HANNA-RIIKKA ROINE

Imaginative, Immersive and Interactive Engagements

The rhetoric of worldbuilding
in contemporary speculative fiction

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ACADEMIC DISSERTATION
To be presented, with the permission of
the Board of the School of Language, Translation and Literary Studies
of the University of Tampere,
for public discussion in the auditorium Pinni B 1097,
Kanslerinrinne 1, Tampere,
on 27 August 2016, at 12 o'clock.

UNIVERSITY OF TAMPERE

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Cover design by
Mikko Reinikka

ACKNOWLEDGEMENTS

ABSTRACT

The dissertation addresses the relevance and purpose of speculative fiction. How can we analytically examine the ways speculative fiction – fantasy and science fiction – can speak to us? Why is it possible to find relevance in works of fiction dealing with distant, strange and impossible worlds, events and characters? The main finding of the dissertation is that worldbuilding is among the most fundamental rhetorical and communicative practices of speculative fiction. Furthermore, the dissertation proves that as a practice that transcends medial boundaries, worldbuilding is one of the features that define speculative fiction genre.

The case studies of the dissertation present a wide variety of contemporary speculative fiction from novels to digital games, films, television shows and fanfiction stories. They have been chosen not only to illustrate the poetics of speculative fiction but also to guide theoretical debates into new territories in the spirit of descriptive poetics. The principal theoretical frameworks are rhetorical and transmedial narratology. Until now, they have largely drawn both their case studies and analytical concepts from literary fiction – and a very particular kind of literary fiction – while speculative fiction and other media have been overlooked. In this regard, the starting point of the dissertation is that the theoretical apparatus of narratology can effectively highlight features and questions relevant to speculative fiction, while material that is new to the apparatus can, in turn, refine and complement the theory.

The dialogue between the case studies and the theory, described above, is brought to the fore through the concept of worldbuilding. The dissertation challenges and complements the established ways of using the concept both in narratology and in speculative fiction research. Worldbuilding is defined as a rhetorical and communicative practice instead of focusing on the ontologically oriented analysis of "creating" a world or on the cognitively informed approach emphasising "making sense" of worlds. Instead, the practice of worldbuilding is suited for introducing ideas or thought experiments central to speculative fiction and for engaging the users – readers, players and viewers – to work out these ideas and experiments.

The main argument on worldbuilding has been divided into three sections that address different ways of engaging with works of fiction: imagination, immersion, and interaction. Worldbuilding is, thus, seen as a practice that guides both the creation of

works of fiction and the ways the users approach the works. The first section (Chapters 1–3) outlines worldbuilding as a distinct practice of emphasising ideas and enabling different uses of imagination to come together. Speculative fiction combines the creative imagining of fictional characters, events and locations with the rational and systematic process of prospecting into what is to come. In addition to this, the double-layered quality of fiction – the simultaneous awareness of the artifice and the possibly existing dimensions of the work at hand – is seen as a fundamental quality of worldbuilding as a rhetorical and communicative practice. The second section (Chapters 4–6) addresses worldbuilding as a dynamic process between the work and the user. Immersion is, therefore, defined as a similarly dynamic activity, where the user both apprehends the framework and uses it. The rhetorical potential of worldbuilding is located into the simultaneous processes of engaging the users to imagine alternatives as well as possibilities by means of world models and handing them tools to reflect on the ways this is done. Finally, the third section (Chapters 7–8) suggests that such a twofold approach to worldbuilding can be used to explore the ways digital media has influenced our understanding and engagement with works of fiction. The analysis of interactivity focusses on the way the apprehension of worlds both as constructs and processes can be used in introducing new instalments to transmedial contexts. Thus, the ways "canonical" worlds differ from fan-created "fanonical" worlds in their rhetorical and communicative goals are brought to light for discussion.

All in all, the dissertation attests to the benefits of creating a dialogue between speculative fiction and narratology: speculative fiction widens our understanding of what fiction is about and what its appeal is, whereas narratology helps to map the distinct rhetorical and communicative practices of speculative fiction genre. Furthermore, the dissertation suggests that worldbuilding is one of the contemporary cultural dominants, which has been gained a strong boost from the rise of digital media. Speculative fiction is fundamentally about ideas, and the dissertation argues that engaging ourselves in creating and working through such ideas can be an enjoyable and revolutionary practice.

Keywords: worldbuilding, speculative fiction, narratology, rhetoric, transmediality

TIIVISTELMÄ

Väitöskirja käsittelee spekulatiivisen fiktion merkityksellisyyttä. Kuinka tarkastella analyyttisesti sitä, miten spekulatiiviset teokset – fantasia- ja tieteisfiktio – puhuttelevat meitä? Miksi jopa hyvin kaukaisiin, outoihin ja mahdottomiin maailmoihin sijoittuvat teokset on mahdollista kokea merkityksellisiksi? Väitöskirjan päähavainto on, että maailmanrakentaminen (*worldbuilding*) kuuluu spekulatiivisen fiktion keskeisimpiin retorisiin ja kommunikatiivisiin keinoihin. Tutkimus osoittaa lisäksi, että eri mediumien rajat ylittävänä keinona maailmanrakentamista voidaan pitää yhtenä spekulatiivista fiktiota genrenä määrittävistä piirteistä.

Tutkimuksen kohteena on kattava valikoima erilaisia nykyaikaista spekulatiivista fiktiota edustavia teoksia: niin romaaneja, digitaalisia pelejä, elokuvia, televisiosarjoja kuin fanifiktiotarinoitakin. Valitun aineiston tarkoituksena on paitsi havainnollistaa spekulatiivisen fiktion keskeisiä piirteitä, myös ohjata teoreettisia keskusteluja uusille urille deskriptiivisen poetiikan hengessä. Tärkeimmät teoreettiset keskustelukumppanit työssä ovat retorinen ja transmediaalinen kertomuksentutkimus. Ne ovat tähän saakka pitkälti rajoittuneet kaunokirjallisuuden – ja vieläpä hyvin tietynlaisen kaunokirjallisuuden – tutkimukseen spekulatiivisen fiktion ja muiden mediumien jäädessä käsittelyn ulkopuolelle. Tutkimuksen lähtöajatuksena onkin se, että kertomuksentutkimuksen välineistö voi nostaa spekulatiivisen fiktion retoriikasta ja poetiikasta esiin jotakin olennaista, kun taas tämän välineistön kohteena harvemmin ollut aineisto voi puolestaan hioa ja täydentää teoriaa.

Aineiston ja teorian vuoropuhelu tiivistyy työlle keskeisessä maailmanrakentamisen käsitteessä. Väitöskirja haastaa ja täydentää niin narratologisen kuin spekulatiivisen fiktion tutkimuksenkin vakiintuneita tapoja käyttää käsitettä. Ontologisiin ulottuvuuksiin painottuvan maailman "luomisen" tutkimisen tai maailmojen "ymmärtämiseen" keskittyneen kognitiivisen tarkastelun sijasta maailmanrakentaminen nähdään retorisena ja kommunikatiivisena keinona, jolla spekulatiiviselle fiktiolle tyypillisiä ideoita tai ajatuskokeita käsitellään ja jonka avulla käyttäjät – lukijat, pelaajat sekä katsojat – osallistetaan niiden työstämiseen.

Maailmanrakentamiseen keskittyvä pääargumentti on jaettu työssä kolmeen käsittelyosaan, jotka tarkastelevat erilaisia osallistumisen tai osallisuuden muotoja: kuvittelua, immersiota ja vuorovaikutteisuutta. Näin ollen maailmanrakentaminen nähdään keinona tai

kehyksenä, joka sekä jäsentää fiktiivisten teosten luomista että ohjaa käyttäjiä lähestymään työtä tietynlaisilla tavoilla. Ensimmäinen osa (luvut 1–3) esittää, että tällaisena keinona maailmanrakentaminen tarjoaa mahdollisuuden niin ideoihin keskittymiseen kuin mielikuvituksen eri puolien yhdistämiseen erityislaatuisella tavalla. Spekulatiivinen maailmanrakentaminen yhdistää fiktiivisten hahmojen, tapahtumien ja paikkojen luovan kuvittelun rationaaliseen ja systemaattiseen, tulevaisuuteen suuntautuvaan prosessiin. Tämän ohella kaikelle fiktiolle ominainen kaksitasoisuus – teoksen keinotekoisuuden ja mahdollisesti olemassa olevien kuvitelmien rinnakkaisuus – määrittyy olennaiseksi osaksi maailmanrakentamisen retoris-kommunikatiivista ulottuvuutta. Toisessa osassa (luvut 4–6) tarkastellaan maailmanrakentamista dynaamisena prosessina teoksen ja sen käyttäjän välillä. Immersio näyttäytyy tältä pohjalta yhtä lailla aktiivisena toimintana, jossa käyttäjä sekä arvioi maailman kehyksiä kuin käyttää niitä hyväkseen teokseen uppoutuessaan. Spekulatiivisen maailmanrakentamisen retorinen potentiaali tiivistyykin siihen, kuinka käyttäjät yhtäaikaisesti sekä kuvittelevat vaihtoehtoja ja mahdollisuuksia maailmakonstruktioiden avulla että kriittisesti tarkastelevat tapoja, joilla tämä kuvittelu mahdollistuu. Lopulta kolmannessa osassa (luvut 7–8) esitetään, että kaksitasoinen tarkastelu voi auttaa meitä ymmärtämään paitsi spekulatiivisen fiktion genreä, myös sitä, kuinka digitaalinen media on muuttanut tapaamme lähestyä ja käyttää fiktiivisiä teoksia. Vuorovaikutteisuuden analyysi keskittyykin siihen, kuinka ymmärrystä maailmoista konstruktioina ja prosesseina hyödynnetään luotaessa uusia teoksia transmediaalisissa konteksteissa. Tätä kautta tarkasteluun nostetaan tapoja, joilla "kanoniset" maailmat eroavat fanien tekemistä "fanonisista" maailmoista retoris-kommunikatiivisilta tavoitteiltaan.

Väitöskirja osoittaa spekulatiivisen fiktion ja kertomuksentutkimuksen vuoropuhelun hyödyt: spekulatiivinen fiktio laajentaa käsitystämme siitä, mitä fiktiiviset teokset voivat käsitellä ja missä niiden viehätys piilee, kun taas kertomuksentutkimus auttaa spekulatiivisen fiktion retoris-kommunikatiivisten erityispiirteiden jäsentämisessä. Lisäksi tutkimus esittää, että maailmanrakentaminen on yksi nykykulttuurin dominanteista piirteistä, jonka merkittävyyttä digitaalisen mediumin nousu on vahvistanut. Spekulatiivisen fiktion pohja tunnetusti on ideoissa, ja tämä työ todistaa, että niiden työstäminen ja työstämiseen osallistuminen voivat olla sekä nautinnollisia että vallankumouksellisia prosesseja.

Avainsanat: maailmanrakentaminen, spekulatiivinen fiktio, narratologia, retoriikka, transmediaalisuus

CONTENTS

I   INTRODUCTION

Speculation is a process of contemplating and considering a subject or an idea. Such a process can obviously be private, undertaken by someone who wishes to ponder on the implications of a specific event or action, for example. However, speculation can take the form of communicating ideas, or bringing new ideas up for discussion. In this, it is not only an endeavour directed towards the future, but also a matter of exposing something from the present, of adopting a different perspective to something familiar, of making things appear by introducing a new context. As a communicative act, speculation is usually thought to follow the model of a situation where someone asks someone else for a purpose to engage in a thought experiment, beginning with structures like "what if", "even if", "imagine if", and so forth. When it comes to works of fiction, such thought experiments are deemed central to the genres of science fiction and fantasy and their practice of challenging us with abstract questions which are concretised in the framework built around them.

This study focusses on speculation and the purpose and relevance of fiction. Why are works of fiction relevant to us and what do they do? Various answers have, of course, already been proposed: by and large, the relevance of any good work of fiction can be summarised as expanding our capacity for understanding ourselves, each other, and the world. During recent decades – in particular after the rise of cognitive and psychological approaches to fiction – our engagement with works of fiction has become more and more associated with everyday mental processes. It has been suggested, for example, that the "function of fiction" is the abstraction and simulation of social experience (Mar and Oatley 2008), that fiction "offers a pleasurable and intensive workout for [our] Theory of Mind" (Zunshine 2006, 164), that literature contributes to the cultivation of sympathy by means of "narrative imagination [...] the ability to think what it might be like to be in the shoes of a person different from oneself, to be an intelligent reader of that person's story" (Nussbaum 2010, 95–96), and that narrative fiction ultimately exemplifies a basic human strategy for "coming to terms with time, process, and change" (Herman 2009, 2). It seems that reading a novel, for example, would resemble a "dry run" of sorts with regard to real life – and similar arguments have been made concerning the relevance of works in a wide variety of media.

Such arguments by researchers of fiction are usually linked with a goal that is easy to support: proving that the study of fiction can be an arena for interdisciplinary collaboration. Furthermore, they aim to show that fiction should not be treated as something separate from our mundane life and the concerns of contemporary society, as a dimension that follows its own secluded laws. The arguments may seem especially relevant for the research of the subject in this study, the speculative genres of science fiction and fantasy, which are intent on representing the impossible, the defamiliar, and the remote. My case studies present speculations, ranging from the principles of quantum mechanics and the dual role of human language as a tool for both communication and imagination to experiments that explore observing humanity from a systemic perspective. However, there is a danger in using ideas from sciences such as cognitive research in the study of the relevance of fiction. First of all, the approaches that paint the picture of fiction as a dry run of real-life skills and actions seem to imply that there is nothing specific to works of fiction that would make them relevant to us – apart from the instrumental value of being a warm-up round for the real thing. Secondly, by reducing works of fiction into exemplars of actual human cognition we miss the dynamics between art and the real-life experientiality (Mäkelä 2013a, 130). In the frame of this study, I see that the possibility of analysing speculation in its distinctly fictional form is diminished if we simply look for its relevance in the dealings with real people and real world.

This study uses the basic principle of speculation with regard to the discussion on relevance: as Merja Polvinen (2014a, 63) has suggested, examining speculative fiction may open up new perspectives to familiar debates. The aim connected to this principle is obviously the validation of speculative fiction as a genre more widely, but like Polvinen, I also suggest that speculative forms of fiction have the potential to push the larger theoretical debates in whole new directions. The theoretical debates here are the ones of contemporary narrative studies, more precisely the ones of rhetorical and transmedial narratology concerning the rhetorical practices and the aesthetic value of fiction. In addition to the genre of speculative fiction – which has typically not featured among the interests of narratology – my case studies include digital games, audio-visual media, and fanfiction writing. Digital games, in particular, are valuable in this regard, because concepts like narrative and representation have been quite fervently disputed in game research, and the controversy also opens up perspectives to some problematics of narrative studies. An apt methodological point of comparison for my strategy is the approach that has been called *descriptive poetics* by Brian McHale (1994, 65): instead of theory being brought to be applied on works of fiction, the descriptive level urges us to hesitate, to linger over and circulate among a range of possibilities. The aim of this study, therefore, is to produce descriptive accounts of the case studies which belong to the genre of speculative fiction and to a variety of media. Together these accounts can, in turn, be utilised as material for theory and for challenging the existing narratological approaches on rhetoric and transmediality. Thus, I set out to

discuss the relevance of speculative fiction without collapsing theory into interpretation, or viewing works of fiction as mere source material for theorising real-life phenomena.

Furthermore, when it comes to challenging theory, the study focusses on defining *worldbuilding* as a communicative and rhetorical practice in relation to concepts like fiction and storytelling. World – and worldmaking – have been introduced to narratology most influentially by Marie-Laure Ryan (in her 1991 book *Possible Worlds, Artificial Intelligence, and Narrative Theory*) and David Herman (in his 2002 work *Story Logic. Problems and Possibilities of Narrative*). Both of these publications represent pioneering research on worlds in narrative theory, but they need to be challenged and complemented. Although the above-mentioned studies present concepts such as world, fiction, and narrative as neutral, multi-purpose tools, these concepts are – more often than not – biased towards certain art forms and their criteria for aesthetic and artistic merit. The term of *rhetoric* exemplifies this: *The Oxford English Dictionary*, among others, defines it as "the art of effective or persuasive speaking or writing, especially the exploitation of figures of speech and other compositional techniques".[1] In literary research, a rhetorical approach concerns communicative acts. As Richard Walsh (2007, 5) argues, this has translated into a critical project where issues of authorial intention and the moral dimension of fiction in the sense of values implicated in or invoked by the communicative acts have been the central concern. In literary theory, there has been no need to question the verbal bias of rhetoric. However, as game scholar Ian Bogost (2007, 20) suggests in his book on procedural rhetoric and expressive power of digital games, in the sense of *effective expression* rhetoric provides ways of emphasising ideas and making them vivid, while persuasion as a goal is largely underplayed or even omitted.

My take on rhetoric is an amalgam of these two viewpoints: my concern is with communication, and with ways of emphasising ideas and *engaging* the users in working them out. In the course of this study, I argue that in speculative fiction, rhetorical potential is not simply a matter of the traditional model of narrative as someone communicating something to someone else for some purpose, canonised in criticism by Wayne Booth (e.g., 1983) and James Phelan (e.g., 2007). Instead, works of speculative fiction rely on worldbuilding as a communicative and rhetorical practice. The analysis of my case studies therefore aims at opening up new viewpoints to both the rhetoric of speculative fiction and the appeal of the genre for the users with regard to the narratological debates. As an integral part of the speculative forms of fiction, worldbuilding transcends the boundaries of different media as well as makes use of their specific affordances in the process. In my view, worldbuilding has been neglected as a communicative and rhetorical practice partly because the preferences of critics ultimately turn the concepts from neutral tools into instruments of aesthetic judgements. The concept of world, for example, usually instantiates a very specific kind of worldness found in the literary mainstream. This not only has to do with the tendency of seeing complex characters and their interrelations as the core material of an aesthetically

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1   Rhetoric invokes also negative connotations: "empty rhetoric", for example, "refers to language designed to have a persuasive or impressive effect, but which is often regarded as lacking in sincerity or meaningful content" (*The Oxford English Dictionary*).

pleasing work of fiction, but also with the attempts of building theoretical frameworks such as "prototypical narratives", where certain features have been deemed more prototypical than others in literary fiction, for example.

Overall, I recognise the challenges posed by the combination of my case studies and theoretical framework: this study has been written for both fantasy and science fiction researchers and for narratologists especially in the rhetorical and transmedial paradigms. What may be self-evident to the experienced reader of science fiction, for example, might not be so to someone mainly interested in the literary mainstream. Having said that, I believe that the combination of speculative fiction and narratology is relevant to both kinds of readers. Simply put, we miss something crucial in relation to both what fiction is about and what its appeal is if we exclude speculative fiction from the research canon – but we also miss something crucial about speculative fiction if we do not consider its communicative practices, an area of enquiry mastered by narratology. Furthermore, the inclusion of a variety of media and works in my case studies – literature, digital games, audio-visual media, and fanfiction – aims to argue that worldbuilding is not specific to only one form of media or works but, instead, one of the contemporary cultural dominants, strongly bolstered by the rise of digital media.

What is Speculative Fiction?

The title of this study explicitly mentions *speculative* fiction. This is a conscious decision from my part: I am interested in the rhetoric and the aesthetics of speculative worldbuilding, not solely in either fantastic or science fictional varieties of it. It does not make sense to separate fantasy and science fiction strictly from each other in this regard. Rather, my focus is on the unique features of worldbuilding when it comes to works of fiction, their making and their users. For the purposes of this study, to meet the criteria for speculative fiction, a work at hand must not only involve a speculative premise, but also address it or work it through in a processual manner. The premise (or the idea, often summarised in the form of a question beginning with "what if" or "imagine if") is not always, or even in most cases, immediately apparent to the user, as the crucial part of both the rhetoric and the aesthetics of the speculative practice is to *engage the users* into addressing it, working it through. This is due to the fact that speculative fiction is a genre of artworks and, therefore, not wholly comparable to our everyday speculations or scientific theories; speculative fiction requires interpretive engagement.

If we necessarily want to distinguish between fantasy and science fiction under the wider umbrella of fiction that makes use of speculative worldbuilding, we might find that the difference is in the mode in which the premise is introduced and worked through. Science fiction achieves this quite systematically, whereas fantasy is – for want of a better word – more experiential. The classic example used to illustrate such experientiality is J.R.R. Tolkien's *The Lord of the Rings* (1954–55) which, among other things, works

through an idea of language as something that both constructs and reflects the experience of both human and non-human beings. In Tolkien's epic, the slow, "unhasty" language of the Ents, for example, endeavours to engage the readers in glimpsing the world and its change the way the Ents experience it. Furthermore, the speculations in fantasy reach out towards something that cannot be rationalised. As such, fantasy is not, however, simply dreamlike or vague, but "perhaps trying to assert and explore a larger reality than we now allow ourselves", as Ursula K. Le Guin (2007, 87) has beautifully put it. The field of science fiction, on the other hand, is perhaps more easily mapped using terms like speculation. Science fiction speculates on systems, and therefore it typically addresses an idea that has distinguishable consequences. In this, the logic of science fiction resembles that of a game: it works through a system where actors engage in a conflict that is not only defined by rules, but also results in a quantifiable outcome (see Salen and Zimmerman 2004, 96). The reader of a science fictional novel, for instance, can attempt to trace the principles according to which certain consequences manifest themselves. Speculative science fiction, therefore, utilises the mode which resembles the traditional scientific method (observation, hypothesis, experiment). While I recognise that the entire, extremely diverse field of fantasy and science fiction cannot be exhaustively addressed in these terms of speculation, my approach is designed to analyse one of the major practices in the larger tradition.

The speculative practice has everything to do with the relevance of fiction. In the analyses emphasising the uniqueness of speculative fiction, science fiction in particular is sometimes assigned roles that go beyond even the ones generally given to fiction. The ones assigned to science fiction have included, among others, predicting the future, inspiring budding scientists and engineers, and influencing enlightened public policy (see Wolfe 2015). On the other hand, both fantasy and science fiction have, more often than not, been completely ignored in the wider discussion of the relevance of fiction, which is probably due to the fact that they are viewed as popular genres with no genuine depth or "serious" themes. Indeed, it is not hard to build a so-called generic fantasy world. It seems that being familiar with the basics of setting up the props of pseudo-medieval landscape and remembering to enliven it with a few dragons, a wizard, a hero with a magical sword and a multi-skilled entourage is enough. It is, likewise, quite an easy task to construct a stereotypical science fictional setting full of spaceships equipped with FTL drives and capable captains, and a galaxy that abounds with "Class M" planets, humanoid lifeforms and anomalies in the space-time continuum. These constructs are awkwardly familiar to us from all media.

I call the generic worlds *constructs*, because that is what they essentially are: consciously drawn collections of particular elements, characters, sequences of events in the form of master plots and such, and locations falling into particular relations to one another. Such constructs unfortunately catch most of the attention in the everyday talk of speculative worlds and in the generic definitions that label a work of fiction as fantasy because it involves a wizard or science fiction because there is a spaceship. However, I mentioned above that speculative fiction works its premise through in a processual manner, and this is where

both the aesthetics and the rhetoric come in. What do we do with the constructs? How do we use the elements, and where do we take them? Why are these particular elements chosen rather than some others? This is also where speculative forms of fiction differ from other fictions, although it has been argued that all works of fiction "advance [our] understanding by exemplifying features and playing out their consequences" (Elgin 2007, 47) and that literature in general can make us understand "how it is possible that what has happened actually could happen, and by inviting us to imagine how things could be otherwise" (Meretoja 2015, 44). Following McHale (2010, 26), I suggest that the specificity of speculative fiction can be put in terms of engaging the users with a model of reality that is in some sense systematically different from our own.

The true power of speculative fiction lies not in the invention of a speculative premise or speculative beings, but in the way the abstract premise (or a model of world) is concretised in the framework built for working it through. In this, it is a form of communicating ideas, or bringing new ideas up for discussion. Compared with generic constructs, these speculations can focus upon anything and draw their inspiration from anything. They can be about a secret logic running behind our world (*Cryptonomicon* in Chapter 1), about the principles of quantum physics (*The Causal Angel* in Chapter 3), or about turning the gendered expressions and our view of personhood upside down (*Ancillary Justice* and *Deus Ex: Human Revolution* in Chapter 6). Furthermore, they can turn our attention to the various conventions and practices of worldbuilding and flaunt their own materiality (*City of Saints* and *Madmen* in Chapter 2 and *Embassytown* in Chapter 5). They can be about large, sweeping issues, such as the relationship between the rational and the mythical in human society (the reimagined *Battlestar Galactica* in Chapter 7), or about smaller fragments and their accumulation, such as looking at humans in a systemic way (role-playing games like *The Mass Effect Trilogy* in Chapter 4). Finally, in the hands of the users, they can be about opening up new viewpoints to works of fiction and about questioning ready-made stories and premises (*Firefly* fanfiction in Chapter 8).

Furthermore, my treatment concerns the aesthetics of speculative fiction, as understanding that the speculative practice is very much about appreciating the beauty and unique capabilities of the genre. In the frame of science fiction studies, Istvan Csiscery-Ronay (2008, 9) has suggested that the aesthetic qualities of science fiction do not classically inspire contemplation and admiration for their harmony and balance. Instead, he sees that it is one of the primary pleasures of science fiction to draw other "beauties" such as fictive neology, history, and science into aesthetic constellations. Especially outside speculative fiction research, such constellations are often understood simply in the sense of generic constructs I have described above. While the constructs can obviously be spectacular and awe-inspiring premises presenting us with strange aliens and magnificent landscapes, appreciating these qualities is not enough. We need to recognise speculative worldbuilding as a legitimate artistic activity, which crucially includes the practice of engaging the users into working the construct through in a processual manner. This is what makes *The Lord*

of the Rings such a great work of fiction compared with various works that have come after it – the ones that have more or less taken the premise of Tolkien's novel but not used it for the purpose of profound speculation such as his understanding of language.

What is Worldbuilding?

In general, worlds and worldbuilding are everywhere these days – both in research and theory on works of fiction, and in the modern media. Mark J.P. Wolf has even argued that entertainment in general is "moving more and more in the direction of subcreational worldbuilding" (2012, 13). However, the shift towards worldbuilding can be traced all the way to the fantasy fiction written in the 1930s. In his contribution to the Omnivoracious blog, speculative fiction writer China Miéville appraised Tolkien's role in the paradigm shift from plot to worlds, for lifting the "invented world" as the primary ingredient in creative writing. Miéville (2009, n.pag) argues that the shift represents an extraordinary inversion, where the order is reverse compared to Aristotle's famous assertion that plot (*mythos*) and action (*praxis*) logically precede other elements of fiction. The shift to worlds, therefore, centralises the world, which "comes first, and then, and only then, things happen – stories occur – within it" (ibid.). Miéville is obviously not alone in praising Tolkien. Wolf's decision to use the term *subcreational* worldbuilding is a direct reference to Tolkien's seminal essay "On Fairy-Stories" (originally published in 1947), where he emphasised the experience of an imagined place as central to fantasy. Speculative fiction researchers such as Brian Attebery have argued that *The Lord of the Rings* gave a new coherence to the genre which makes use of such an experience: "Without Tolkien's work before us it might not seem worthwhile to isolate fantasy as a distinct form" (1992, 10). Furthermore, Tolkien's epic influenced the early game designers. The highly popular tabletop role-playing game *Dungeons & Dragons* (1974, Gygax and Arneson) can be credited for "liberating" Tolkien's classic elements of worldbuilding for a larger use.[2]

While post-tolkienian understanding of worldbuilding is mostly concerned with the worlds as ontological constructs and centralises the author as a creator of sorts, I firmly place my rhetorical approach to complement such views, if not to oppose. Seeing worldbuilding primarily in the sense of building constructs is by no means limited to speculative fiction and its research: in various approaches, using works of fiction is seen equal to "transporting" into an ontologically separate domain in a manner not unlike the process of transporting (e.g., Gerrig 1998) from the familiar environment of the Starship *Enterprise* to the unexplored planets and other new locations. Especially in the approaches drawing from possible worlds semantics, fictional reference is recuperated as an actual reference to a fictional world, and

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2   The elements Tolkien used obviously did not come out of nowhere: it is widely known that he was influenced, among others, by Norse and Finnish mythology (such as *Poetic Edda* and *Kalevala*), Old English or Anglo-Saxon literature and poetry (such as *Beowulf*), and Greek mythology (such as the myth of Atlantis). Here, however, I am interested in the way he "modernised" worldbuilding in the sense it is used today.

on this basis, fictionality is turned into an abstract ontological category (see Walsh 2007, 15, 153). In the course of this study, I will explore this further, but here I want to explicate my concern with communication: in essence, I see speculative worldbuilding as a way of turning abstract and general thought experiments (or ideas) into a particular and therefore communicable form.

Such an approach to worlds as the one described above often gets disregarded for at least two reasons. Firstly, much of the research has focussed on the general sense of verisimilitude that fictional texts impart. As Polvinen (2014b, 104) notes, especially cognitive literary studies tend to focus on how fictions are like reality, or are treated like reality. More often than not, worlds and characters (or "agents") in works of fiction are supposed to be approached as life-like, as counterparts of sort to the ones of our mundane experience. The concept of world is taken to mean a model of a physical space, surroundings, or a container, and therefore the communicative aspects related to worlds are seen simply as engaging the users with an effort to naturalise the world through "transportation" into a position inside it. However, I do not see the relevance of fiction as limited to the principle that the users should be able to engage with the events and the characters as if they were real. In speculative fiction, the engagement is sought with what is blatantly *not real*. Secondly, the userly attitude where items and occurrences in a work of fiction are interpreted as "matter" is often seen as naïve, in the sense that users would be skilled enough to understand metaphors and other devices only in the literal sense ("inside" the world) and not as parts of the aesthetic techniques of an artwork ("outside" the world). Such analyses overemphasise some ways of meaning-making and obscure the fact that speculative fiction, in particular, relies on literalisation of metaphorical expressions and calls the users to interpret the elements of fiction as matter as a way of making sense of the abstract and general.

My critique on the two viewpoints highlights the most intriguing paradox of fictional worlds: they *both* exist *and* do not exist at the same time. Most of the previous studies in narratology touching upon this paradox have assumed a stance which argues that one can *either* engage imaginatively with an alternate reality, *or* one can consciously interact with a real-world artefact, but not both. In her book on fictional worlds, *Narrative as Virtual Reality* (2001), Ryan addresses the engagement with fiction precisely through two opposing stances: the immersive world and the interactive game. Her view has much to do with the ontological understanding of fiction, which carries the implication that we need to make-believe or pretend that the fictional world is real for the duration of our engagement with a work of fiction, and once we recognise that the world is artificial, made-up, we cannot immerse ourselves into it any longer. The way Ryan outlines our engagement with fiction and worlds has been quite influential, and it has rarely been challenged apart from Polvinen's work done within the second-generation cognitive narratology. In her 2012 article, Polvinen argues that "a crucial part of the experience of fiction is the knowledge that we engage not only with characters and events, but also with artistic object" (ibid. 108). I agree with Polvinen's view and decisively present the stance of *both/and* as an alternative to the

either/or. Simply put, the stance of both/and implies that worlds can be approached both as something "possibly existing" from the perspective internal to our imaginative experience and as artificial structures to be contemplated from the external perspective.[3] With regard to the acknowledgment of fiction's artificiality, my approach is – as is Polvinen's discussion – in line with Walsh's position that "disbelief is essential to the reading of a work of fiction *as fictional*, and it is only by doing so that we apprehend the effects it achieves by means of fiction's own [...] resources" (2007, 70; emphasis original).

In my rhetorical approach, I argue that it is important to distinguish between two aspects of worldbuilding, the understanding of worlds as constructs and as processes. The overall aim is twofold, as my interest is simultaneously in something that is in the here-and-now – like works of fiction as artefacts and the users engaging with them – and in the theory-formation of worldbuilding. This is an important insight into worldbuilding. The analyses of the case studies focus, on the one hand, on their structures and forms and, on the other hand, on our userly engagements with these artefacts. In my view, what is interesting about speculative worlds is not simply their content, what is in the world as models that differ from our mundane reality, but the actual process of establishing them and therefore contemplating or considering the speculative experiment as a way of communicating ideas. In this sense, the study of worldbuilding is not only about how the works of fiction invite us to engage with them, but also about how they seek engagement with the world. The analysis of such engagement is quite limited if the characters, events, or worlds are seen only as reflections or proxies of the mundane reality, or if it is suggested that they should not be approached as world-like at all.

In what follows, I will start from the premise that artificiality is a resource for both authors and users. It can be suggested that because speculative worlds are quite easily recognised as invented constructs, speculative fiction is particularly adept at making use of worldbuilding as a rhetorical practice. By artificiality, I am referring to both the recognition of the work at hand as fiction and to the awareness of it being material, of being made. With regard to worldbuilding, this is the view of *world-as-construct*, the view of everything that "is in the world". However, the construct exists in the sense of a framework, in order to communicate the speculative idea by engaging the users to address the construct in a processual manner, *world-as-process*. This is why the latter aspect of worldbuilding is close to interpretation, as worlds can be seen as contexts in which things appear.

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3   In his rhetorical understanding of narrativity, James Phelan has similarly suggested that it is a "double-layered phenomenon, involving both a dynamics of a character, event, and telling and a dynamics of audience response. The phrase 'somebody telling... that something happened' gets at the first layer: narrative involves the report of a sequence of related events during which the characters and/or their situations undergo some change. [...] Turning to the second layer, the dynamics of audience response (or, in terms of the definition, the role of the 'somebody else'), narrativity encourages two main activities: observing and judging." (2007, 7.) I will further discuss the problems posed by such definitions later in the Introduction, while here I would like to simply point out that Phelan's approach is tied too much to temporality and the particulars to be useful in my discussion.

For the purposes of this study, interpretation is defined as a practice of seeing something in a relevant context. On the one hand, this definition resembles the way narrative hermeneutics has envisaged the relationship between an individual subject and broader systems: the interpretative process of an individual in a particular, historically defined situation is conditioned by general, culturally-mediated narrative models (see Meretoja 2013, 100–101). Similar interpretative interplay between the particular and the general is extremely relevant when it comes to worldbuilding. However, in this study I will argue that our understanding of the more general systems is not only based on narrative. On the other hand, the above-mentioned working definition, with its emphasis on context, is close to the fundamental tenet of cognitive narratology, the process of narrativisation as proposed by Monika Fludernik. In short, narrativisation encompasses the interpretative abilities by which readers link strange and unfamiliar with what they already know, "thereby rendering the unfamiliar interpretable and 'readable'" (Fludernik 1996, 45). Although narrativisation is concerned with narrative parameters only, the dynamic of framing something new by means of the already known bears a resemblance to seeing something in a relevant context. There is a danger in taking narrativisation too far in literary analysis, however. As Maria Mäkelä argues, cognitive narratologists often tend to conflate interpretation with sense-making: "the reader is a navigator, the text is a map, and the target is mental assimilation" (2013b, 144). For his part, McHale laments that literary criticism has lost something of value in the cognitive "upgrade": "A capacity for fine-grained analysis [...] and an attentiveness to literary convention" (2012, 123). I concur with Mäkelä and McHale's concerns, and this study subscribes to a form of second-generation cognitive approach that is sensitive to the conventions, in addition to various contexts. The above-mentioned premise that artificiality is a resource for both authors and users is one concrete example of such sensitivity.

The approach emphasising the userly engagement is especially important in the frame of digital media, where we are positioned as the users of various resources: to explore, navigate, and concretely use such resources. In the field of science fiction, in particular, users often take part in the discussion about the aesthetics and the poetics of the genre. Farah Mendlesohn (2003, 1) has noted that science fictional texts are often written by people who are active critics, and that the texts can also be produced by the same fan base that supports the market. The roles of user and author, or critic and fan are similarly intertwined in the field of gaming and game research and, even more explicitly, in fanfiction. Taking such features into account is something that is relatively strange for traditional research on fiction, but the features highlight the fact that the recognition of the elements used in building worlds and the experience of imaginatively immersing into them are not incompatible. They further justify my twofold aim at studying something that is in the here-and-now (such as the interaction between fans) and simultaneously contributing to the theory of worldbuilding (such as the engagement with works of fiction).

The paradox of both/and has appeared in new contexts during the past decade. Rather than explicitly promoting the realms of fiction and mundane as something separate, the concepts like "ludic society" point out that the users can be invited to "experience a complex mixture of realities that they are engaged with as a unified whole" (Mäyrä and Lankoski 2009, 9). Furthermore, as Linda Hutcheon observes while revisiting her theory on adaptation, the process of change in the conventions of storytelling has multiplied its forms, for instance in the way that "the ethical values of the story world of *Harry Potter* are adapted to the real world of social activism" (2013, xxi). Hutcheon refers to the Harry Potter Alliance, a non-profit organisation run primarily by *Harry Potter* fans, which combines the fannish admiration of the novels with real-world action – you can act just like your heroes or Dumbledore's Army. One of their stated values goes as follows: "We know that fantasy is not only an escape from our world, but an invitation to go deeper into it".[4] The example of the Harry Potter Alliance is perhaps extreme, but it illustrates the way the realms of fiction and mundane have begun to intermingle even further, despite the fact that they have never been strictly separate.

One of the contemporary phenomena that features in my treatment of worldbuilding is that of franchised entertainment. The rapid proliferation of the large constellations which have been called, among other things, transmedial worlds or franchises, polymorphic fictions, distributed narratives, and archontic texts, is often seen as economically motivated. Clare Parody, for instance, suggests that what is actually adapted is "a brand identity, the intellectual property, advertising language, and presentational devices that cohere, authorise, and market the range of media products that together comprise the franchise experience" (2011, 214). At the moment, the Walt Disney Company more or less dominates the entertainment industry, remaking its original scheme on a more ambitious scale by putting films such as *Star Wars: The Force Awakens* (2015) back at the heart of the business. From this standpoint, the decision of making a female character Rey the protagonist in *The Force Awakens* is basically a strategy to target girls as well as boys with the advertising (see *The Economist* 2015, 27). Although I recognise that the understanding of the economic logic of franchised worldbuilding is valuable, my interest in worldbuilding is that of an art researcher, and I suggest that similar rhetorical and aesthetic dimensions of speculative worldbuilding can be discerned in the case of the transmedial environment as well. They are also present in the fannish engagements, although the communicative goals are rather different.

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4   See Harry Potter Alliance website: http://www.thehpalliance.org/what_we_do.

Digital Games, Other Media, and Users

In addition to the franchised worldbuilding and fanfiction, digital games are rarely addressed in the frameworks focussing on communication and the rhetoric – despite the fact that processuality, an element of worldbuilding, is one of their key features, too. By and large, digital media has influenced the modern media landscape and changed (or is constantly changing) the ways works of fiction are made, distributed, and used. The computer has famously been referred to as the "first metamedium", which is able to simulate any other media (see Kay 1984, 59), such as the medium of game. While I agree with the basic idea of Kay's argument, I suggest two critical notions that further reflect my approach on digital games and other media in this study. Firstly, although the computer can imitate or simulate other media, it is even more interesting to look at what it is that the computer as a *digital* medium brings to the equation. Secondly, representing a book or news on television inside a digital game world, for example, carry the functions commonly associated with books or television news, such as providing background information or making the voice of authority audible.

The two notions contribute to my overall approach on worldbuilding across media. On the one hand, there are elements and practices that transcend medial boundaries. As Ruth Page (2012, 186) has found in her study on stories in social media, there is no genuine dichotomy between the stories in the old and new forms of technology. On the other hand, I want to argue that when it comes to analysing media such as digital games or television shows as artistic practices, we need to resist the idea of studying them as "literature". The demands for recognising digital games as "works of digital literature" or seeing storytelling as synonymous with "art" are especially prevalent in the game journalism (see Alderman 2015; Owen 2015). Such claims are usually made with good intentions: in short, they argue that we need to recognise games as worthy of serious study. However, the implied objective of studying them as *literature* imposes the literary criteria of aesthetics and artistic merit on them and dismisses their unique features and affordances in the process. As Jesper Juul (2013, 23) notes, the downside of this strategy in arguing for the value of games is that it makes games sound derivative: if we think that games should live up to the criteria set by literature, for example, why bother with games at all?

In a similar vein, it is sometimes argued that digital games would need cinematic sequences and such in order to drive their stories. It is telling that "narratives" or "stories" are seen crucial for literature and film as *media*, while games are seen as something different. The discussion of the relationship between games and stories goes back a long way, but it was especially heated during in the early 2000s when the scholars of game studies, the so-called ludologists, argued quite forcefully that digital games in particular display a unique formalism that defines them as a different *genre* from narrative, drama, and poetry (e.g., Eskelinen 2001; Frasca 2003). This argument was, in part, based on the fears concerning theoretical imperialism which supposedly attempts to reduce everything into narrative. Espen Aarseth, for instance, argued: "Computer games studies must be liberated from

narrativism, and an alternate theory which is native to the field of study must be constructed" (2004, 262). Although the "blood feud" (see Jenkins 2004a, 118) between ludologists and narrativists has abated, its legacy is still substantial. The ludologists' approach resembles another argument for the value of games in its more austere form noted by Juul: instead of appraising the unique qualities of games, "it becomes an argument for identifying a 'pure' game that should be purged of influences from other art forms, typically by banishing straightforward narrative from game design" (2013, 23).

This study does not discuss games (or any other media) from the viewpoint that they would "complement" literature (or any other media), but indeed as unique art forms. However, because my emphasis is on speculative worldbuilding – which, as I have argued, transcends medial boundaries – I also argue that they make use of the larger, transmedial rhetoric and aesthetic practices in their own way. Overall, the discussion on whether games should be regarded as stories or narratives is basically an instance of asking the wrong question about games, similarly irrelevant as asking whether books or television shows are stories. What we should be asking instead is whether these works of fiction invite narrative interpretation as a relevant response, and how it relates to other responses during the engagement with them. In fact, the reason for asking the wrong question about games is partly due to the conflation of narrative interpretation as a response and the actual gameplay resulting from or heeding to such a response. In other words, different approaches to the same game can produce very different strategies in actuality, while in reading literature, the differences in the "strategies" of reading a novel occur on the abstract level of interpretation.[5]

In the attempts to create a middle ground between narratology and ludology, terms like "ludonarrative" have already been coined for the phenomena that combine both game and story elements (see Aarseth 2012, 130). As the spectrum of digital, and indeed all games, is extremely wide and diverse, such terms are useful in that they narrow down the field of enquiry instead of attempting to make definite claims of *all* games in existence. As a term, "ludonarrative game" thus establishes the fact that although not all games (e.g., abstract games) make use of narrative devices and elements, some games would make no sense or would be unplayable if such devices and elements were completely removed. In this study, however, I refrain from using concepts such as ludonarrative in the analysis of my case studies, because my emphasis is on narrative and various other elements in relation to speculative fiction that transcends the boundaries of different media. This is also the reason for choosing digital role-playing games (RPGs) as my primary case study from the diverse spectrum of games.

RPGs are usually mentioned with regard to ludonarrative: games such as BioWare's *The Mass Effect Trilogy* strongly rely on the narrative cues and devices, while positioning

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5   The multitude of responses (and the preferences of players) has been noted especially in the field of RPG research, as RPGs typically allow various attitudes or styles in gameplay (see e.g., Kim 2004). I will discuss this in more detail in Chapter 4, but here I want to point out that the recognition of such attitudes and responses can also help us recognise that the view on the reading process as coherent or unbroken is a result of certain kind of conceptualisation of the term "reader".

the player in the role of the playable character, acting inside the fictional game world and motivating various actions. Digital role-play thus brings together achievement and goal oriented gameplay and the more imaginatively (and, to some extent, narratively) motivated player activities in a unique way. Narrative cues and devices such as the ones used by digital RPGs should not be viewed as something "native" to the medium of literature or belonging to a different "genre". For example, the ones belonging to the larger aesthetics and rhetoric of speculative fiction (e.g., master plots) are *transmedial* phenomena. Some games, however, make use of elements more familiar from literature that could be classified as "remediation" (see Bolter and Grusin 2000) or a particular type of intermedial relationship. As an illustrative example, *Dragon Age 2* (2011), another RPG by BioWare, introduces a frame of a (possibly unreliable) character narrator recounting the events the player is about to play to another character interrogating him.

I have also chosen to coin the term user instead of repeating every time the list of "reader, player, or viewer". Other more general terms such as "interlocutor", "interpreter", or "recipient" seem either too medium-specific or too constricted. Interlocutor, for example, emphasises a very specific type of communicative situation. For some, the term user evokes negative connotations compared with terms like interpreter – as Rita Felski notes, the very word *use* has come to represent the idea that "imagination and invention have been banished from the world by a soulless regime of efficiency, logic, and profit" (2013, v–vii). The uselessness of art, in the sense famously discussed by Oscar Wilde, is therefore seen as resistance to the demand to be useful. In this study, I employ the concept of use in the same spirit as Felski does when she argues that use is not something we brutally impose on "hapless works of art". Rather, it can be "something they invite by drawing us into certain attitudes, postures, and modes of engagement" (ibid. xii).

Furthermore, although I use this single term to refer to readers, players, and viewers, I do not mean to imply that our experience of and engagement with various media is the same in all different cases. I will return to this discussion throughout this work (especially in Chapter 6 where I will analyse the novel *Ancillary Justice* and the digital RPG *Deus Ex: Human Revolution* side by side) but I will point out a few illustrative examples here nevertheless. In relation to the unique affordances of games and procedurality, Bogost (2007, 85) has discussed the rhetoric of failure, which basically means the ability to make claims about how things do not work: no matter how hard the player tries to make things right, the attempts are either doomed to fail or the player has to give up some of her ideals, for example.[6] Juul (2013, 113) suggests that failure in games is intertwined with the unique ways that games can present painful events: the experience of *complicity* is a new type of experience that is unique to games, stronger and personal than simply witnessing a fictional character performing the same actions. Such experience is crucial for my case studies as well. Especially in the final instalment of *The Mass Effect Trilogy*, the player has

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6   Molleindustria has developed various games making use of such rhetoric: *McDonald's Video Game* suggests that it is impossible to run the fast-food chain in an ethical manner, while *Oiligarchy* unceremoniously links oil drilling to political corruption. The games can be freely played at www.molleindustria.org.

to make various thorny decisions despite acting in the heroic role of the playable character, Commander Shepard.

As I already pointed out, concepts like narrative and representation have been quite fervently disputed in game research. The controversies open up perspectives to some problematics of narratology, and this makes game research such a prominent partner in theoretical discussions in this study. In the studies on audio-visual media like television shows, strong opposing viewpoints to the understanding of narrative have not emerged. However, in my analysis on transmedial worldbuilding in Chapter 7, I emphasise the fact that seriality and especially the long form of *series television* affect how television shows have been able to address cultural issues and react to them over time (see Koistinen 2015, 29). When it comes to fanfiction writing, my case study in Chapter 8, I want to point out the importance of the shared experience of being a fan while users are being engaged with certain works of fiction.

All in all, the term *user* is designed to address the larger generic frame of worldbuilding unique to speculative fiction, and to pay attention to the transformative influence of digital culture to the contemporary uses of literature and other art forms (see Felski 2013, xi). Rather than combining the experiences of and engagements with various media into a single entity, my emphasis on the rhetoric highlights the particularities of different media in relation to worldbuilding which is used across media as a communicative and rhetorical practice. By virtue of being such a practice, worldbuilding draws us as users into certain modes of engagement, which then contribute to an experience of worldness, or an imagined place. Throughout my study, I will explore the question of whether such an experience can be deemed central to all works of speculative fiction.

Towards a "Prototype-Conscious" Narratology

With regard to narrative theory, my approach on worldbuilding can be observed in connection with the discussions among three paradigms: transmedial narratology, rhetorical narratology, and unnatural narratology versus the "naturalising" approaches to worlds. On the grounds of my case studies, the umbrella of transmedial studies is quite obvious. Jan-Noël Thon (2015a, ix–x) points out that "transmediality" is commonly used in two different senses: while current narratology tends to use the term as referring to elements and the aesthetics whose realisation "is in each case necessarily media-specific" but which are "nevertheless not bound to a specific medium" (see Rajewsky 2005, 46n6), within media studies "transmedia storytelling" (e.g., Jenkins 2006) or "transmedial worlds" (Klastrup and Tosca 2004) describe more or less coordinated efforts, made to provide audiences with entertainment experiences that integrate more than one medium.[7] My conceptualisation

7   The concept of *intermediality* is close to transmediality, but differs from it in a way that makes transmediality more suitable for my study. In her essay aiming to specify and position the conception of intermediality, Irina Rajewsky proposes broad and narrow senses for the concept. In the broad sense, intermediality may

of worldbuilding as a communicative practice that draws the users into certain modes of engagement can obviously be seen as a transmedial phenomenon in the first sense of the term. Its use is, as Rajewsky puts it, "transmedially available and realisable, i.e. available and realisable *across* media borders" (ibid.; emphasis original), especially within the genre of speculative fiction. Furthermore, its realisation makes use of the affordances specific to each medium. Such an observation might seem self-evident in the context of speculative fiction research, in fact, as the aesthetics of the genre is generally understood to encompass a variety of media. In Section IV, however, I will utilise the concept of transmediality in the second sense, when I discuss the ways my conceptualisation of worldbuilding functions in relation to franchises or universes that encompass much larger constellations than just a single work of fiction.

Transmedial narratology, or "media-conscious" narratology, as Ryan and Thon (2014) have also called it, refers to the narratological approaches that may be applied to different media. Although I consider my approach as part of transmedial narratology, I see the project as a double-edged sword. On the one hand, it can be problematic to set various different, unique media under one umbrella. The whole concept of transmediality has been criticised by researchers with an essentialist view on different media, where every mediated phenomenon is bound to its mediality, cultural context and perceptional circumstances (see Schober 2013, 93; critique in Lutas 2015, 31–32). Even so, a close analysis of the expression or manifestation of practices such as worldbuilding between different forms of media can highlight the crucial features of the practices themselves when they are not approached as something that originates in one medium and then "transfers" to or gets "remediated" in others. On the other hand, then, transmedial approach can help us challenge and refine the concepts developed on the basis of quite limited material. As I have argued above, the concept of world, for example, instantiates a very specific kind of worldness found in literary mainstream.

Furthermore, transmedial narratology is often afflicted (and restricted) by its emphasis on narrative – especially in the case of worlds. In order to portray the centre of contemporary media convergence,[8] Ryan and Thon argue that the centre should be associated with the abstract type of content constitutive of "narrativity", content that we can define as that which all stories share:

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serve foremost as a generic term for all those phenomena that in some way take place *between* media (and can therefore be differentiated from *intra*medial phenomena as well as from *trans*medial phenomena) (2005, 46). In the narrow sense, Rajewsky distinguishes three subcategories for intermediality: medial transposition (e.g., film adaptations, novelizations), media combination (e.g., opera, film, theater, comics), and intermedial references (e.g., references in a literary text to a film through, for instance, the evocation or imitation of certain filmic techniques such as zoom shots, fades, dissolves, and montage editing) (ibid. 51–52).

8   Media scholar Henry Jenkins has famously coined this term. By convergence, he means the "flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want" (2006, 2). Jenkins' focus is therefore on contemporary media culture, while Ryan and Thon discuss more the aesthetic or artistic dimensions of the phenomenon.

> [T]he concept of storyworld plays a prominent role, for it captures the kind of mental representation that a text must evoke in order to qualify as a narrative. David Herman describes narratives as "blueprints for a specific mode of world-creation" (2009, 105), but it would be more appropriate to say "world imagination", for while the author creates the storyworld through the production of signs, it is the reader, spectator, listener, or player who uses the blueprint of a finished text to construct a mental image of this world. The convergence of media around a common center that we may call 'narrativity' – a center that is itself organized around a storyworld – will serve as an opportunity to capture their distinctive narrative resources. (Ryan and Thon 2014, 3.)

Although I argue for the view of speculative worldbuilding as a transmedial phenomenon, I do not expressly tie it with just narrative. While it is probably safe to say that the vast majority of literary works of fiction invite us to use narrative as one of the primary frames of interpretation (and, therefore, possess the quality of narrativity), worldbuilding as a practice should not be inherently tied to the narrative qualities in the sense of the author creating the world and the user constructing it.[9] There are other "tools" and responses available when it comes to our engagements with cultural artefacts, and this is one of the main reasons why I have included digital games, transmedial franchises, and fanfiction into my case studies. In the course of this study, I will argue that other responses also exist in the engagement with literary fiction, but they are not usually highlighted in theory, because of the strong emphasis on narrative in the existing theories on worldbuilding. My transmedial narratological approach, then, is not about "capturing distinctive narrative resources" of different media, but about using the transmedial phenomenon of worldbuilding to challenge and refine the existing prototypical assumptions behind various narratological concepts. This is bolstered both by the fact that my case studies represent various different media and the fact that they belong to the genre of speculative fiction, which deviates from the classic case studies analysed in narratology. Speculative fiction may open up new perspectives to the familiar debates (Polvinen 2014a, 63), therefore offering a basis for performing theoretical thought experiments.

So, what are the prototypes of contemporary narrative theory that this study challenges in the frame of worldbuilding? One of the challenged prototypes is obviously the concept of world: above I have already discussed the way this concept is typically used in order to refer to a proxy for our mundane world. Mäkelä argues that cognitive narratology, in particular, grounds itself in prototype modelling, and therefore "the cognitive-narratological prototype

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9   With this, I do not mean to imply that communication and narrativity be viewed as interchangeable concepts, but that worldbuilding has been situated as a prototypical element of narrative itself (see Herman 2009). A concept sometimes mentioned in relation to communication of worlds is *description*: Monika Fludernik argues that "nonnarrative elements" such as description are "constitutive of how most narratives handle the setting" (2000, 274). In this study, I sometimes compare my approach with the understanding of narrative as a text type beside description and argument, but do not further use them. This is due to the fact that my conceptualisation of worldbuilding encompasses all three text types in a way that makes their discussion as separate modes unproductive in my user-oriented approach.

reader always opts for the most likely, the primary, the coherent" (2013b, 145). In my view, the understanding of world as a proxy for our mundane view of the world is precisely an example of opting for such qualities. In her recent discussion on the transmedia's preference for "ontologically remote" worlds, Ryan argues that "it takes a lot of cognitive effort to imagine a world very different from ours, because we cannot use our experience of the real world" (2015a, 12–13).[10] According to Ryan, "realistic" fiction would be easier to engage with imaginatively as our cognitive frames for understanding the mundane world would be at the user's disposal, while in the case of "fantastic or futuristic" fiction, the user would have to work harder to "construct a mental image" (see Ryan and Thon 2014, 3) that would function as a world-like proxy. After the "painful period of initiation" (Ryan ibid. 13), however, the users are able to instantly immerse into the worlds, to instantly see them as world-like instead of being something strange and remote. Ryan's approach is therefore an example of the view that the users would want to opt for the most likely, the primary, the coherent in the sense of *familiar* instead of appreciating the strange or the cognitively challenging *worldbuilding* itself, they just want to experience absorption into the worlds which they have familiarised themselves with.[11] Like Mäkelä (ibid.), I aim not to construe the user here as a "mere sense-making machine but as someone who might just as well opt for the improbable and the indeterminate".

Ryan's approach can, among many others, be criticised for the same bias that the so-called unnatural narratologists have raised in relation to the prototypical views on narrative. Jan Alber, Stefan Iversen, Henrik Skov Nielsen and Brian Richardson argue that most definitions of the term narrative "focus far too extensively on the idea that narratives are modelled on the actual world and consequently ignore the many interesting elements of narrative which James Phelan has termed synthetic" (2010, 114). Similarly, most definitions of the term world focus on the idea that worlds are primarily modelled on our mundane world and consequently they ignore the many interesting elements I have here called world-as-construct.[12] What is often valuable about speculative fiction is the fact that the nature of speculation can be such that it cannot be traced back to either real-world models or even to the narrative understanding of causes and effects. In my approach, the worlds are modelled on the speculation, a process of contemplating and considering a subject or an idea, and

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10   Ryan bases her claim of cognitive effort on the principle of minimal departure (originally in Ryan 1991), and argues that when a text "mentions a horse we can imagine it on the basis of our knowledge of real horses, but when a text mentions a ghorf we have only the information provided by the text to visualize this kind of creature, unless there are illustrations". Therefore, since fantastic worlds are "harder to imagine than realistic worlds", they have much more to gain from a transmedial and multimodal representation that depicts them through many different kinds of signs that address different senses. (Ryan 2015a, 13.)

11   As I will argue in Chapter 8, such an experience of familiarity is important, for example, to the writers and readers of fanfiction. However, even in the case of fanfiction, it is not the whole truth about worldbuilding.

12   Furthermore, as Mäkelä argues, the "homogenizing side effects of much contemporary narratology" (2013b, 143) ignore the fact that also many conventions under the heading of realism are "peculiarly balanced between the cognitively familiar and the cognitively estranging – and, as such, question the reader's loyalty to naturalisation" (ibid. 145).

working it through. So, although the worlds of speculative fiction can be approached as "possibly existing", they do not need to be possible or real the same way as our mundane world is. To achieve such an effect, speculative fiction makes use of rather distinctive strategies which have to do with worldbuilding.

Another challenge related to my conceptualisation of worldbuilding as a communicative practice is the prototype of the rhetorical communicative situation as canonically expressed by James Phelan: "Somebody telling someone else on some occasion and for some purpose(s) that something happened" (2007, 3). The definition has a clear verbal bias, but even more problematic for my transmedial study is the fact that in the rhetorical tradition represented by Phelan, the concern with communicative acts is centrally associated with the questions of authorial intention. This issue is highly problematic when it comes to discussing communication in digital games or transmedial constellations, for example. It is problematic in the theorisation of fictional worlds in literary fiction, as well, because in this sense, worldbuilding cannot be seen as a rhetorical practice unless it is seen as a feature of narrative and a part of the rhetorical situation of somebody telling something to someone else.

Herman, who has made pioneering work in introducing the concept of worldmaking to narratology, has presented a view on prototypical instances of narrative which argues for the view on worldmaking as a part of narrative communication. He (2009, 19) argues that such instances involve something more than just particularised temporal sequences unfolding within more or less detailed storyworlds. In my view, Herman conflates the engagement with works of fiction and narrative communication or sense-making: reading a novel is seen as reconstructing a storyworld from the textual cues and the reader, thereby, as positioning herself into the communicative situation. This understanding is repeated in the above quote from Ryan and Thon, who define narrativity as a "centre that is itself organised around a storyworld" (2014, 3). In the course of my study, I therefore suggest that not everything in our engagement with works of fiction falls under the category of narrative. I put forward, for example, the distinct interpretative frame of simulativity alongside with narrativity.

Last but not least my approach must deal with the challenge of literary mainstream fiction, because the way that it makes use of various elements is typically seen as the prototype from which all other forms deviate. As a result, works of speculative fiction (and quite obviously games, television shows, fanfiction, and so forth) appear marginal or even unnatural in comparison with the norm. I subscribe to the view that we should neither stretch terms such as "narrative" until they cover every possible work of fiction (or every mundane communicative situation) nor label elements "natural" or "unnatural" on the grounds of a prototype such as a literary mainstream novel. The former move would only dilute the concepts into uselessness (and confirm the fears of narrative imperialism, as expressed by Aarseth above), while the latter would just solidify the status of the prototype as "normal" and subordinate everything divergent from the aesthetics of the mainstream.

Instead of saying that a novel which, for example, has no clearly definable characters or distinct events would defy our assumptions about narrative, we could say that it merely challenges our assumptions formed by the mainstream novel. The primary reason for this is obviously my emphasis on speculative fiction, for it is important to pay attention to the fact that the aesthetics and the relevance of my case studies do not wholly conform to the same regularities as they do in mainstream fiction.

Throughout the study, my emphasis is on the users and on the dynamic relationship between users and works of fiction. The overall aim is to argue for the recognition of the various modes of engagement and interpretation beside the prototypical narrative ones and to study the interplay between them in the userly work by means of worldbuilding. This study suggests viewing speculative worldbuilding as a transmedial practice, which is available and realisable across media borders, but which makes use of the affordances specific to each medium. Because media such as many of my case studies can be seen to represent a "new norm", with regard to the understanding of the prototypical narrative developed in the study of literary fiction, McHale has recently predicted that as narrative theory loses its mooring in the "old" prototypes, it "might become divergent and various, multiple *narratologies* instead of one – a separate narratology for each medium and intermedium" (2015, 302; emphasis original). I do not find such progress promising. In order to analyse contemporary media and art, which are defined by the phenomenon of convergence, the various theories should converge, too, and support each other. This way, the prototype, which is, for example, only implied in the analyses of narrative qualities of works of fiction, can be exposed and questioned. I therefore suggest that it might be useful to advance a "prototype-conscious" narratology instead of the proliferation of medium-specific narratologies.

Structure of the Study

This study is primarily interested in the different modes of engagement that worldbuilding as a communicative (and rhetorical) practice draws the users into. Following Felski (2013, xii), I have defined *use* as something that works of art invite, by drawing us into such engagements, attitudes and postures. Furthermore, I argue that worldbuilding is integral (if not completely unique) to speculative fiction, and that different media analysed bring different aspects of the practice into the picture – and also challenge the prototypical narratological conceptualisation of worlds and our engagement with them. The structure of this study is, therefore, divided into three sections according to different modes of engagement: imagination, immersion, and interaction.

In the first section, "Imaginative Engagement with Worlds", literature (or literary speculative fiction) forms the basis of my discussion. I have not made this choice in order to imply that as a practice, worldbuilding would be native only to literature as a media. Rather, the idea is to start by introducing and developing the concepts relevant to this study

by means of literary examples, because this is the scholarly environment where they were introduced and developed in the first place. Moreover, I want to emphasise that many of these concepts in their prototypical sense are problematic as tools for literary analysis as well, not only when they are applied to other media. This will be argued throughout the case studies representing the three different speculative premises for the userly engagement.

The first section outlines the idea that worldbuilding is a distinct way of putting the user's imagination at work. From a rhetorical viewpoint, it offers a specific way for emphasising ideas. Furthermore, I suggest that *speculative* worldbuilding is unique in the way it enables the different uses or aspects of imagination to come together. By juxtaposing two works that address similar speculative ideas with each other – a novel and a pamphlet – in Chapter 1, I will illustrate the way worldbuilding in speculative fiction not only engages the user in imagining fictional characters, events and such, but also in a more "rational" process of making comparisons between actual outcomes and possible events. However, in its distinctly *fictional* form, it enables the usage of double perspective, where a rather different sense of the familiar and the strange are employed. In Chapter 2, I will, therefore, look more closely at the artificiality of my case study as the central factor in worldbuilding as a communicative practice, instead of deeming artificiality an obstacle that needs to be overcome before deeper involvement. Throughout the first section, I will illustrate the interplay between two perspectives in the imaginative engagement: *world-internal*, approaching a world as possibly existing, and *world-external*, approaching a world as an artifice and a work in its materiality, despite the fact that they are intertwined in the overall engagement with a work of fiction. In Chapter 3, I will dispute the role of narrative as the exclusive object of interpretation and outline my understanding of the most distinctive feature of speculative fiction, which is its potential of working more abstract and general frameworks into concrete and particular. Furthermore, I will argue that this feature contributes to the experience of *worldness* that is peculiar to the genre.

Overall, the first section discusses worldbuilding in relation to three larger conceptual contexts: fiction, communication, and the frames of interpretation. In other words, speculative worldbuilding is defined in a way that makes it distinguishable from other phenomena and practices and provides a premise for challenging prototypical assumptions and conceptualisations, whereas the second section "Immersive Engagement with Worlds" focusses on the userly viewpoint and the rhetorical potential of speculative fiction. After the conceptual tuning of worldbuilding in the first section, Chapter 4 departs from the realm of literary fiction by taking a digital role-playing game trilogy as its case study. Here, I will argue for an understanding of worldbuilding as a dynamic communicative practice between a work of fiction and its user, concretised in the agency of the player immersed into the development of the role-playing character inside and in relation to the game world. Immersion is not understood as easy absorption, but as an active process of both apprehending the framework and using it. Chapter 5, for its part, turns back to literary fiction and shows how ignoring the features of such immersive engagement has presented

a view on userly worldbuilding where the rhetorical objectives have appeared subordinate to the mimetic ones. Finally, Chapter 6 takes a work of fiction and digital RPG as its case studies side by side and argues for a transmedial or generic understanding of the rhetorical potential of speculative fiction, potential that lies in its doubled nature which both engages the users to imagine alternatives and possibilities by means of world models and hands them tools to reflect on the ways they do this.

The last section of the study, "Interactive Engagement with Worlds", takes worldbuilding as a transmedial phenomenon to the more concretely transmedial environment, that of franchised entertainment and fanfiction. In short, I will argue that the ways digital media has influenced our understanding and engagement with works of fiction can be fruitfully explored by such doubly transmedial discussion. The interactive mode pursues the logic of engagement where the understanding of worlds as constructs (what there is) and processes (what there could or might be, as a result of what is) is actively taken into the users' own hands. In Chapter 7, the "canonical" side of this logic is explored by means of transmedial franchise, while in Chapter 8, the "fanonical" dimension is brought to the fore. In both cases, worldbuilding is used as a communicative and rhetorical practice, but for rather different purposes, based on what it is that the authors and fans want to share and communicate.

This study focusses on the unique affordances of speculative fiction and worldbuilding. These enable speculative fiction, for example, to concretise the workings of fiction's devices, such as unique characters, or expose the frames we use in creating and understanding them. In this, speculative fiction does not so much distance us from our mundane world or from our actual experience of it, but from the ways we build sense into it. Speculative fiction uses the imaginative engagement by means of worldbuilding as its powerhouse, but not solely in the traditional, author-led way. The rise of digital media has made the active invocation of worldbuilding and the use of rhetorical affordances more available than before. This means it is a way of sharing the experience of works of fiction not only in the sense of emotional engagement, but also in the sense of political or socially oriented engagement. After all, speculative fiction is fundamentally about ideas, and engaging ourselves in the working through of a variety of such ideas can be both an enjoyable and a revolutionary practice.

II IMAGINATIVE ENGAGEMENT WITH WORLDS

[F]antasy, the making or glimpsing of Other-worlds, was the heart of the desire of Faërie (Tolkien 1983, 135).

In this section I will argue that speculative worldbuilding is a distinct way of putting the user's imagination at work. Imagination is usually brought up by literary theorists in relation to the creation of fictional events, original artworks – or worlds – whereas more rational aspects, such as the ability to imagine comparisons between actual outcomes and possible alternatives or otherwise "prospecting" into the future are downplayed (see Richardson 2011, 676). Here, it is suggested that in its fictional form, speculative worldbuilding is a unique practice that enables different uses or aspects of imagination to come together. The approach bears resemblance to science fiction scholar Darko Suvin's classic theory on the co-presence of cognition and estrangement, which allows science fiction "both relevance to our world and the position to challenge the ordinary, the taken-for-granted" (1979, 8–9). I, however, further connect my approach with the double-layered nature of fictional worldbuilding, which is captured in the quote above from J.R.R. Tolkien's seminal essay: the desire of fantasy to both make and glimpse worlds. Speculative fiction, in particular, invites its users to engage with the worlds imaginatively, but it also enables them to recognise the artificiality of these worlds, to reflect on the fact that they are real-world constructions made for a purpose. On that account, this study aims to bring fictional domains, which are often taken to be distant from our experience of the mundane reality into a deeper dialogue with the userly engagement taking place in the here and now.

The view on fictional worldbuilding as being double-layered points the way towards its significance as a rhetorical practice, something that I find lacking in so many otherwise path-breaking studies on the worlds of fiction. Marie-Laure Ryan's influential approach, which I brought up in the Introduction, assumes a stance of *either/or* and ultimately grants fictional worlds the function of acting as a proxy for our mundane reality. The concept of world is therefore taken to mean a model of a physical space, and the communicative aspects related to worldbuilding are seen simply as engaging the users with an effort to naturalise the world through relocation or transportation into a position inside it. Interestingly, Tolkien's famous theory on secondary worlds, which is based on the idea of a writer making "a Secondary World which [user's] mind can enter" (1983, 132) is similar to Ryan's

conceptualisation. In her important critique on Ryan, Merja Polvinen argues that the view of world as a physical space "suggests the impossibility of being both inside and outside a fictional world" (2012, 98) and as a result, the kind of duality that is specific to works of fiction is ignored, "the knowledge that we engage not only with characters and events, but also with an artistic object" (ibid. 108). My approach draws from Polvinen's argument, but takes it to the field of speculative fiction, where the rhetoric of worldbuilding should be seen as based on such duality instead of being an act of reviewing our mundane world from the perspective of an ontologically separate realm.

Furthermore, this section argues that we need to recognise the specific combination of different uses of imagination as a crucial feature of speculative worldbuilding. In this, the global, general, law-likeness, and abstract (such as hypotheses, scientific theories, or thought experiments) are combined with the particular, contingent, and concrete (such as stories with specific agents, events, and their relations). This combination provides the basis that allows the works of speculative fiction to be founded on quite distant premises which can be imaginatively engaged with in a way that purely scientific models, for example, do not allow. The works not only enable the user to follow up the working out of a certain idea and its consequences, but also facilitate her cognitive and emotional engagement with worlds as possibly existing. In what follows, I will refer to *world-as-construct* as a model that has been built in order to work through an idea, while *world-as-process* refers to the actual working through of the idea by means of the userly engagement. Making meaningful sense of the two dimensions – abstract and particular – is in the heart of worldbuilding as a communicative practice, but it also contributes to the peculiar sense of *worldness* that is so important to speculative fiction.

The way worldbuilding is used in communicating ideas is often obscured by the aforementioned understanding of world as a model of physical space, as well as by the widely accepted assumption noted by Richard Walsh, that "an awareness of the world's artificiality would necessarily produce user detachment instead of involvement" (2007, 148). Throughout the case studies in the following three chapters, artificiality is viewed as the central factor in the process of communication, instead of being deemed an obstacle that needs to be overcome before deeper involvement with works of fiction. I will argue that both the artistic and the rhetorical potential of worldbuilding rest on what Maria Mäkelä has called "oscillation between flatness and perspective; between a sense of *surface* and *depth*" (2013b, 146; my emphases). In relation to speculative worldbuilding, I have chosen the word "interplay" to describe the relationship between the two senses because in my view, both of them are constantly maintained and intertwined in the engagement with a work of speculative fiction. They are explicated by means of two perspectives: *world-internal*, seeing the world as possibly existing; and *world-external*, seeing the world as an artifice and the work in its materiality. It is argued that the latter has been more or less ignored both in narrative studies on worlds and in speculative fiction research.

Chapter 1 will begin the enquiry into worldbuilding and imagination by asking what it means to imagine a world. I will suggest making a clear distinction between fiction and nonfiction in terms of worldbuilding, a move which is especially important for developing a transmedial approach. My case studies are Neal Stephenson's two works, the novel *Cryptonomicon* (1999) and the pamphlet-like essay *In the Beginning... Was the Command Line* (1999). The former falls into the category of a work of fiction, while the latter is a work of nonfiction. Despite this difference, it is argued that both of these works seek to engage the user's imagination by means of speculative worldbuilding. Similarly to Brian McHale (2010), I will approach Stephenson's works as building speculative "scale-model worlds": in doing so, they engage the user in actually trying out an idea. From the viewpoint of communicating ideas, "what is modelled" becomes, in the end, less important than the way the modelling is done. Both works of fiction and nonfiction leaning on this speculative practice can build scale-model worlds and highlight something from the user's understanding of the present reality. However, I argue that works of fiction differ from nonfiction in their doubled structure – the interplay between the two perspectives – which is important for the rhetoric of their idea. Stephenson's *Cryptonomicon*, for instance, concretises the abstract theme of information and power by imposing a power structure on its readers, as well. Fictional worldbuilding is introduced as a term, which encompasses this double-layered process.

Chapter 2 will turn more closely to the relationship between communication and worldbuilding and argues that instead of calling the users to discard the frame of invention in their engagement with a work of fiction, fictional worldbuilding extends an invitation to adopt two perspectives. With this view, I oppose not only the conceptualisation of speculative worlds as models of "ontologically remote" (Ryan 2015a, 12) entities which the user relocates to, but also the stark distinction between the primary and secondary worlds in fantasy fiction research. Both of these premises require us to move away from the actual here and now of being engaged with a work of fiction. When it comes to fantasy fiction research, in particular, the theoretical roots of such a move are located in our supposed imaginative relocation to an ontologically distinct domain, while in narratologically informed theories on worlds, they are also tied to the emphasis on communication as a *report* or *telling*. It may be tempting to see Jeff VanderMeer's *City of Saints and Madmen* (2006) in terms of relocation and report: it is a work of fiction which is less of a novel than a collection of short stories, novellas and other texts, woven together by the fantastically immersive city of Ambergris and framed by a set of case notes identifying the writer as someone who has unwittingly become a traveller between two worlds. However, VanderMeer's book invites the reader to pay attention to the work specifically as a construct and illustrates the fact that as a rhetorical act, fictional worldbuilding is based on the doubled awareness of both the imaginary realm and the means used in bringing it available to imagination. In this chapter, I will argue that the doubled structure of this kind, inherent to fictional

worldbuilding, cannot comprehensively be described either in the belief-oriented paradigm or the in the tradition where communication is understood as report.

Finally, Chapter 3 will challenge the prototypical understanding of narrative as the object of both imaginative and interpretative engagements with fiction and brings the concept of simulation to the discussion of worldbuilding. The starting point is the argument that the definitions of narrative based on its prototypical content – namely, autonomous intentional agents and their interactions – (see Herman 2009; Palmer 2004) has not only presented narrative as the only frame of interpretation for discerning complex states, connections, and relations, but also produced quite a limited view on what works of fiction are about and what their appeal is. I will analyse this by looking at the way the other frames are activated in the engagement with Hannu Rajaniemi's novel *The Causal Angel* (2014). The novel juxtaposes permanent, determined selves and the radically fluid selves adopted in gameplay, and is therefore an excellent case study for analysing one of the most distinctive features of speculative fiction: the potential for working abstract and general frameworks into concrete and particular. In this, speculative worldbuilding seizes both the readily changeable aspects of reality as we understand it and the very model on which this understanding is based. Despite the inclusion of simulation and scholarly dialogue with game studies, the chapter will not move outside of literature as a media. However, I would like to argue that the view on speculative worldbuilding as a communicative and rhetorical practice developed throughout these first three chapters provides a theoretical basis for a transmedial approach, which emphasises the affordances of different media.

1 WORLDBUILDING AND FICTION

This chapter argues that although speculative worldbuilding draws the user into the mode of imaginative engagement, as a communicative practice it can be used in works of fiction and nonfiction alike. In this capacity, it is not only employed to engage the user with the process of building what Brian McHale (2010) has called "scale-model worlds", but also to highlight something from the user's understanding of the present reality. We should ask, however, what it means to imagine a world. The imagination and fiction are not interchangeable concepts, but should be distinguished from each other when it comes to worldbuilding. There is nothing *inherently* fictional about speculative worldbuilding, despite the fact that it has the potential to create a double exposure of real and imagined for the user. The prevalence of worldbuilding as a practice notwithstanding, I suggest that fictional worldbuilding as a practice is distinguishable from the nonfictional one in the way it enables the use of a double perspective. Making a clear distinction between fiction and nonfiction in these terms is especially important for a transmedial approach, because worldbuilding is not tied to concepts like invented narrative – and the assumptions such concepts carry.[13] Worldbuilding can therefore offer a transmedially applicable way to discuss the specificity of speculative fiction.

I have two works by Neal Stephenson, American writer and game designer, as my case studies. His novel *Cryptonomicon* and pamphlet-like essay *In the Beginning... Was the Command Line* (henceforth, *Command Line*) were both published in 1999. The former is routinely called a work of fiction, whereas the latter is categorised as a work of nonfiction. Despite the obvious differences in style and form, the two works can be considered parallel to each other: both of them offer a similar conception of the abstract union between information and power, presenting the ones who control the flow of information as the ones having the most power. It can also be said that the two works have been written for similar audiences. Jay Clayton, for example, has called *Cryptonomicon* "the ultimate geek novel"

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13   In transmedial approaches to works of fiction, world has been introduced as a concept to replace terms like narrative or story in the definitions of fiction, such as the one noted by Dorrit Cohn: "in English critical language [...] fiction as the designation for an invented narrative – novel, novella, short story – has been current for more than a century" (1999, 2). An illustrative example of the attempt to move fiction away from storytelling is game scholar Jesper Juul's choice to use the term to "mean any kind of imagined world" (2005, 122).

(2003, 204), while *Command Line* is, in short, a commentary on the operating systems business and an analysis of the Graphic User Interface (GUI) as a metaphor in the shape of the intrusive abstractions that have increasingly been set between human users and the actual workings of devices. The most obvious element that ties the two works together is the fictional book *Cryptonomicon*, the namesake of the novel described as a "cryptographer's bible", which summarises the knowledge of cryptography and cryptanalysis. As N. Katherine Hayles notes in her analysis of Stephenson's two works, fictional *Cryptonomicon* is "a kind of Kabala created by a Brotherhood of Code that stretches across centuries. To know its contents is to qualify as a Morlock among the Eloi, and the elite among the elite are those gifted enough to actually contribute to it." (2010, 140–141.) In Stephenson's portrayal of contemporary culture in *Command Line*, the future society imagined by H.G. Wells in *The Time Machine* (1895) is given a twist, and it is only a small minority of people (the Morlocks) who actually know how everything works, while most of the people (the Eloi) learn what they know from the sources controlled and designed by the minority. Stephenson's Morlocks, therefore, do not only control the information but also its *availability*, both in the sense of access and in the sense it is provided.

Fittingly, *Cryptonomicon* is not a novel for those who do not want to work too hard. Portions of it are rather complex, especially for the non-technical reader. The structure of the novel is quite intricate, as well, as it weaves together four character-centred storylines (three of them taking place during World War II and one of them in the late 1990s, during the Internet boom) in a manner which is most familiar from the thriller genre. In 1942, Lawrence Pritchard Waterhouse, a young mathematician, gets assigned to the joint British and American detachment 2702. The mission of this secret unit is to conceal the fact that the Allied Intelligence has cracked the Enigma code that the Nazi Germany is using. To this end, the detachment stages events that provide alternate explanations for the Allied Intelligence's successes. Another protagonist, marine sergeant Bobby Shaftoe, serves in that detachment, carrying out Waterhouse's plans and "simulating randomness" to hide intentional action. Meanwhile, Japanese soldiers including Shaftoe's old friend, engineer Goto Dengo, are building a mysterious bunker in the Philippines. The fourth storyline is set in 1997, where Randy Waterhouse, Lawrence's grandson, travels to the Philippines to promote his old companion Avi's new start-up.

The goal of this chapter is to discuss the basis on which *Cryptonomicon* can be called a work of fiction and *Command Line* a work of nonfiction, despite the similarities in their themes and practices in worldbuilding. Just as Stephenson fiercely argues in *Command Line*, "GUIs use metaphors to make computing easier, but they are bad metaphors" (n.pag),[14] I aim at making the discussion of speculative worldbuilding easier, but also try to avoid turning it into a bad or a vague metaphor that does not really tell us anything about our

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14   *In the Beginning… Was the Command Line* is available as a free download. Although it was also published as a trade paperback later in 1999, I refer here to the freely distributed version of the essay, which is unfortunately not paginated. The essay can be downloaded at http://www.cryptonomicon.com/beginning. html.

engagements with cultural artefacts. Both of Stephenson's works make use of speculative worldbuilding as a communicative and rhetorical practice in addressing their topic: they engage the user into working the speculative premise by means of various what-if projections and thought experiments. However, already the summary of *Cryptonomicon* above provides a brief illustration of the profound difference between speculative worldbuilding as a larger imaginative practice and more specifically as an artistic practice of fiction. Works of fiction such as novels provide two perspectives with regard to the mode of imagination: as Merja Polvinen (2012, 108) suggests, the crucial part of the experience of fiction is our knowledge of the engagement with both imagined characters and events and a work of art. I refer to these two perspectives as *world-internal* and *world-external* perspectives. Stephenson's novel both discusses the importance of the user interface and becomes an interface in itself, simulating randomness and keeping the reader in the dark. In doing so, it concretises the abstract theme of information and power by imposing a similar power structure on its reader, as well. I introduce fictional worldbuilding as a term that encompasses this double-layered engagement.

1.1   Worldbuilding in Fiction and Nonfiction

As Richard Walsh argues, the uniqueness of fiction is usually "taken to be either a quality of the discursive product (a fictional representation) or a quality of the discursive act (a nonserious or otherwise framed assertion)" (2007, 1). Chapter 2 will discuss the latter quality in the context of worldbuilding, while here the focus is on the former quality in relation to the idea that a work's status as fiction is defined through the fictional character of its object. In the theories on fictional worlds, the object is obviously a world, and this is why world has been used as a fundamental concept in exploring the relationship between the domains of the real and the fictional. To understand how such an object is traditionally thought to be created, I will first visit the discussion on fiction and referentiality, illustrated by Dorrit Cohn's attempt to define the concept of fiction with the use of the adjective *nonreferential*. Cohn (1999, 15–16) argues that fiction is distinguishable from nonfiction by two closely interconnected features. Firstly, its references to the world outside of the text are not subject to accuracy, and secondly, it does not exclusively refer to the world outside of the text. For Cohn, then, nonreferentiality signifies that "a work of fiction itself creates the world to which it refers by referring to it" (ibid. 13).[15]

In Cohn's terms, the status of *Cryptonomicon* as a work of fiction could be established on the basis that it does not exclusively refer to the world "outside" of the text and that its references are, therefore, not bound to accuracy, while the opposite would be the case in *Command Line*. One could always ask, why it is necessary for a work to refer to *anything*

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15   Cohn's treatment bears resemblance to Gérard Genette's idea of pseudoreference, which suggests that "the beings to which [fictional utterances] apply have no extratextual existence, and the beings refer to us back to the utterances in a movement of infinite circularity" (1991, 25–26).

in particular. This comes down to the theory of representation, because it has traditionally been the norm to view narrative as the representation of a series or sequences of events in the narratological scholarship. As David Rudrum points out, such a traditional understanding of narrative has clearly been one of the few methodological constants of narratology, which, "so closely bound up with semiotics, is predicated on the view of language as signifiers (*sjuzet*) and signifieds (*fabula*), the former conveying a representation of the latter" (2005, 196).[16] Representation can basically be thought of as a triangular relationship: that it is always of something or someone, by something or someone, to someone. If representation is taken to be built on relationships of reference, it always presupposes something or someone (though imaginary) that is to be presented in an act of depiction.

In theories on fictional worlds, the hierarchy of the two worlds – the world "outside" of the text and the world created by the text – has become an underlying, prototypical assumption, especially in the approaches based on possible worlds semantics.[17] Marie-Laure Ryan, who has perhaps developed such an approach to the furthest, defines the concept of fictional recentering in these terms: "consciousness locates itself to another world and [...] reorganises the entire universe of being around this virtual reality" (2001, 104). Fictional world – or alternative possible world, as Ryan calls it – therefore takes the central position in the conceptual universe, and all the references to it become actual once the user is imaginatively engaged with the system. Fictional world is, therefore, supposed to be the object of references, standing as a proxy for our mundane world. In effect, fictional reference is recuperated as an actual reference to the fictional world and fictionality is hence turned into an abstract ontological category (see Walsh 2007, 15, 153).

It is problematic, however, that such approaches on fiction and worlds as Ryan's foreclose anything outside an alternatively existing domain for the duration of the engagement with a work of fiction. Polvinen (2012, 98) remarks that Ryan's view is based on her chosen metaphor of physical space, which translates into the theoretical impossibility of being both inside and outside a world. As a result, the concept of world is effectively cut off from the engagement with the artistic object. In other words, world-internal and world-external perspectives are essentially seen as incompatible. Theories on fictional worlds are not alone in creating such a dichotomy, although they specifically make use of world as an operational

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16   As an "extremely elastic notion" (see Mitchell 1995), representation is associated not only with semiotics and signs, but also with the aesthetic principles of art in general, according to which the degree to which an artistic representation resembles the object it represents can be discussed.

17   Possible worlds semantics can be traced as far as to the 18th century and the philosophy of Gottfried Wilhelm Leibniz, who argued that a multitude of possible worlds exists as thoughts in God's mind, and since he is good and omnipotent, and since he chose this world out of all the possibilities, this world must be the best of *all* possible worlds (see Ryan 1991, 16). In the 1960s and 1970s, Leibniz's concept of possible world was taken up by philosophers Saul Kripke, David Lewis and Jaakko Hintikka, who remodelled it into a theoretical tool suitable for modal logic. Modal logic makes use of possible worlds as abstract constructs, which elucidate theoretical problems related to truth-values and counterfactual conditions, but its conceptual apparatus is not easy to apply to the study of works of fiction as it is. However, critics such as Thomas Pavel (1986), Lubomír Doležel (1998) and Marie-Laure Ryan (e.g., 1991, 2001) have developed their applications in the field of narrative theory.

model in addressing the imaginative engagement. Walsh (2007, 148) sees the dichotomy as an example of a critical practice situating itself in contrast to the reading experience. For his part, Gregory Currie criticises the accounts of narrative which "derived from taking the internal perspective alone" as they "ignored the expressive features of the work: features that function to indicate the ways in which authorial interest is directed towards unity, time, specificity, and causation" (2010, 51–52).[18] Ryan attempts to account for this when she notes in a later article that recentering does not occur *whenever* a text describes an imaginary world. When someone makes a counterfactual statement, for example, they intend to invoke an imaginary state of affairs, but for the purpose of saying something about the real world, not to "contemplate the fictional world for its own sake" (Ryan 2010, 4).[19] She, therefore, seems to imply that there is a difference between worldbuilding as an imaginative and a fictional practice. Nevertheless, suggesting that in fiction worlds are contemplated for their own sake remains limited to the world-internal perspective. In my opinion, world needs to be *porous* in order to be truly descriptive of worldbuilding as a communicative and rhetorical practice, not enclosed in a separate sphere.

Both *Cryptonomicon* and *Command Line* make use of speculative worldbuilding, both to invoke an imaginary state of affairs and to say something about the real world. In the course of *Command Line*, Stephenson describes modern culture as a two-tiered system with the terms the Morlock and the Eloi borrowed from Wells' *Time Machine* – except that Stephenson turns the system upside down. Now, the Morlocks who keep the technological wheels turning are in the minority and in charge, because they understand how everything works. However, the phenomenon Stephenson calls "metaphor shear" can make the Morlocks to surrender their credentials and become Eloi. He discusses this with the example of choosing an operating system which, for him, denotes "buying a system of metaphors" and more importantly, buying into the "underlying assumption that metaphors are a good way to deal with the world" (*Command Line*, n.pag). This discussion is accompanied and illustrated by Stephenson's conversion narrative that recounts his real-life traumatic experience when his Powerbook crashed and obliterated his "big file" in July 1995, and how he, as a result of this, became a dedicated user of Unix and Linux. The same scheme of thought related to metaphor shear crops up frequently in *Cryptonomicon* – most explicitly during a scene, where Randy tries to get along with his girlfriend Charlene's

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18   Currie further suggests that narrative meaning-making is based on an acute awareness of representational correspondence: "for a given representational work, only certain features of the representation serve to represent features of the things represented" (2010, 59). In his view, particularly in cases where the assumption of representational correspondence becomes problematic, recipients will look for alternative external explanations related to authorial intentions or representational conventions before trying to imagine contradictory or otherwise problematic storyworlds based on a rigid insistence on internal explanations. In comparison to my world-external and world-internal perspectives, however, Currie sees the two possible explanations as alternatives to each other rather than complementary to each other.

19   Ryan's (2010, 4) example of a counterfactual statement is "If Napoleon had invaded Russia he would have not ended up on St Helena", which could be taken to mean namely that Napoleon made a critical mistake when invading Russia.

academic society. The academics are visiting their house while attending the "War as Text conference", which presents papers such as "Unshavenness as Signifier in World War II Movies". In the end, Randy ends up in a heated argument about Internet with the Finnish-British Yale professor, Dr G.E.B. Kivistik:

> The words came out of Randy's mouth before he had time to think better of it.
> "The Information Superhighway is just a fucking metaphor! Give me a break!" he said.
> "That doesn't tell me very much," Kivistik said. "Everything is a metaphor. The word 'fork' is a metaphor for this object." He held up a fork. "All discourse is built from metaphors."
> "That's no excuse for using bad metaphors," Randy said.
> "Bad? Bad? Who decides what is bad?" Kivistik said [...]. Randy could see where it was going. Kivistik had gone for the usual academician's ace in the hole: everything is relative, it's all just differing perspectives. [...]
> "So," Randy continued, "to get back where we started, the Information Superhighway is a bad metaphor for the Internet, because I say it is. There might be a thousand people on the planet who are as conversant with the Internet as I am. I know most of these people. None of them takes that metaphor seriously. Q.E.D."
> "Oh. I see," Kivistik said, a little hotly. He had seen an opening. "So we should rely on the technocrats to tell us what to think, and how to think, about this technology?" (*Cryptonomicon* 102–103.)

In this scene, compared to the people who actually know how things work, even the well-educated academics do not seem to understand why it matters that some metaphors are bad or hopelessly ambiguous. *Command Line* similarly evokes an image of a world that has become irreversibly polarised. It adheres to the two-tiered Eloi/Morlock structure of a technological society. The Eloi learn everything they know from "Disney-like Sensorial Interfaces" without having to strain their minds or endure boredom. These interfaces are designed and controlled by the Morlocks, who "have the energy and intelligence to comprehend details, go out and master complex subjects" (*Command Line*, n.pag). Stephenson's pamphlet suggests that this is caused partly by popular culture, which renders most people incapable of taking stands, and partly by a new semiotic layer between people and machines. The text thus argues for the necessity of recognising that we are being controlled:

> Back in the days of the command-line interface, users were all Morlocks who had to convert their thoughts into alphanumeric symbols and type them in, a grindingly tedious process that stripped away all ambiguity, laid bare all hidden assumptions, and cruelly punished laziness and imprecision. Then the interface-makers went to work on their GUIs, and introduced a new semiotic layer between people and machines. People who used such systems have abdicated the responsibility, and

surrendered the power, of sending bits directly to the chip that's doing the arithmetic, and handed that responsibility and power over to the OS. (*Command Line*, n.pag.)

All in all, both *Cryptonomicon* and *Command Line* resort to similar means when attempting to get their message across: they establish a premise, which is then systematically worked through in the course of the text. Following the arguments that a work's status as fiction is defined through the fictional character of its object, it should be possible to define *Command Line* as nonfiction on the basis that it refers to a premise known in the world inhabited by Stephenson and his readers, while *Cryptonomicon* should be viewed as referring to a fictional premise. According to Cohn, for example, an artfully created world, "no matter how close the resemblance in other respects, is never identical to the one inhabited by the author who has invented it or by his readers" (1999, 16). Characters like Randy or G.E.B Kivistik obviously exist only in the text (or perhaps inside the world) of *Cryptonomicon*, but such an observation does not provide an accurate basis for distinguishing fictional and nonfictional forms of worldbuilding from each other.

This is illustrated by the fact that despite being a work of nonfiction, *Command Line* is not based on some undisputedly actual premise, but rather on the world-as-construct that Stephenson has fashioned alongside his own conversion narrative. The phrase "fashion" comes from Nelson Goodman, who suggested in his seminal work *Ways of Worldmaking* that it would be better to focus on world-versions than on worlds, and that "these things and worlds and even the stuff they are made of [...] are fashioned along with the things and worlds themselves" (1981, 96). With the reference to world-versions, I do not intend to imply that there is no such thing as reality. Instead, I want to point out that a work of nonfiction such as *Command Line* can make use of an alternative premise, such as the two-tiered structure of the Morlocks and the Eloi. Fictionality, therefore, does not reside in the references to imaginative premises or in the elements themselves but must be looked for elsewhere.

Henrik Skov Nielsen, James Phelan, and Richard Walsh have recently argued that fictionality as a quality or fictive discourse as a mode should be distinguished from fiction as a set of conventional genres.[20] The gist of their "Ten Theses about Fictionality" is the observation (2015, 62) that fictionality "in the form of the intentional use of invented stories and scenarios" – what-if projections, if-only regrets, thought experiments, and hypotheses of all kinds – is pervasive in our culture. Furthermore, the theses aim to argue that works of fiction can engage with the mundane reality: "fictive discourse is not ultimately a means of constructing scenarios that are cut off from the actual world but rather a means for negotiating an engagement with that world" (Nielsen et al. 2015, 63). This is a valuable

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20   The genre designation provides a global framework for understanding a text as a whole, e.g., novel, short story, graphic novel, fiction film, television serial fiction and so on (Nielsen et al. 2015, 62). As such, it resembles the distinction drawn between 'narrative' as text type and genre: in contrast to genre, whose "members are entire texts, single text types mainly refer to parts of texts depending on whether the passage exhibits the semantic profile in question or not" (Aumüller 2014, n.pag.).

insight for my work on the rhetoric of speculative worldbuilding, because as a genre, speculative fiction is quite adept at going beyond facts in order to highlight something in the mundane world around us. Separating fictionality from the set of conventional genres also points out that practices such as speculative worldbuilding can be employed within nonfictional discourse instead of being exclusive to works of fiction. In his description of the Eloi/Morlock structure, Stephenson openly makes use of a speculative thought experiment as a rhetorical practice: he does not attempt to deceive his readers or lie to them, but aims at generating a fresh perspective into the contemporary culture and society. In this, speculative worldbuilding can be seen as a "vehicle for negotiating values, weighing options, and informing beliefs and opinions" (ibid. 62).

However, the discussion of the relevance of works of fiction to the mundane world does not necessarily benefit from using fictionality as a blanket term for various different cultural forms and using it to cover the use of what-if projections, if-only regrets, and such (see also Dawson 2015, 82). For my part, I would like to question the use of such a term in order to explain our ability to conjure up imaginary perspectives, for example, when the word *imagination* already exists. In her book on rational imagination, cognitive scientist Ruth M.J. Byrne (2005, 211) has convincingly shown that the ability to think about two possibilities from the outset is intrinsic to the human understanding of the factual reality. She calls instances of people imagining things that could have turned out differently as examples of counterfactual thought. The existence of such thinking in mundane life demonstrates that thoughts are not tied to facts: "they can go beyond facts to encompass other possibilities" (ibid. 1). Dual-possibility ideas are typically a way of highlighting something from the present or from the factual reality as we understand it. For example, the opportunity to learn from the past mistakes is, in part, based on the ability to think how things might have been better. Rhetorically, they can be used to create a double exposure of real and imagined, which Nielsen, Phelan and Walsh argue to be a quality of fictive communication that invites "the reader or listener to map an engagement with representations of *what is not* onto *what is*. This mapping can substantially affect his or her sense and understanding of what is." (2015, 68; emphases original.) However, this duality is fundamentally similar to the dual-possibility ideas of our mundane life which do not exactly correspond to our engagement with works of fiction despite being based on the intrinsic feature of human thinking.

It is, therefore, not enough to draw our attention to the double quality of fiction: the fact that it is not meant to be understood as true and yet is meant to shape our understanding about the actual world. Instead of this, I suggest that we concentrate on another kind of duality that is unique to works of fiction, the knowledge of our simultaneous engagement with both imagined characters and events and with a work of art (see Polvinen 2012, 108). In relation to the rhetoric of speculative fiction, this means understanding that worldbuilding is not about creating ontologically separate realms in the sense Ryan's approach outlines them, but about engaging the user's imagination in a way that can

enable a different viewpoint on her actual world, for example. Dystopian imaginings are an archetypal example of this. For instance, in the novel *Memory of Water* (2014) by Finnish writer Emmi Itäranta, the freshwater resources of the world have run short. The novel includes very tangible descriptions of drinking deeply good, fresh water. In doing so, the novel not only engages the reader to imagine another world, but also makes her think about our present world and its negligence concerning one of the most important conditions of life, water. Here, the two perspectives overlap, as the foreign world is imagined both as a possibly existing realm and recognised as an artificial structure built for imagining alternatives, for prospecting into the future. The double exposure of real and imagined in fiction is therefore achieved *both* in terms of a parallel between our mundane experience of drinking fresh water and the descriptions of such possibly existing acts in the novel, *and* in terms of recognising our engagement with an intentionally built construct. Next, I will look at the interplay of these two perspectives in relation to fiction(ality) in the genre of speculative fiction.

1.2   World-internal and World-external Perspectives

In *Command Line*, Stephenson takes up Disney and its way of creating artfully reconstructed representations of "real" places, such as a stone-by-stone reproduction of a ruin in the jungles of India as part of Disney World. He sees such representations as "mediated experiences which Disney does better than anyone", and then contrasts both Disney's products and GUIs with the work of a writer:

> Disney is in the business of putting out a product of seamless illusion – a magic mirror that reflects the world back better than it really is. But a writer is literally talking to his or her readers, not just creating an ambience or presenting them with something to look at; and just as the command-line interface opens a much more direct and explicit channel from user to machine than the GUI, so it is with words, writer, and reader. (*Command Line*, n.pag.)

For Stephenson, language is "the only system of encoding thoughts", and the fact that Disney World's content is not translated into "clear explicit written words" makes it such a disturbing environment in *Command Line*.[21] While technology companies like Apple and Microsoft are using GUIs instead of the command-line interface, Disney can create a "Sensorial Interface" on top of anything, producing a seamless illusion which does not

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21   Chapter 8 will discuss the relationship between the media conglomerates such as Disney and communities of fans who, in Stephenson's terms, refuse to be put in the position of the Eloi and take the production of illusions into their own hands.

really say anything.[22] Similar-sounding concerns about theories of fictional worlds have been voiced in rhetorical narrative studies. Walsh, for instance, argues that readers "cannot be content merely to construct fictional worlds, as if this in itself were endlessly satisfying" (2007, 53). Here, I am interested in worldbuilding as a communicative practice – especially in the context of speculative fiction – and the different rhetorical affordances it employs in fiction and nonfiction. The terms of world-internal and world-external perspectives are designed to explicate the specificity of the double exposure of real and imagined in speculative *fiction*: the double exposure is achieved both in terms of a parallel between our understanding of what is and engaging us with the representations of what is not, and in terms of our awareness of the engagement with an intentionally constructed artistic object.

Cryptonomicon might not seem like speculative fiction – in the sense of generic fantasy or science fiction – at a first glance. It puts together a thriller-like plot, depictions more familiar from the genre of historical fiction, and vivid characters engaged both in adventure and romance. Still, as I argued in the Introduction, to meet the criteria for speculative fiction, a work of fiction must not only involve a speculative premise, but also work the premise through in a processual manner. The premise has famously been called the *novum* by science fiction researcher Darko Suvin (1979, 63), and it is often summarised in the form of a question beginning with "what if" or "imagine if". However, both the aesthetics and the rhetoric of the speculative practice depend less on what there is in a work of fiction than on how it is described or worked out. *Cryptonomicon*, for instance, plays around with an idea resembling conspiracy theory, the idea that there is an extremely small number of people in the world who actually are enlightened or intelligent enough to understand how the world works and, consequently, are running things. As Farah Mendlesohn notes, it is ideas, rather than events or characters that are crucial for science fiction: "It is here that sf departs from contemporary literature, because in sf 'the idea' is the hero" (2003, 4). Here, my definition of speculative fiction obviously overlaps with some definitions of science fiction, but, as I suggested in the Introduction, the feature that distinguishes science fiction from fantasy with regard to speculation is the mode in which the premise is introduced and worked through. Speculative science fiction speculates on systems, and therefore it typically addresses an idea that has distinguishable consequences.

While the models focusing on the referentiality of fiction have been mostly interested in discussing the way a fictional world "replaces" our actual world during the engagement with fiction, the scholars and writers of science fiction have strongly emphasised the question of how imagined worlds can be brought into relation with the experience and knowledge of readers. Ursula K. Le Guin once characterised science fiction as "thought experiments" whose purpose is "not to predict the future [...] but to describe reality, the present world" (1976, n.pag). While this is a suggestive formulation, I agree with Brian McHale in his view that Le Guin's approach tends to "limit science fiction to the displaced reflection of

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22   Stephenson's line of thought here closely follows Jean Baudrillard's (e.g., 1994) idea of postmodern universe as one of *hyperreality* where entertainment, for example, is designed to offer more intense experiences than our banal, mundane life.

contemporary reality" (2010, 23). He (ibid.) suggests that instead of *describing* present reality, science fiction serves the valuable function of enabling us to imagine alternatives to the received reality, allowing us to think of the world *as otherwise as it currently is*. In order to do this, science fiction projects a model of reality that is in some sense systematically different from our own.

Citing Clifford Geertz' definition of "model" in two senses (1973, 93–94), where "modelling of" involves manipulating signs in such a way as to capture a pre-existing reality and "modelling for" involves manipulating reality in order to bring it into line with a semiotic template, McHale (2010, 21) sees speculative worldbuilding as an example of "modelling for". In speculative fiction, modelling for is to build a scale-model world in which to develop some of the possible consequences of an idea. Furthermore, "what is modelled" is often less important than the way the modelling is done. In other words, emphasis should be shifted from the scale-models to the *process*, which McHale (ibid.) calls "the actual trying out or trying on of the idea". I therefore view the scale-model as a constructed *premise*, which is then worked through. Following this, I suggest that the userly sense of worldness does not reside in the elements or the premise, in the world-as-construct, but in the way we are engaged with working it through – world-as-process. This contributes toward a view of worldbuilding as real-world participation, not so much as an instance of simply reflecting or imitating our reality.

McHale quotes an anecdote told by the distinguished science fiction author Samuel R. Delany about a regular reader of science fiction, who tries the experiment of rereading Jane Austen's *Pride and Prejudice* for the first time in many years and finds it interestingly transformed. "Before, I used to read novels to tell me how the world really was at the time they were written", the reader reports. "This time, I read the book asking myself what kind of world would have had to exist for Austen's story to have taken place." (Delany 1984, 99.) McHale (2010, 25) concludes that the reader now "reads Jane Austen's fiction not as a mirror held up to a historical reality, but as an exercise in world-building – a kind of thought experiment". *Cryptonomicon* can obviously be approached as a description of the world during the events of World War II, for instance, but it is more fruitful to think of it as inviting the reader to think what kind of a world would have to exist in order for the novel's events to take place. This, furthermore, highlights the important feature of speculative worldbuilding as an artistic practice: the premise is not always, or even in most cases, immediately apparent to the user but must be worked through in order to be made meaningful sense of – just as the reader of *Cryptonomicon* only grasps the true nature of the conspiracy at the end of the novel.

One of the components contributing to this end is cognitive estrangement which is, along with other effects such as the sense of wonder, often mentioned as the generic marker of science fiction. In relation to naturalising approaches to fiction, Maria Mäkelä argues that many realist conventions and novelistic techniques are in a continual motion between surface and depth, appealing to both "cognitive familiarity" and "cognitive estrangement"

(2013b, 164). As an example, the "hyperrealist descriptions" (such as the oft-mentioned hat of Charles Bovary in Gustave Flaubert's *Madame Bovary*) are ultimately motivated by the objective "to give us a sense of paper, or of writing, as juxtaposed with the illusion of immediate perception" (ibid. 150). In other words, the effect of estrangement is not restricted only to speculative fiction. Instead, it is specific to artistic conventions in general. This is what Viktor Shklovsky, the originator of the concept estrangement (*ostranenie*), also suggested: "The technique of art is to make objects 'unfamiliar', to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged" (1998, 18).

I argue, however, that speculative fiction is unique in the way it makes use of estrangement as a means of communicating ideas. As a rhetorical practice, speculative worldbuilding in fiction aims to give us a sense of the idea and the elements used in working it through, and to juxtapose these with the sense of the possibly existing world, which, in effect, is being built by these elements. In terms of world-external and world-internal perspectives, the estrangement is rooted in the user's awareness of the world, both as made and as possibly existing, and therefore does not simply arise from the double exposure between real (what is) and imagined (what is not), no matter how fantastic or remote the imaginings may be. The kind of speculative fiction I analyse activates the effect of estrangement when it engages the user in world-processing. In other words, the user's process of working the premise through in a systematic manner slows down the perception of the idea that is being worked through. This is indeed an aesthetic end in itself.

How is the sense of the thought experiment given, then? The majority of works of speculative fiction are imaginative in a sense that differs from everyday counterfactual thought, as according to Byrne, everyday thoughts "do not tend to focus on impossibilities – that is, things that could have never been, given the way the world is" (2005, 10). The fact that works of speculative fiction *precisely* focus on impossibilities is an important complement to Byrne's larger pronouncements on imagination, which, as Alan Richardson points out, "seem instantly suspect once one recognises the pervasive role of fiction in human mental life" (2011, 666). In a sense, all works of fiction deal with impossibilities compared to our everyday "even if's" and "what if's", because they engage us as users to imagine something that could have never been real *for us* and therefore serve a different purpose than even imagining something based on a flagrantly impossible premise, such as "if I could go back and do it over" (ibid. 667). In its fictional form, speculative worldbuilding seizes not only the readily mutable aspects or fault lines of reality[23] as we understand it (choices, actions, controllable events, and so on), but also the very model we base our understanding on.

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23   Byrne calls the "mutable" aspects or fault lines of reality – aspects that are more readily changed in a mental simulation of the event – regularities in people's imaginations, which indicate that there are "joints" in reality, junctures that attract everyone's attention (see also Kahneman and Tversky 1982). Byrne identifies the most readily changed aspects to be actions (instead of inactions), obligations (especially in the sense of controllable, but socially unacceptable actions), causes (causal relations and 'even if' –imaginations), and time (e.g., the most recent event in a temporal sequence). (Byrne 2005, 3–8.)

I argue that this combination both enables the user to follow up the working out of an idea and its consequences and facilitates her cognitive and emotional engagement with (or "absorption" into) the worlds as possibly existing. In this, elements such as wizards or FTL drives are not "less rational", because rationality should not be understood as a quality of something being based on the understanding of factual reality, but as a quality of human reasoning, which depends on the imagination of possibilities. Fictional worldbuilding in speculative fiction makes use of such rationality.

In my view, therefore, both *Cryptonomicon* and *Command Line* work through a similar idea and aim at negotiating a new relationship with reality as we understand it, but their differences in engaging the reader can be located in the nonfictional and fictional forms of speculative worldbuilding. In the course of her study on Stephenson's works, Hayles (2010, 126) discusses "the fictional world of *Cryptonomicon*" and "the nonfictional conversion narrative of *Command Line*". This is a small detail in her analysis, but it is quite interesting from the viewpoint of the userly engagement with the two works. *Command Line* indeed follows the structure of a conversion narrative, which recounts how Stephenson became a dedicated user of Unix and Linux. Stephenson links the experience to the larger system of deceptive interfaces and metaphors which had seduced him:

> It was – if you'll pardon me for a moment's strange little fantasy – as if I'd gone to stay at some resort, some exquisitely designed and art-directed hotel, placing myself in the hands of past masters of the Sensorial Interface, and had sat down in my room and written a story in ballpoint pen on a yellow legal pad, and when I returned from dinner, discovered that the maid had taken my work away and left behind in its place a quill pen and a stack of fine parchment – explaining that the room looked ever so much finer this way, and it was all part of a routine upgrade. But written on these sheets of paper, in flawless penmanship, were long sequences of words chosen at random from the dictionary. (*Command Line*, n.pag.)

The presentation of Stephenson's conversion narrative is an extremely important part of his depiction of contemporary, technologically advanced society, divided into those who are seduced and lazy, and those who actually take matters into their own hands and learn how to prompt the machines to act. It also illustrates his rather problematic relationship with metaphors, as the above excerpt, among many others, is actually a description of metaphors by means of yet further metaphors. However, the argument he makes is not against the use of metaphors, but for recognising the way they relate to the actual workings of systems. In contrast to *Cryptonomicon*, Stephenson's "strange little fantasy" is not really designed to address impossibilities – things that could have never been, given the way the world is. Rather, it is an imaginative "as if" scenario built to illustrate something that has been true for Stephenson himself and to call upon readers to relive it with him in order to draw a similar conclusion. It is noteworthy that Stephenson's conversion narrative concentrates on the readily mutable aspects of reality (choices, actions, controllable events, and so on) and, therefore, rests its rhetorical effect on the fact that he and his readers share the same

understanding of the factual reality when moves beyond facts in the form of little fantasies, for instance, are initiated.

Cryptonomicon is a different case, despite the fact that its elements do not really signal any major discontinuities in comparison with our understanding of the factual reality (with the exception of the apparent resurrection of Enoch Root, which I will discuss in the next subchapter). However, the novel uses other ways of activating estrangement, or increasing the length of perception on the idea that is being worked through. While *Command Line* could be viewed in the frame of conversion narrative, Hayles likens the structure of *Cryptonomicon* to the workings of a sort of machine that assembles a "coherent story out of plot lines which have been fragmented and spliced into one another" (2010, 139). In other words, the novel itself resembles an interface with a machine. The idea of a contemporary world run by a chosen elite is explicated in two different timelines, but with the re-emergence of character "types" who act out their roles similarly in both cases. The most obvious pairs are Lawrence Waterhouse and his grandson Randy, and Bobby Shaftoe and his son Doug. While Lawrence and Randy are the geek-geniuses, doing tedious work in order to break the codes and find out how the world really works, Bobby and Doug fill the role of the muscle, doing as they are told. In the World War II storyline, the opposing force is obviously the Nazi Germany, whereas in the 1990s that part is played by business rivals. The struggles in both timelines are overseen by Enoch Root, a mysterious superuser of the system. This way, the doubled character types in the two timelines activate the effect of estrangement, as they invite the reader to recognise the "surface" of the work, to adopt the world-external perspective and therefore consider the building blocks of what is represented as possibly existing beside the "depth" of the work.

Another example of how a text contributes to our awareness of its artistic conventions is the way the reader engagement in the "working out of a scale-model world" is brought about. I already mentioned in the introductory section of this chapter how Detachment 2702 manipulates physical actions into patterns aimed at simulating randomness. The character of Lawrence Waterhouse, on the other hand, is presented as extremely gifted at finding patterns of *regularity* in his surroundings, such as in the cityscape of London, where he notices how "the curbs are sharp and perpendicular, not like the American smoothly molded sigmoid-cross-section curves" (*Cryptonomicon* 144). The sharpness of the curbs then prompts Waterhouse into speculating how the regular transitions between the sidewalk and the street could be mapped by putting "a green lightbulb on Waterhouse's head" and then following his trajectory during a blackout. These trajectories are then drawn on the pages of the novel, and finally the analysis of them is presented:

> Ingenuity is a completely different matter. There is no systematic way to get it. One person could look at the pile of square wave tracings and see nothing but noise. Another might find a source of fascination there, an irrational feeling impossible to explain to anyone who did not share it. Some deep part of the mind, adept at noticing patterns (or the existence of a pattern) would stir awake and frantically signal the

dull quotidian parts of the brain to *keep looking* at the pile of graph paper. The signal is dim and not always heeded, but it would instruct the recipient to stand there for days if necessary, shuffling through the pile of graphs like an autist, spreading them out over a large floor, stacking them in piles according to some inscrutable system, pencilling numbers, and letters from dead alphabets, into the corners, cross-referencing them, finding patterns, cross-checking them against other.

One day this person would walk out of that room carrying a highly accurate street map of London, reconstructed from the information in all of those square wave plots.

Lawrence Pritchard Waterhouse is one of those people. (*Cryptonomicon* 145–146; emphasis original.)

The excerpt above displays the overall manner in which *Cryptonomicon* suggests that the factual world can be built (or reduced) into patterns of regularity which then reveal something about the way the world is. The principle is quite similar to the one Alan Turing explains when he addresses the close parallel between the problems of the physicist and those of the cryptographer. This explanation, taken from Turing's essay "Intelligent Machinery" (1948) and placed on the first page of Stephenson's novel as an epigram, states: "The system on which a message is enciphered corresponds to the laws of the universe, the intercepted messages to the evidence available, the keys for a day or message to important constants which have to be determined". *Cryptonomicon* itself can be read (among other ways) *both* as a study of the principle or a way of understanding the world expressed in Turing's quote and Waterhouse's pattern recognition described in the excerpt above, *and* as a manifestation of such patterns, such as the ones controlling the flow of information and the distribution of power. Compared to nonfiction, it provides two relevant perspectives for imaginative engagement, to both the possibly existing characters such as Waterhouse (world-internal) and to the artistic object in working out this idea (world-external). Furthermore, it starts from the premise that is quite general instead of focussing on the readily mutable aspects of reality, and in doing so, posits a scale-model world in relation to which the particulars such as Waterhouse can be understood.

At the end of their article on fictionality, Nielsen, Phelan, and Walsh make an observation on Suzanne Collins' *The Hunger Games* trilogy (2008–2010) which I find quite astute, although I insist on distinguishing fiction from the larger category of imaginative practices. They (2015, 71) provide a short reading of the trilogy and suggest that the novels broadly address the fight against inequality and oppression and for justice and equality. They further argue that our "interpretive engagement" with novels such as these is continuous with the more direct ways in which we make sense of our lives and our world. Above, I quoted Byrne's (2005, 1) statement that our thoughts are not tied to facts: they can go beyond facts to encompass other possibilities. In this sense, our engagement with *The Hunger Games* is obviously continuous with our "more direct" thinking of the mundane life, but what does this observation really tell us about Collins' novels? Dawson

notes this when he argues that while seeking to separate the quality of fictionality from the genre of fiction in order to demonstrate how pervasive it is, literary theories get applied outside the sphere of literature, but themselves gain nothing from the process: "This means that when the theory is turned back to fiction, it has nothing new to offer" (2015, 84). Nielsen, Phelan, and Walsh do, however, prove the difference between works of fiction and various other contexts in their short analysis. They describe the elements of *The Hunger Games* trilogy, which repeat a message about the possibility of revolution and change: birds called mockingjays, the protagonist Katniss Everdeen, and the books themselves. In my view, such an observation illustrates the use of a double perspective, because it points out the depiction of revolution inside the possibly existing world of Collins' novels and the way the novels as artefacts engage their users to address the idea of revolution.

This observation becomes especially important when we recognise that it is deeply ingrained, not only in the abstract process of imagining various possibilities, but also in the concrete implementation, the artifice of the work at hand. When it comes to *fictional* worldbuilding, the union between the world-external and the world-internal perspectives is ultimately embedded in an invitation to be in two worlds at the same time – to imagine the world and to be aware of it as a construct. This is a prerequisite for the ability to "extrapolate the relevance of the story to our understanding of and engagement with our reality" (Nielsen et al. 2015, 71). I argue that the artistic effect of estrangement arises from this. It is quite pronounced, for example, in the way the description above of London's cityscape slows down the reception of a perfectly ordinary situation of stepping down from the sidewalk onto the street and turns the reader's attention to the elements and the way they are structured. Furthermore, the recognition of the importance of particular implementations entails the need for sensitivity with regard to medium-specific affordances and devices – a discussion that I will return to from Chapter 3 onwards. Next, I will discuss the double layers on which *Cryptonomicon*, in particular, bases it rhetorical effect.

1.3 The Two Layers of Fictional Worldbuilding

As a response to the age-old paradox, the capacity of a fictional artefact to "hold the interest of its readers, to tell them about experiences at once imaginary and relevant to their own lives" (Riffaterre 1990, xii), it has often been suggested that speculative fiction serves the valuable function of estranging us from our experience of the mundane life. This view typically appears along with the presumption that we as users are *first* engaged in imagining a foreign land, and only *after* this complete absorption "export" meanings from it to our world. Polvinen criticises such a presumption for suggesting that our imaginative engagement is "understood to be interrupted or cancelled out by moments of self-reflection that occur when readers are explicitly made aware of the fictionality of what they are reading" (2012, 93–94). She then uses the concept of *textual self-reflection* to refer to instances of explicit

metafictionality.[24] The concept that I have used, world-external perspective, differs from the traditional view of metafiction in that it is constantly maintained instead of occurring on and off: it is a feature inherent to all works of fiction, a part of the interplay "between a sense of surface and depth" (Mäkelä 2013b, 146).

In its fictional form, speculative worldbuilding gives us a sense of the idea and the elements used in working it through and juxtaposes these with the sense of the possibly existing world. Therefore, as Polvinen (ibid. 108) has argued, the imagination of unrealities is guided by the design of the (literary) work itself. The world-internal perspective, the ability to approach the elements in a work as world-like, for example, is therefore made possible by the recognition of the work as an artifice. Such recognition enables the user to navigate and negotiate the work of fiction in a way that allows for the worldness to emerge: it does not lie so much in the scale-model, the premise, but in the way the user is engaged in working it through. The double-layered experience in this sense is not present in nonfiction, despite the fact that essays like *Command Line* can make use of practices like speculative worldbuilding. In my view, both of Stephenson's works suggest that it truly does matter what sort of system of metaphors we buy into, but only *Cryptonomicon* communicates this by way of engaging its reader into the double-layered experience.

At the end of his essay, Stephenson introduces half-jokingly a thought experiment, which presents the workings of our universe as being similar to the ones of an operating system, coded by some kind of a hacker-demiurge who pounds out one command line after another, creating one universe after another. He then speculates on the possibility that even if such an operating system actually were available on the Internet, most users would not want to bother with learning the commands or struggling with the failures. Soon we would have an operating system where "all of the possible decisions we could ever want to make" would have been condensed into series of dialogue boxes:

> Soon after a few releases the software would begin to look even simpler: you would boot it up and it would present you with a dialog box with a single large button in the middle labeled: LIVE. Once you had clicked that button, your life would begin. If anything got out of whack, you could complain about it to Microsoft's Customer Support Department. [...]
>
> What would the engineer say, after you had explained your problem, and enumerated all of the dissatisfactions in your life? He would probably tell you that life is a very hard and complicated thing; that no interface can change that; that anyone who believes otherwise is a sucker; and that if you don't like having choices made for you, you should start making your own. (Command Line, n.pag.)

Overall, Stephenson's essay negotiates a scale-model of a world where things are as he pictures them to be, and, at the same time, attempts to persuade the reader to join the effort

24   Such self-reflection should not, however, be equated with becoming aware of one's physical surroundings, because the reader retains focused attention on the text while becoming conscious of the fictionality of what she is reading. In effect, textual self-reflection brings out the double perspective of fiction.

and conclude that "this is the world I live in, this is the way it goes". In doing so, Stephenson draws from the practices conventionalised by works of fiction as rhetorical resources. The reader is engaged in negotiating a model that has the potential of enabling her to map a new relationship with the mundane world. Even so, while being engaged with Stephenson's thought experiment, the reader is not confronted with actual textual self-reflection. The reader might, obviously, evaluate and reflect on Stephenson's argument and the way it is presented, but the action is not similarly dual as it is in the case of being engaged with a work of fiction – something that I will discuss next in more detail.[25]

As I noted above, Nielsen, Phelan, and Walsh have argued that double exposure is a feature of fictive communication and as such it may "invite the reader or listener to map an engagement with representations of *what is not* onto *what is*" (2015, 68; emphases original). However, Byrne (2005, 211) has convincingly shown that the ability to think about two possibilities from the outset is intrinsic to human understanding of the factual reality. Dual-possibility ideas are typically a way of highlighting something in the present, mundane world. Creating a double exposure to *what is* appears, therefore, to be basically an *imaginative* practice, but not inherently fictional. When it comes to speculative worldbuilding in its *fictional* form, a double exposure is not achieved only in terms of a parallel between our understanding of what is and engaging us with the representations of what is not, but also in terms of our awareness of the engagement with the artistic object. We are, hence, invited to use two perspectives – world-internal and world-external – at the same time, to imagine the world both as a possibly existing realm and to be aware of it as a construct, built in order to imagine alternatives and to prospect into the future. Furthermore, speculative fiction makes use of estrangement in communicating ideas in a unique way; exercises in speculative worldbuilding are not merely conceptual thought experiments, but take a distinctive form in the work in its materiality.

This interestingly contradicts some of the widely accepted paradigms in the current theories on fictional worlds, such as the assumption critically noted by Walsh (2007, 148), that an awareness of artificiality would produce user detachment instead of involvement. In her analysis of the fictional status of online gameworlds, Lisbeth Klastrup (2009, n.pag) argues that online worlds differ radically from the "traditional fictions", because the communication with other people inside the worlds is not imagined but actually takes place here and now. Although participating in online gameworlds is, indeed, different from reading literature, I would like to point out that reading a novel similarly occurs here and now. The reader is not imagining the artistic object at hand but is aware of it as an actual thing. This awareness of the fictionality of fiction does not constitute an anomalous rational action that works against the imaginative engagement but is necessary for such

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25   In Section III, I will discuss the relationship between the navigation "inside" an imagined world and the manipulation of an actual artefact which is further intertwined with the affordances of different media (such as the processing of a literary text that is fundamentally linear in nature). Here, however, I aim to discuss the difference between fiction and nonfiction in terms of creating a double exposure by means of worldbuilding as a rhetorical practice.

an engagement to happen in the first place (see Polvinen 2012, 108–109). Fictionality, therefore, does not reside in certain elements, but rather in the way the user is invited to engage with these elements. From my point of view, the importance of recognising the artificiality in the userly engagement can be fruitfully extended from the literary theory to the study of various other media, and I will discuss this more especially in Chapter 4. But how does such a double perspective work in relation to worldbuilding and *Cryptonomicon*, then?

Stephenson has been quoted saying that "language [...] is the reverse of cryptography [because it] is about conveying information, not hiding it" (qtd. in Weise 1999, n.pag). *Cryptonomicon*, however, does its best to keep the reader in the dark. On the whole, it can be construed to be imposing a power structure of sorts on the reader, not unlike the one it suggests is what makes the world tick. The novel tests the reader's skills in using the interface: it not only contains diagrams, mathematical formulas, images, and maps, but is also constructed as a kind of formula itself. This formula slowly emerges, underlining the unavoidable linearity of the reading process. As Hayles notes, controlling information in *Cryptonomicon* quickly evolves "into a problem of simulating randomness" (2010, 121). The chapters, more or less concentrated on the limited third person point of view of a single character, follow each other in a seemingly random order, and the connections between various characters, events, and timelines seem coincidental at best. Hayles views the way the "surface narrative" is assembled as a mark of the digital technologies that have produced the text: "As the cryptological and gold plots begin to weave together, it becomes increasingly clear that the novel is functioning as a kind of machine assembling a coherent story out of plot lines that have been fragmented and spliced into one another" (ibid. 139). While it is true that the structure and various techniques of *Cryptonomicon* signal the fragment-to-pattern design of the novel, I do not see this exclusively as a mark of digital technologies but rather of novelistic conventions. I would rather say that Stephenson's novel concretises the analogy between literature and technology in a systematic manner.

The role of the world-external perspective in the userly engagement often receives less attention than the so-called real-world beliefs. As Richardson notes, the general assumption is that engagement with fictions recruits real-world beliefs but never contaminates them – "the real world will always trump the fictive one" (2011, 668). In their study updating the "folk theory" of imagination, for instance, Gregory Currie and Ian Ravenscroft argue that "if a story set in 1800 has the character on the side of the Atlantic one day and on the other side the next, I may decide that this is just an error on the author's part" (2002, 13). In effect, they suggest that the user should be able to use the fictional events "as if they were real", and only when this is not possible, the perspective external to the engagement with the work is adopted as an alternative. Compared with my concept of the world-external perspective, this external perspective is not part of the imaginative engagement but opposed to it. Currie and Ravenscroft's argument, therefore, makes the represented actuality the object of critical judgement and dismisses the specificity of both fiction and,

when it comes to *Cryptonomicon*, the novelistic form, as well. In what follows, I will take a look at the shortcomings of this view by examining the use of double perspective in the mysterious case of the character Enoch Root.

The seemingly ageless Enoch Root appears in both timelines of *Cryptonomicon* in major roles. During World War II, he serves as a chaplain in the Detachment 2702 and apparently dies in Sweden in 1945: "When Enoch Root dies, the only other people in the room are Rudolf von Hacklheber, Bobby Shaftoe, and the Swedish doctor. The doctor checks his watch, then steps out of the room." (*Cryptonomicon* 675.) In spite of his death, Root appears next to Randy's cell in the Philippines in the 1990s, and towards the end of the book it is also revealed that he attended Bobby Shaftoe's funeral in 1945, after having supposedly died in Sweden: "Staring out from the shade of that hood is the supernaturally weird-looking (in that he has a red beard and grey hair) head of Enoch Root – a character who keeps bumping into Goto Dengo as he goes around Manila trying to carry out his duties" (*Cryptonomicon* 1068). Such resurrection of a character can of course be interpreted in many ways – if nothing else, by assuming that the writer has made a mistake, as Currie and Ravenscroft suggest. However, the strangely well-timed appearances of Root can be read as one of the ways the relationship between information and power is addressed in *Cryptonomicon*. In other words, it is yet another puzzle or a pattern for the reader to recognise.

In the 1990s timeline, Root asks Randy in prison how he was able to recognise him on the phone despite the fact that they had only been in contact via e-mail (since the beginning of his trip to the Philippines, Randy has been receiving e-mails from a mysterious address ending in eruditorum.org). When Randy cannot give him an answer, Root argues:

> [I]nside your mind was some pattern of neurological activity that was not there before you exchanged e-mail with me. The Root Representation. It is not me. I'm this big slug of carbon and oxygen and some other stuff on this cot right next to you. The Root Rep, by contrast, is the thing that you'll carry around in your brain for the rest of your life, barring some kind of major neurological insult, that your mind uses to represent me. When you think about me, in other words, you're not thinking about me qua this big slug of carbon, you are thinking about the Root Rep. (Cryptonomicon 994; emphases original.)

The "Root Rep" is nothing else than a way of getting at the real thing, or something that comes between the mind and reality. To use the terms in Stephenson's *Command Line*, the "Root Rep" is one of the metaphors in one big Graphic User Interface coming between us and the understanding of how things *really* work. However, in the case of *Cryptonomicon*, Root also concretely acts in these roles as a character. He is both thwarting the attempts to understand how the secret logic works and, in the end, gives it away. From the viewpoint of fictional worldbuilding, Enoch Root engages the reader in a dual action where she is invited to see the character through two perspectives that continually inform each other.

In the larger, thematic context of *Cryptonomicon*, Root can be seen as a representation (or a representative) of the "Brotherhood of Code that stretches across centuries" (Hayles 2010, 140). In other words, he could be seen as not being the same man in both timelines of the novel, but the same character – not unlike different people can, in succession, become root[26] in the same system, and quite like the characters in the two timelines repeat the same roles. Root himself evokes yet another metaphor, the archetype of a Trickster god found in various cultures, consistent with a pattern, according to which "cunning people tend to attain power that uncunning people don't" (*Cryptonomicon* 1002) and Trickster is an opposing force to Ares, a god of war. According to Root, Ares needs to be dealt with or else his worshippers are going to end up running the world: "And the only way to fight the bastards off in the end is through intelligence. Cunning. *Metis*." (*Cryptonomicon* 1003; emphasis original.) Briefly put, the character Root can be understood as the root user of the large and complex but well-hidden system, which is actually running the world through intelligence, not violence. Furthermore, in the context of Stephenson's oeuvre, this is yet another manifestation of the archetype of a geek hero which is repeated in his novels.

The character Root can be, in other words, seen as a possibly existing person and as a device in an artistic object, a work of literary fiction. Inside the imaginary world of *Cryptonomicon*, Randy's "Root Rep" is a mental image, representation of the physical world surrounding him, but for the user, "Root Rep" is built or negotiated on the basis of various prior resources, evolving throughout the novel. The same goes for the novel as a whole. *Cryptonomicon* is turned into a case of non-communication when it hides the information from the reader into a structure, which is seemingly random. In doing so, it not only discusses the importance of the user interface, the system of metaphors, but also becomes an interface itself, simulating randomness and keeping the reader in the dark. Unlike *Command Line*, Stephenson's novel, therefore, activates the effect of estrangement. The user's process of working the premise through in a systematic manner slows down perception on the idea that is being worked through. Compared to Disneyland's seamless illusions that Stephenson mentions, the speculativity of the practice is located in the process, not simply in the fantastic elements. I argue that this is an aesthetic end typical of fiction and not of nonfiction which, despite using practices such as speculative worldbuilding as part of getting its message across, does not yield in to using the double perspective in this sense.

My analysis shows that the readers' active participation in worldbuilding involves awareness of the work at hand as an artistic object. If being engaged with fiction is taken to mean "crossing the boundaries" between two worlds, a double perspective such as the one described above, is effectively obscured. Similar obstruction is met in the presumption that if the user recognises the artifice of the object at hand, the imaginative engagement is interrupted. According to such views, the user is seen to presuppose another world – in

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26   *root* is the account that has access to all commands and files on an operating system that belongs to the Unix family. It is also known as the *root account*, *root user* and the *superuser*.

which there are different laws and characters are simply able to come back from the dead – and then place this other world in parallel to the real one. Instead of such a view, I suggest that fictional worldbuilding extends an invitation to engage with two contexts at once, to be aware of both the imaginary realm and the means used in bringing it available to the imagination. In this the premise, world-as-construct, is worked through in a processual manner, which, in the end, brings "the idea" available to the experience.

This chapter has argued that although previous research has located the use of speculative worldbuilding in works of fiction, it can also be used in nonfiction as a communicative and rhetorical practice. In this capacity, speculative worldbuilding has the potential to create a double exposure of the real and the imagined for the user. Following this, it was suggested that various what-if projections and thought experiments are not inherently fictional but imaginative resources. I argued, instead, that the use of a double perspective – world-internal and world-external – is specific to the aesthetics and rhetoric of speculative worldbuilding in its distinctly fictional form. In the case of *Cryptonomicon*, for example, the user can interpret elements like the character Root in relation to the negotiated scale-model which is offered as an alternative, whereas *Command Line* places its thought experiment close to our understanding of the mundane reality. In the double-layered experience, the user interprets Root as a device of fiction in the context of the novel and its conventions, while simultaneously perceiving him as a possibly existing character inside the imaginative realm. In the next chapter, I will look at a work that makes use of the double perspective inherent to fiction in its discussion of the generic conventions and affordances of both speculative fiction and literature in general. In this, it presents an excellent case study for studying our imaginative engagement with works of fiction as communicational artefacts from the viewpoint of worldbuilding.

2   WORLDBUILDING AND COMMUNICATION

In the previous chapter, I criticised the influential view that in works of fiction, world is created through references to it as an imaginary object, and discussed the resulting emphasis on the world-internal perspective in the analysis of worldbuilding. The concept of world has been effectively cut off from the actual engagement with the artistic object, and the specificity of *fictional* worldbuilding as a practice, which makes use of world-external and world-internal perspectives, is obscured. This chapter examines the consequences of such views to the theorisation of communication in relation to worldbuilding. In both fantasy research and narrative studies alike, separation between either real (primary) world and fictional (secondary) world (see Tolkien 1983) or "the world where narration takes place and the world which is narrated" (Genette 1980, 245) has contributed to the view that we need to move away from the actual here and now when we are engaged with a work of fiction. This move away from reality is not only caused by our supposed, imaginative relocation to an ontologically distinct domain, but also by the emphasis on communication as a *report*. While communication of a story is indeed one of the functions of most works of fiction, worldbuilding as a communicative practice does not fall under the description of a "report of a sequence of related events during which the characters and/or their situations undergo some change" (Phelan 2007, 7). Furthermore, such descriptions are prone to ignoring the world-external perspective, the materiality and the actual use of the work at hand, which in the case of speculative fiction is a central factor in communicating ideas.

Although the prototypical understanding of narrative communication as a report from somebody to someone else has been developed in the literary environment and used in rhetorical narratology, it has the potential to make even the discussion of literary fiction rather one-sided – especially when it comes to the rhetoric. In what follows, speculative worldbuilding is presented as a useful theoretical framework for analysing our imaginative engagement with works of fiction as *communicational artefacts*. In this, both the experience of an imagined place (world-internal perspective) and the awareness of means and conventions used in bringing it available to be experienced (world-external perspective) are intertwined in a way that has been ignored in relation to communication. In speculative fiction research, the issue is further complicated by the fact that fantastic worlds, in particular, are routinely viewed in opposition to our mundane world. Thus, their possibility

to engage us with anything apart from experiencing them as alternatively existing places or looking at our mundane world from a "fresh" perspective is even more remote than it is in the theories separating from one another the world where narration takes place and the world which is being narrated.

This chapter suggests that both the tolkienian distinction between primary and secondary worlds and the prominent narratological conceptualisations of world ignore the importance of the double perspective and thus fail to describe the communicational and rhetorical relevance of worldbuilding in speculative fiction. Jeff VanderMeer's *City of Saints and Madmen* (2006) is an excellent case study, because it highlights the use of double perspective in a way that is especially relevant for the discussion of fantastic worldbuilding. *City of Saints and Madmen* is a work of speculative fiction, which could be called less a novel and more a collection of short stories, novellas, and other texts written by the author in the course of ten years. The book consists of no less than seventeen separate texts, divided into two sections, "The Book of Ambergris" and "AppendiX", the former comprising four novella-length pieces and the latter covering thirteen shorter texts, which vary from a brief natural scientific monograph on the Giant Freshwater Squid to a chilling horror story and a vignette recounting an imaginary version of the author's life.[27] As the crossings of generic boundaries and casual combinations of various types of speculative texts are among the most prominent features of *City of Saints and Madmen*, VanderMeer's work is often classified under the umbrella of New Weird, a genre (or a literary movement) that emerged in the early 2000s, consisting mostly of Anglo-American writers. China Miéville's *Perdido Street Station*, published in 2000, is widely accepted as the first notable example of New Weird fiction.[28]

Despite the fragmentary nature and generic vagueness of *City of Saints and Madmen*, the texts are interwoven by the fantastic city of Ambergris, which, little by little, develops into a sprawling metropolis while other realms evolve around (and under) it. In addition to sharing a setting, the texts are framed by the case notes concerning a writer, who is a patient in a mental institution, convinced that he has imagined a city called Ambergris, and that he is actually from Chicago. Finally, the unpleasant "truth" dawns on him, here described from the perspective of his interrogator:

> "I don't believe in Ambergris. How many times do I have to say it?" He was sweating now. He was shaking. [...]

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27   The first edition of the collection was published in 2001 by the name *City of Saints and Madmen: The Book of Ambergris*. The following year appeared a second edition, in which all four novellas were revised and new material was added as an appendix (eleven texts in total). Finally, when the collection was published in the United Kingdom in 2004, two more extra stories were added.

28   Before New Weird fiction as a term had been coined and the movement was thought to exist, *Perdido Street Station* acted as a stimulus to a conversation among critics, writers and readers that centred on its defiant unclassifiability (see Gordon 2003, 456; VanderMeer & VanderMeer 2008). In addition to fantasy, science fiction, and horror, Miéville's novel was linked to several sub-genres, such as gothic or dark fantasy, weird fiction, and steampunk.

"No," I said, putting on my jacket. "You are not free to go."

He rose quickly, again pounded his fist against the desk. "But I've told you, I've told you – I don't believe in my fantasy! I'm rational! I'm logical! *I'm over it!*"

"But you see," I said, with as much kindness as I could muster as I opened the door, "that's precisely the problem. This is Ambergris. You are *in* Ambergris."

The expression on X's face was quite indescribable. ("Strange Case of X" 330; emphasis original.)

The above excerpt illustrates why a work of speculative fiction such as *City of Saints and Madmen* presents an interesting challenge to the approaches limited to the world-internal perspective. The reader is invited to engage with Ambergris both as a possibly existing realm and as something explicitly imagined by someone. VanderMeer's book therefore invites us to pay attention to the work specifically as a construct. It toys with the idea that texts such as "Strange Case of X" would be read as a report by some fictional narrator who "knows" the world instead of imagining it. *City of Saints and Madmen* thus openly displays and comments on the fact that as a work of fiction, it has been constructed by someone. As such, the work brings up features of worldbuilding, which are typically rendered invisible due to their conventionality despite the fact that they are crucial for the rhetoric of all speculative fiction.

Richard Walsh has criticised the concept of narrator for establishing "a representational frame within which the narrative discourse may be read as a report rather than invention" (2007, 69). The concept is used to argue that the reader cancels out the fictionality and therefore finds a rationale for suspension of disbelief. I agree with Walsh in that such a representational frame – or a fictionalised communicative situation it encompasses – should be rejected in the rhetorical analysis. However, in my approach to worldbuilding as a practice that transcends medial boundaries, I suggest that the recognition of the work as an invention results, quite simply, from the user's awareness of the artefact as having been made instead of the argument presented by Walsh, that "fictions are narrated by their authors, or by characters" (ibid. 84). As a rhetorical act, fictional worldbuilding can therefore be viewed as extending an invitation to engage with two contexts at once – to be aware of both the imaginary realm and the means used in bringing it available to the imagination. This observation is especially important for the engagement with *City of Saints and Madmen* as a communicational artefact which, among others things, has the two-fold ambition of both discussing the generic and literary conventions and making use of them.

2.1 Secondary Worlds in Fantasy

Primary and secondary world, the classic terms in fantasy research, were used for the first time by J.R.R. Tolkien in his 1939 lecture. Since then, they have been frequently used as the basis for two important discussions. Firstly, to break down the features characteristic

of fantasy fiction, and secondly, to explicate the relationship between the mundane and the fictional world. In what follows, I will look at the underlying assumptions in Tolkien's terms and reflect them on New Weird fiction generally and *City of Saints and Madmen* in particular. VanderMeer's work makes for an interesting case study for this, as it aspires both to use the generic conventions of building fantastic worlds and bring them up for discussion. VanderMeer, therefore, makes use of the double perspective inherent to fictional worldbuilding to engage the reader in imagining a world as possibly existing and in evaluating the artistic object at hand, as well. My argument is simply that in *City of Saints and Madmen*, the communication of stories set in a fictional environment is intertwined with the goal of discussing the generic fantastic conventions of worldbuilding.

Over the last ten years, the New Weird community has constituted a school of its own with its literary polemic and group anthologies. Its essential debates have taken place on the Internet. Three years after the publication of *Perdido Street Station*, writer M. John Harrison started a message board with the words: "The New Weird. Who does it? What is it? Is it even anything?" The resulting conversation on the board involved more than fifty writers, reviewers, and critics, and "many thousands of words were used in the struggle to define, analyse, spin, explore, and quantify the term 'New Weird'" (VanderMeer and VanderMeer 2008, xii). In this debate, which has been documented in the anthology *The New Weird* (edited by VanderMeer and his wife), many participants saw New Weird as an artistic revolution of some kind, as a new paradigm within the genre of speculative fiction: "[M. John Harrison], how many revolutions have you been part of??" asks writer Steph Swainston in one of her comments (ibid. 319). Following the aftermath of the colourful discussion, VanderMeer presents a working definition of the twenty-first century New Weird:

> New Weird is a type of urban, secondary-world fiction that subverts the romanticized ideas about place found in traditional fantasy, largely by choosing realistic, complex real-world models as the jumping off point for creation of settings that may combine elements of both science fiction and fantasy. (2008, xvi.)

In his attempt to account for the relationship between New Weird and the mundane world in the definition, VanderMeer places New Weird fiction in the known territory of speculative fiction with terms such as "secondary-world fiction" and "traditional fantasy". With the latter term, VanderMeer is supposedly referring to *high fantasy*,[29] which is one of the two classic categories that fantasy fiction is often divided into, the other being *low fantasy*. Briefly put, in high fantasy the events are situated in a secondary world, whereas in low fantasy, fantastic events occur in the primary, mundane world. VanderMeer's working definition, in other words, links New Weird fiction to the theoretical tradition

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29   The genre of high fantasy has also been called genre fantasy or epic fantasy and is used to denote work of fiction that involves "a self-contained secondary world without any contact with the primary world" (Nikolayeva 1988, 36). Since many scholars perceive this division as judgemental, they prefer not to use it (ibid.).

of secondary worlds, but is careful to announce that its writers draw their inspiration from fantastic narration different from Tolkien, such as Mervyn Peake's *Gormenghast* trilogy (published between 1946 and 1959), or M. John Harrison's *In Viriconium* series (written between 1971 and 1984).

Although writers of New Weird fiction have quite openly ranged against the mass-produced commercial fantasy fiction and its "post-tolkienian" default conventions, their outlook on worldbuilding is nevertheless indebted to Tolkien's works and his idea of subcreation. Furthermore, they take after Tolkien in that they wish both to create and to theorise their creation, even itemise it. VanderMeer, simultaneously a writer, a critic, a publisher and an avid reader of New Weird fiction, has actively participated in both defining the genre and in realising it, i.e., in putting the theory into practice – and vice versa. The discussion of what New Weird is (or is it even anything) is overall an illustrative example of the feature Farah Mendlesohn has described in relation to science fiction, but which I see typical of contemporary speculative fiction in general: the fact that it is more an ongoing discussion than a genre in the sense of a "body of writing from which one can expect certain plot elements and specific tropes" (2003, 1).[30] The discussions on New Weird show, of course, that genres as are defined communally, too.

Engaging the user with an experience of an imagined place is something that both Tolkien and the authors of New Weird fiction deem central to their work – for Tolkien, the "making or glimpsing of Other-worlds" is in the heart of the desire of fantasy, or "Faërie", as he (1983, 135) calls it. Moreover, writers like VanderMeer have a strong volition to engage their readers with the experience of something new and to place them in a world they do not expect, a world that will surprise and challenge them (see VanderMeer & VanderMeer 2008, 319). One of the principal means New Weird fiction uses in its attempt to subvert the "romanticised ideas about place" is to refer to something that deviates from the European fairy tale and romance tradition, or a simplified version of Tolkien's work. The following excerpt describing the city of Ambergris is an illustrative example:

> The night came down crookedly on Ambergris, and the slanted darkness, in sheets, reflected back on itself. It came down like a flood. It smelled of the river. It smelled of mud and reeds. It smelled like the forethought of smoke. [...] The wind that rose up was like an animal. It used the trees as its claws; it suborned the star for eyes. It needed only eyes and claws to lay Albumuth Boulevard bare. No one walked in that night except the insane and the gray caps with their blood-red flags. ("The Exchange" n.pag.)

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30 Alastair Fowler's understanding of the nature of genre as communication is rather similar to Mendlesohn's view of science fiction. Fowler's theory stresses the instability of genres and their ability to combine with other genres. He (2002, 20) states that a single work modulates the genre it takes part in, and this makes genre less a means of classification than of communication between the author and the reader. All in all, he suggests, the attempt to define the genres of a single work is to try to find different meanings to the work (ibid. 20, 38, 256).

The passage from VanderMeer's novel introduces an urban setting, which is gritty but also as inherently crooked and slanted as the darkness of the night. The particulars like a city boulevard are familiar, but the indigenous people of Ambergris, the gray caps, quite disturbing in turn. The way the coming of the night is described in evocative language is similarly apt to rouse the feeling of strangeness in the reader. In *City of Saints and Madmen*, the structure of the work reflects the sprawling urban setting in its momentariness and simultaneity. Furthermore, the choices of expressions and words concretely relate to the strangeness of the world. Thus, the strange or unfamiliar does not emerge only in relation to our experience of the mundane world, but also in relation to the conventional fantasy literature we are used to. It goes without saying that VanderMeer's style of writing is not completely unheard of in the field of speculative fiction – as is not the use of postmodern themes and techniques, such as irony, black humour, metafiction, and pastiche. However, to use them together with the emphasis on the place as an imaginative environment is something that both connects *City of Saints and Madmen* closely to the tradition of fantasy and singles it out.

Worldbuilding and the relationship between imagined and real places have played an important role both in the definitions of fantasy fiction and the ambitions of the writers. For my part, I would like to introduce the userly experience and the double perspective more firmly to the discussion on the relationship between real and imagined in fantasy fiction. The lines of thought underlying Tolkien's theory have rarely been explored critically, despite the fact that Tolkien has been, for example, accused of escapist tendencies and of supporting ruling ideologies.[31] In my view, as a theoretical model for imaginative engagement, the secondary world evokes too simple an understanding of the rhetoric of fantasy. Tolkien's approach on the imagination draws from the romantic theories, most obviously on Samuel T. Coleridge's distinction between "primary imagination", which is the agency of perceiving and learning, and "secondary imagination", which as a creative shaping force "dissolves, diffuses, dissipates, in order to re-create" what primary imagination has perceived and learned (1983, 304). What is more, Tolkien's outlook on the secondary world and subcreation reflects his deeply Christian worldview and belief that creation is the origin of our primary world through an act of God. This reflected on Tolkien's view of worldbuilding as the act of an author, together with his intellectual background in linguistics and his suggestion that the fantastic is a function of *language*, based "on our ability to separate modifier from substantive and recombine them to produce green suns and flying serpents" (Attebery 2004, 297).

Chapter 1 argued that one of the rhetorical affordances of speculative worldbuilding is the potential to create a double exposure of real and imagined for the user. The way Tolkien

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31   For Rosemary Jackson, for example, Tolkien's fiction represents a retreat, while his essay "On Fairy-Stories" is "sentimental", "nostalgic", and the product of "an outworn liberal humanism" (1981, 153, 155). While I suggest that Tolkien's distinction between a primary and a secondary world is insufficient as such for the analysis of the rhetoric of fantasy, I do not agree with Jackson that the rhetoric Tolkien's novels – such as *The Lord of the Rings* – could be boiled down to "supporting a ruling ideology" (ibid. 155).

has discussed the relevance of fantasy to its users aims to make a similar point, although in decisively different terms: in his seminal essay, he suggested that fantasy enables the reader to approach her own world from the perspective of another world, an effect that he calls "recovery" (1983, 146). Innumerable scholars have grasped the idea and stated that one of the speculative fiction's greatest abilities is to estrange our own world so that we can better see it. Through these worlds that are usually called *impossible*, it might be easier for us to deal with all sorts of issues such as class, racism, imperialism – and, ipso facto, our ordinary, mundane life. The idea resembles the formulation of the idea of estrangement, which has two sources: Viktor Shklovsky's *ostranenie*, which I mentioned in Chapter 1, sometimes translated as "defamiliarisation", and Bertolt Brecht's *Verfremdung*, which may mean "alienation" (see Wolfe 1986, 31–32). The sense of wonder – a term suggested by C.N. Manlove, who connected it with "contemplation of strangeness" (1975, 7) – resulting from the effect of estrangement can ultimately help us penetrate the illusion of the world we live in. For Shklovsky and Brecht, this meant breaking away from the mystifications of bourgeois ideology, while for Tolkien, the illusion was produced by boredom, habit, false sophistication, and loss of faith.

Following the ideas on recovery and wonder, Brian Attebery (2004, 309) has argued that the definition of the genre of fantasy – with *The Lord of the Rings* as the prototype – is a form that makes use of both the fantastic mode to produce impossibilities, and the mimetic mode to reproduce the familiar. He continues: "Fantasy does impose many restrictions on the power of the imagination, but in return it offers the possibility of generating not merely a meaning but an awareness of and a pattern for meaningfulness" (ibid.). According to this, fantasy can pose some questions, themes, or problems that exist in the real world in an "impossible" environment and widen the user's perspective, especially if these questions, themes, or problems have not been part of the user's understanding of the factual reality. New Weird fiction writers like Miéville have relied upon this effect quite consciously. Miéville's novel *Iron Council* (2004), for example, connects trade unionism and critique of globalisation with a fantastic quest narrative composed of weird and wondrous sequences including fantastic inventions such as "slow sculptors" and thaumaturges creating golems.

This discussion brings out the most problematic feature in Tolkien's theory. By only concentrating on the relationship between the real and the imagined as the distinction between the primary and the secondary world, Tolkien and the researchers of fantasy fiction following him have lost the possibility to understand the "awareness of and a pattern for meaningfulness", which Attebery himself discusses. Most theories on estrangement in fantasy ignore the perspective that I have called world-external. In Attebery's treatment, the familiar "reproduced" refers to the familiar in the sense of our knowledge and experience of the mundane world. Although Kathryn Hume's well-known definition of fantasy as a *mode* – since fantastic impulses can be found in texts that belong to several different genres – does not use Tolkien's terms, it outlines the fantastic as "any departure from *consensus reality*" (Hume 1984, 20; my emphasis) and, therefore, submits the specificity of fantasy to

the similar distinction between real and imagined.[32] Nevertheless, the fact that Tolkien's influential theory on subcreation is still used in innumerable approaches to fantasy suggests that it captures something relevant of the works of fiction it aims to describe. It seems to be valuable in respect to the process of interpretation, even in the case of Miéville's *Iron Council*, which is quite different from the fairy stories Tolkien originally studied in his essay.

In my view, the theory on primary and secondary worlds manages to describe how the double exposure in terms of the parallel between our understanding of what is and the representations of what is not is achieved in fantasy fiction. This is still only one side of the relationship between the real and the imagined in speculative fiction, as I argued in Chapter 1. The other is our awareness of the engagement with the artistic object. When it comes to *Iron Council*, for example, Miéville's ambition is two-fold as he can be seen to be rebuking fantasy fiction for its conservative politics with the socialist ideology of his own novel, or with the fact that many characters in the novel are casually bisexual (see Poole 2004, n.pag).[33] Thus, the reader who is familiar with the tradition of fantasy fiction becomes aware of the conventional, often rather conservative elements in fantasy, which typically are not being reflected on. Such two-fold ambitions have often been in the heart of New Weird worldbuilding in general.

VanderMeer is not as openly political or partisan as Miéville, and especially in *City of Saints and Madmen*, the more humorous aspects of imagining impossibilities are brought to the fore. As a humourist, VanderMeer's style resembles those of Terry Pratchett's *Discworld* series (1983–2015) and Douglas Adams' *The Hitchhiker's Guide to the Galaxy* "trilogy" (1979–2009). Still, the recurring theme of the work is a weighty one: our understanding of the mundane world. The theme becomes concrete through depictions of insane writers, wor(l)d plays and tricks, and characters like the missionary "severed from his memory, severed from his faith, severed from his senses by the fever" ("Dradin, In Love" 96). In doing so, VanderMeer's work does not only attempt to engage the users imaginatively with these depictions, but also test and stretch the boundaries of the definitions of fantasy as a genre. One can quite reasonably claim that in its popular form, fantasy fiction does not challenge the consensus reality or, more crucially, our way of maintaining it despite its depiction of "impossibilities". In its heavily canonised form, fantasy fiction can rather be seen as making use of the agreed-upon or *consensual* ways of conceptualising a speculative fantasy world, which has become almost as familiar as our mundane world.

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32   Hume's chosen term, consensus reality, is hardly free of ideology, but compared to Tolkien's term, primary world, it effectively highlights the idea that commonsensical concepts of reality are simply agreed-upon, based on the common experiences of people in the world, or a culture or group, as they believe them to be.

33   At one time, Miéville was well-known for bashing the conventions of genre fantasy and for calling Tolkien "the wen on the arse of fantasy literature". His often quoted comment is available at http://boingboing.net/2003/11/02/mieville-on-tolkien.html, for example.

In relation to the agreed-upon ways of conceptualising a fantasy world, Tolkien's theory entails another problem. As I have mentioned above, Tolkien emphasised the experience of an imagined place as central to fantasy, and, as Attebery has argued, with *The Lord of the Rings* gave a new coherence to the genre that makes use of such an experience: "Without Tolkien's work before us it might not seem worthwhile to isolate fantasy as a distinct form" (1992, 10). However, along with the opposition of the primary and the secondary world, this line of thought also conventionalised an understanding of a world as a physical space in fantasy research and the theories of writing fantasy instead of viewing worldbuilding as a communicative practice that entails the double perspective into the real and the imagined. In other words, Tolkien (with his contemporaries) conventionalised the way of conceptualising a speculative fantasy world.

Such a traditional way of conceptualising a fantasy world (along with various other conventions) is tied to the idea of subcreation which does not tell us much about the users. In his discussion of subcreation as an artistic practice, Tolkien argues that compared to the "operations of Fancy", fantasy is capable of achieving expression, "which gives (or seems to give) 'the inner consistency of reality'" (1983, 138–139) and thus the writer as a sub-creator "makes a Secondary World which [one's] mind can enter. Inside it, what he relates is 'true': according to the laws of the world." (Ibid. 132.) Tolkienian distinction between the primary and the secondary world, therefore, carries the implication that the mundane world could be defined as "world-like" in its inner consistency, regardless of the human perceiver. The idea of a world that is itself already world-like reflects the logic according to which fictional narratives have been thought to function in narrative theory: the user attempts to construct the hidden story behind the discourse and strives to hold up an illusion of a world that substitutes our own in the text. As such, it coincides with Marie-Laure Ryan's (e.g., 2001) view which suggests that it should be impossible to be both inside and outside of a world while engaging imaginatively with a work of fiction.

In her discussion of the means by which the fantastic enters the narrated world, Mendlesohn (2008, xii–xiv) has shifted the emphasis towards the dialectic between the author and the reader and outlines four categories: the portal-quest, the immersive, the intrusive, and the liminal. Despite her rhetorical emphasis, Mendlesohn's categorisation does not discuss worldbuilding as a communicative practice, but rather concentrates on the core rhetorical strategy of fantasy, which is constructed through a point of view: "Like a perspective puzzle, if the reader stands in 'the wrong place', the image/experience will not resolve" (ibid. xviii). This strategy is apparent in the aspiration of New Weird fiction writers to surprise or challenge their readers, but in my view, the understanding on the specificity of engaging the user in relationship with the fantastic should include the world-external perspective alongside the world-internal one. The user of speculative fiction is, therefore, invited to stand in two "right" places instead of just one.

The emphasis on the world-internal perspective, similar to Mendlesohn's idea of inviting the reader to stand in the right place, is inherent to Tolkien's theory. However,

Tolkien's insistence on "the inner consistency of reality" also resembles Brian McHale's idea that in serving the function of enabling us to imagine alternatives to the received reality, speculative fiction projects a model of reality that is in some sense *systematically* different from our own (see 2010, 23). *City of Saints and Madmen* does not provide its reader with the inner consistency of reality. If anything, it disputes the whole idea of such consistency along with the idea of something pre-existing hidden behind the discourse. What is important, though, is that VanderMeer's work makes systematic use of the traditional ways of conceptualising a fantasy world in such disputation. In this, it makes its materiality blatantly recognisable to the users and bolsters the world-external perspective – an effect which I will look at next.

An illustrative example of the overall ambition in *City of Saints and Madmen* is "The Hoegbotton Guide to the Early History of Ambergris", which is presented as having been written by a retired historian, Duncan Shriek. Among other things, it ridicules the academic style of writing for its extensive use of lengthy footnotes by adding to them the explicit voice of the pamphlet's author:

> I should add to footnote 2 that the most interesting information will be included only in footnote form, and I will endeavor to include as many footnotes as possible. Indeed, information alluded to in footnote form will later be expanded upon in the main text, thus confusing any of you who have decided not to read the footnotes. This is the price to be paid by those who would rouse an elderly historian from his slumber behind a desk in order to coerce him to write for a common travel guide series. ("Early History of Ambergris" 103–104, footnote 3.)

Such techniques bring forward the writer and his role as a mock-reporter of sorts, as the last footnote explicitly suggests: "Surely, after all, it is more comforting to believe that the sources on which this account is based are truthful, that this has not all, in fact, been one huge, monstrous lie?" ("Early History of Ambergris" 190). At the same time, though, "Early History of Ambergris" presents a fantastical story recounting how the fleet of thirty whaling ships, led by Cappan John Manzikert I, arrives at the joint of the "L" in the River Moth (where Ambergris would later be founded) and meets the indigenous people, the gray caps, the inhabitants of the remarkable city of Cinsorium. Soon, a total massacre of the gray caps ensues, followed by the blinding and other mysterious experiences of Manzikert I in the underground sections of the ancient city. Then, after 70 years, follows the event called the Silence, here described by a common soldier, Simon Jersak: "As the mist, which had hidden the true extent of the city's emptiness from us, dissipated, and as every street, every building, every shop on every corner, proved to be abandoned, the Cappan himself trembled and drew his cloak about him" ("Early History of Ambergris" 152).

"Early History of Ambergris" is a story of the conquerors, who try to wipe out the natives that prove to be unfathomable in their ways of resistance and revenge, but it simultaneously focusses our attention on the way the events of the story are made available to our imaginative engagement. It enables us to approach fictional elements and scenarios (such

as the gray caps and the strange event of the Silence) as possibly existing, from the world-internal perspective, but the way the form of the chronicle and the role of the chronicler are textually reflected bolsters the world-external perspective. Furthermore, the fact that the story is situated within the practice of speculative worldbuilding, both imaginatively and concretely as part of VanderMeer's collection of stories about Ambergris takes the effect even further. As such, it also aims to explore (or exploit) the agreed-upon conventions used in speculative worldbuilding and show that often our understanding of speculative worlds leads us to represent them in certain ways – and vice versa.

Another example of such an effect is "The Ambergris Glossary", which includes headwords such as "EJACULATIONS, ORDER OF. The most pleasurable yet socially-unacceptable of the Orders" ("Glossary" 17) or "NYSIMIA. A western city known for death, dust, beer, and, more recently, for ridiculous theories involving pony-riding invaders, old dead men, and the gray caps" (ibid. 42). VanderMeer's work, thus, takes up various classic conventions of conceptualising a fantasy world (such as the detailed account of the world's history, complete with a nerdy glossary), makes fun of them and, to some extent, of the reader who presumably expects such conventions to be used. Still, there is another side to *City of Saints and Madmen* besides humour. As I have argued, making the user aware of the artificiality of the work does not necessarily disrupt the imaginative engagement but rather facilitates it. By means of the double perspective, VanderMeer's book focusses the reader's attention on that certain artificiality of worlds, which is a recurring feature in speculative fiction, not only structurally but also contentually and thematically.

As a practice, worldbuilding should be seen as being conventional, especially within the frame of a specific genre. McHale has suggested of literary representations in general that "they depend upon literary conventions; that these conventions are to some degree arbitrary; that they are not part of our natural endowment or everyday experience, but must be learned through exposure to texts, literary or otherwise" (2012, 120). On the one hand, conventionality contributes to the paradox of speculative fiction: the highly imaginative is pursued with the means that have become more or less clichéd. Yet, conventions contribute to the relevance of fantasy, and Mendlesohn argues that "a fantasy succeeds when the literary techniques employed are most appropriate to the reader expectations of that category of fantasy" (2008, xii). In this sense, the means and techniques are not simply clichés, if they can be meaningfully used by the user. The way science fictional texts often use the encounter with the unknown or unfamiliar as their driving force has been evident for a long time (and I will address this myself in Chapter 5), but the importance of the familiar or consensual has not been an object of serious study that often.

Habituality can render the conventions invisible, despite the fact that in speculative fantasy fiction they are *always* in plain sight of the user – just think of maps, glossaries, family trees, and (long-winded) explanations of an imaginary world's history. The elements do not even have to flag their artifice this clearly. In its canonised – or, should I say, conventional – form, fantasy does not call our attention to these conventions beyond drawing from the

learned agreements between the reader and the work. To use the terms more familiar from the studies on play, these conventions are tools or *props* that the user takes up in order to engage with imagining things that could never be or could never have been real possibilities for her. VanderMeer (and many other New Weird fiction writers such as Miéville) often use these conventions in a way that slightly differs from what the users have learned through their exposure to fantasy fiction. New Weird, thus, invites reflection on the conventions by means of the world-external perspective, and this sometimes produces a humorous effect, too. This contributes to the two-fold rhetorical aim, where the communication of a story goes hand in hand with the discussion on the principles that communicate it in the first place. Next I turn to the conventions exposed and reflected by City of Saints and Madmen that are not specific to speculative fiction only, but literary fiction in general, such as the frame of report and the authorial voice.

2.2 Communication as Reports from a World

Throughout *City of Saints and Madmen*, VanderMeer plays around with various authorial positions or roles. Many of the stories are attributed to imaginary writers and presented either as fiction or nonfiction, by means of numerous conventions that Gérard Genette (1991, 79) has called indexes by which a fictional text declares itself as such. The generic indication "a novel" on the title page is one example among others. In VanderMeer's work, however, various texts go through the motions of denying their fictionality, although it is doubtful that the reader would actually be fooled. Such motions play a part in the two-fold rhetorical aim, which I brought up in the previous subchapter. VanderMeer's work makes use of conventions that we have learned through our exposure to texts (see McHale 2012, 120) and also exposes the fact that these conventions are no more than consensual tools. Here, I will look at how *City of Saints and Madmen* opens a double perspective into our actual engagement with a work of fiction. Thus, it not only explicitly challenges the idea that the user should move away from the actual here-and-now while being engaged with fiction, but also questions the view on the rhetoric potential of literature as a matter of someone telling or reporting something to someone else for some purpose. Instead, the work uses speculative worldbuilding as a communicative and rhetorical practice in order to bring out the features of our engagement with fiction. I therefore ask whether there is anything in our engagement with works such as *City of Saints and Madmen* that does not fit into the frame of reporting.

Above, I have called attention to the problems that concern making a simple distinction between the real (primary) world and a fictional (secondary) world as the model of imaginative engagement in fantasy fiction. Approaches concentrating on narrative communication as report have made similar divisions. Genette, for example, has discussed "two worlds: the world where narration takes place and the world which is narrated" (1980, 245). Theories on fictional worlds have adopted this division in a rather straightforward

way. The basic assumption is quite simply that a world is produced by the story, which is communicated by someone, or at least an agent of some kind. The premise has been explicated in more detail by means of the narrative communication model (as presented e.g. by Jahn 2005, n.pag). It postulates the narrator as a fictional reporter, who is assumed to be responsible for conveying information about the fictional world. As a fictional reporter, the narrator cannot address the real reader but only a narratee, and this creates the theoretical need for metaphors such as transportation. The reader is assumed to transport or relocate imaginatively into the position of the narratee during the process of accepting and making sense of the fictional events and places as narratable – and as possibly existing for the narrator who is reporting them to the narratee. In short, as Walsh has critically pointed out, the concept of narrator defines "the extent to which we can set aside our knowledge that the narrative in hand is indeed fictional" (ibid. 69).

The approach that prefers the frame of report over invention in theories on fictional worlds has resulted in theoretical emphasis on communicative challenges, which are often pinpointed to literary devices more common in postmodernism or experimental literature than, for example, mainstream fiction. In her treatment of metalepsis, Karin Kukkonen has called these devices "frills and whistles" and voiced the common assumption that unless such devices are present, "readers will not leave this fictional world as long as the story unfolds" (2011, 5). The assumption highlights two recurring ideas in the theories on fictional worldbuilding. Firstly, the idea that the user is required to unconditionally "enter" the fictional world, and secondly, the idea that the user has to be ignorant of the artistic object that engages her in the pretence that the fictional world is something separate from the fiction itself.

I have already discussed both Ryan's concept of fictional recentering (e.g. 1991; 2001) and the tolkienian view of the writer inducing a "phenomenon of belief" (1983, 132), but David Herman's conceptualisation of the storyworld is even more explicit with its transportation metaphor. With it, he aims to prove how the world-creating power of narrative can "transport interpreters from [...] the space-time coordinates of an encounter with a printed text or a cinematic narrative, to the here and now that constitute the deictic center of the world being told about" (2002, 14). In "Strange Case of X", a novella comprised of an interrogation report of a writer placed in a mental institute and framed by descriptive passages written both in first and third person, the introductory passage of the interrogator arriving at his workplace, a so far unidentified bureau, should therefore be viewed as transporting the reader into a position from which the world with its events and characters is both narratable and possible:

> He passed a trio of coat racks, all three banal in their repetition of gargoyles, and not all in keeping with the dream of a modern facility dreamt by his superiors. [...] As he walked, he made a note of the water dripping from the ceiling; better that the janitors fix leaks than wax floors. Before you knew it, mold would be clotting the walls and mushrooms sprouting from the most unexpected places. [...]

> The mud smell thickened the air, but entwined around it, rooted within it, another called to him: a fragrance both fresh and unexpected. He stopped, frowned, and sniffed once, twice. He turned to the left and looked down. In the crack between the wall and the floor, amid a patch of what could only be dirt, a tiny rose blossomed, defiantly blood-red. ("Strange Case of X", 278–279.)

This excerpt is a perfect example of the New Weird fiction writers' technique of engaging the reader's imagination and positioning her in relation to the fictional. In addition to the visual, the passage covers vari   ous other sensory impressions: there is the smell of mud and a "fragrance both fresh and unexpected", the auditory experience of the water dripping from the ceiling, the bodily sense of moving through damp corridors – even the experience of taste is evoked with the reference to the mud smell being so strong that it thickens the air. All in all, the beginning of "Strange Case of X" establishes a sense of the world as an imagined place, which can be told about, or reported from, if you will. The excerpt furthermore illustrates the subtle way in which the sense of weird often enters VanderMeer's writing: the bureau where the ancient coat racks are in stark contrast with the "dream of a modern facility" could just as well exist in the mundane world, but the mushrooms and the oddly placed blood-red rose hint at the possibility of something stranger.

Herman's conceptualisation of the storyworld reflects his understanding of narrative as a "basic human strategy for coming to terms with time, process, and change" (2009, 2). As a mental structure or strategy, the storyworld is both a tool for making sense of narrative and something that the user makes sense of. It is, therefore, seen to guide or enable the production of a narrative, and reconstructing it while reading, for example, translates into tracing the mental activity of this kind. In effect, storyworld as a concept tends to conflate engagement with works of fiction, not only with narrative communication, but also with sense-making that belongs to our natural endowment. Herman's view of the storyworld thus asserts the engagement with works of fiction as making sense of characters, situations, and events represented by the textual and semiotic cues used in the representing medium (see ibid. 17). Reading a novel is seen as reconstructing a storyworld from the textual cues – reader "naturally" positioning herself into the communicative situation – while no other modes of engagement even seem to exist. Such an understanding erases the double perspective inherent to fiction and, consequently, ignores the means of communication that are specific to fiction, such as the way speculative fiction makes use of estrangement in communicating ideas.

The idea that there is a narrator who reports something about or from a world which is, in a sense, independent of his mind (i.e., not a dream, hallucination, or thought experiment) is one of the general interpretative conventions in reading literary fiction. When such a convention is treated explicitly as a convention with regard to interpretation of literature, it is not necessarily problematic. The beginning of "Strange Case of X", for example, allows the reader to take up a position inside the communicative practice, a position which further allows her to approach the characters, events, and the world in

general as something that can be told about. In the same spirit, a storyworld can be seen as a result (or, a resulting work-in-progress) of using the frame of report in the imaginative engagement with a work of fiction. Even so, this should not be taken to mean that the status of the work as an invention would simply be forgotten, or that the explicit awareness of it as such would render communication impossible. *City of Saints and Madmen* as a whole, and "Strange Case of X" in particular, base their rhetorical potential on the doubled effect. The characters, situations, and events are both made available as possibly existing in the sense of being told by someone to someone else, instead of being the result of the teller's delirious state and simultaneously questioned as possibly existing by confusing the reader about where the events, for example, actually occur and why. This way, VanderMeer's work draws our attention to both the conventions and agreements and the sense of a world that these conventions and agreements are used to evoke.

When it comes to the doubled effect, "Strange Case of X" functions as a turning point for the whole work. Acting as a hinge between the two sections of the book, it is offered as a key text for the composition of *City of Saints and Madmen*. In short, it is a story about a writer (living in a world like ours), who first imagines a place called Ambergris and writes fiction about it, but who then begins to catch disturbing glimpses of Ambergris as if it existed independently of his mind: "So I turn a corner and I look up, and there, for about six seconds [...] I saw, clotted with passersby – the Borges Bookstore, the Aqueduct, and in the distance, the masts of ships at the docks: all elements from my book" ("Strange Case of X" 289). The writer finally enters Ambergris, guided by a mysterious manta ray, but still thinks it is all happening inside of his mind. In the end it turns out, however, that he is actually being interrogated in Ambergris for fantasising about a place where people "flew and 'made movies'" and where there are cities like "New York City, New Orleans, Chicago" (ibid. 331). The novella ends here, but other texts collected under the heading "AppendiX" reveal that after learning he really was in Ambergris, the writer mysteriously vanished from his cell. He left behind his copy of *City of Saints and Madmen* (i.e., the first three novellas of the book), along with other documents, mostly written by others living in Ambergris (i.e., the texts making up "AppendiX"), most of which address the themes of transformation and madness.

At the end of the collection, VanderMeer builds a fictionalisation of himself. As the vignette of the book implies, he is the missing writer who had experienced entering in Ambergris: "[I]n the late 2006, on the eve of the publication of this very edition, VanderMeer disappeared from his house. He left no note." ("About the author", n.pag.) Alongside with the vignette and other texts in the collection, "Strange Case of X" brings out the double perspective into fiction in various ways. It not only presents VanderMeer himself both as the inventor and the invented character, but also reproduces the effect in the character of the interrogator who, in the end, is pointed out as the narrator recounting the events in first and third person. The choice between persons depends on whether the writer is present or

not, as the transition from third person to first person at the end of "Strange Case of X", for example, occurs when the narrator leaves the writer in his cell:

> As he locked the door behind him and ascended the staircase, he realized that it was all a horrible shame. Clearly, the writer had lost contact with reality, no matter how desperately that reality had struggled to get his attention. [...] In the end, the fantasy had been too strong. And what a fantasy it was! [...] In fact, he reflected, the only real benefit of the session, between the previous transcripts and the conversation itself, had been to his fiction; he now had some very interesting elements with which to compose a fantasy of his own. Why, he could already see that the report of this session would be a kind of fiction itself, as he had long since concluded that no delusion could ever truly be understood. He might even tell the story in first *and* third person, to both personalize and distance the events. ("Strange Case of X" 331–332; emphasis original.)

The frame of report would lead us to conclude that the choice between persons results from the choice made by the interrogator as a narrator, but because it is the presence of the writer that is crucial for the transition from third to first person, it might actually be the other way around: it is the writer who imagines what the interrogator does, thinks, and feels outside "the report of this session". The novella, thus, calls the reader to ponder on the nature of fiction and the making of fiction, especially when fiction is compared to a delusion or lies when X tried to communicate his experiences to the interrogator by means of a story he has written: "X reached under the desk and handed me a thin sheaf of papers. I took them with barely disguised reluctance. 'Fiction lies.' X snorted. 'So do people.'" ("Strange Case of X" 310.) As a work of speculative *fantasy* fiction, *City of Saints and Madmen* does not resolve the mystery and, therefore, the user is not presented with any distinguishable consequences: "no delusion could ever be truly understood", as the interrogator states it.[34] As a final twist, VanderMeer's texts published as part of *City of Saints and Madmen* have been used to engage readers with an experience similar to the one X is going through in the novella. In "Strange Case of X", the interrogated writer tells how he went to an old bookstore in New Orleans with his wife, found a paperback copy of Frederick Prokosch's *The Seven Who Fled*, and bought it. To his amazement, the newspaper the book was wrapped in by the store owner was "a weathered broadsheet published by Hoegbotton and Sons, the exporter/importer in my novel" (ibid. 293). As an example of real life application, "King Squid" has

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34   As a point of comparison from speculative *science* fiction, *Star Trek: The Next Generation* episode "Frame of Mind" depicts how Commander Riker, one of the main characters of the show, switches between mental realities and becomes thoroughly confused about what is real and what is imagined. In the end, the mystery is resolved: Riker wakes up on an operating table, flees and learns that his strange experiences have been the result of his own subconscious fighting against the alien probe, targeted on him to discover strategic information about the Federation. Both subgenres thus use the same storytelling techniques to query our perception of reality.

been released as an insert pamphlet or chapbook in the Finnish science fiction magazine *Tähtivaeltaja*.[35]

James Phelan has brought up the idea of a "category mistake" in his discussion of the dispute about whether the governess in Henry James' *Turn of the Screw* (1898) is sane or insane: "we could conclude that the dispute stems from the mistaken assumption that the character is a representation of a possible person" (1989, 4). Such an assumption while reading "Strange Case of X" would lead to similar discussions of sanity: is the writer in mental institution really native to our world, a visitor in the foreign land, or is he an insane ambergrisian, who has hallucinated about living in another reality that resembles ours? Or has he perhaps visited our world, which would be a secondary world from the viewpoint of Ambergris? The category mistake would be identical to one in James' governess and result in the assumption that the writer should primarily be viewed as a representation of a possible person rather than a literary construct, which serves some artistic goals and can therefore represent something rather different despite also being a person – quite like the character of Enoch Root, which was discussed in Chapter 1.

Where Enoch Root could be interpreted based on the negotiated scale-model, which is offered as an alternative to our understanding of the reality in *Cryptonomicon*, in *City of Saints and Madmen*, the question of the ontological status of the writer is related to the way VanderMeer's work systematically disputes the functioning of literary devices and the learned agreements between the reader and the work. What is the world where narration takes place in "Strange Case of X", for example? The novella describes a fictional writer (who could be read as a representation of VanderMeer himself) as a character in a story where he is being interrogated by a mental institute employee. The employee in question is then presented as the actual narrator of the story – and, in a later text, introduced as "Dr. V", who could also be seen as a representation of VanderMeer the writer. In this sense, the whole work could be read as a thought experiment of the writer's struggle with himself, addressed by means of various imaginings and concretised in the physical form of the book.

"Strange Case of X" represents a breach in the categories, because it breaks down the sense or illusion of Ambergris as a possibly existing, secondary world by turning the reader's attention to its constructed existence. But does it really matter that the illusion is broken? Without an explicit breach, the artificiality of Ambergris would still be there, although not in such plain sight as it is now. Still, if we had no means whatsoever of thinking of Ambergris as possibly existing, the whole doubled effect that I have discussed would be lost and the work could not draw our attention to the relationship between the conventions and the sense of a world these conventions are used to evoke. There would be no way the work could, for example, bring the imaginative work of the author to our mind, if we thought *City of Saints and Madmen* was simply a "literary structure offered to readers by the author for aesthetic purposes" (Andersson 2015, 61). The overall structure of the

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35   The insert pamphlet was only released in Finnish as part of the hundredth issue of *Tähtivaeltaja* in 2007, and it was not published outside of Finland.

work is, at the same time, completely artificial and able to contribute to the imaginative experience of a sprawling, networked world. No one even seems to run the city. Maybe the "working anarchy" means surrendering power to Ambergris itself. This is reflected on the structure of Ambergris, where nobody tries to find their way around without a map and where someone familiar from one story can walk past the protagonist of another story in the throng on Albumuth Boulevard. As a recurring feature, this contributes to the sense that the characters would have a life of their own behind it all, behind what the author lets us know.

The category mistakes and other such assumptions are related to a larger problem in narrative theory, which I have already discussed and which Gregory Currie has pinpointed to be deriving from the internal perspective, an account of the story-content alone: "Adopting the internal perspective, we examine the world of the story as if it were actual; we speak and think directly of the characters and events of the story, though much of this speaking and thinking may be make-believe" (2010, 49). One of the major category mistakes that follow from this is the idea that behind the text there would reside a final agent who could be separated from the discourse, or that the narrative discourse (*sujet*, *form*) would convey a representation of a "pre-existing" story (*fabula*, *content*). Establishing frames such as these also means viewing the world as a pre-existing realm where the agent reports from. This effectively obscures the fact that such a realm is being invented and that speaking and thinking of it is mostly make-believe as well. Placing readers into an internal communicative situation, therefore, ignores the actual here and now of being engaged with a work of fiction and leads to the idea that readers should *believe* in the fictional world. In fiction, the role of the author or external narrator is not an epistemically responsible one, as Currie notes: "He or she offers the story as something to engage with imaginatively than by way of belief, and there is no expectation that what is said by the author/external narrator will be true" (ibid. 69). If this is overlooked, category mistakes will certainly ensue. Next, I will look at the prototypical understanding of narrative communication in relation to works of fiction as representational artefacts calling for our imaginative engagement.

2.3   Works of Fiction as Communicational Artefacts

Narrative representation is primarily treated as a tool for communicating something. While I do not suggest changing this emphasis, I agree with David Rudrum in his argument that narratology can be criticised for being "tied to a philosophy of language that foregrounds signification above and before questions of use and practice" (2005, 203). As Rudrum points out, representation as one type of language use "offers a single conception of what narrative is that is simultaneously a prescription of what it does" (ibid. 202). For my part, I argue that foregrounding signification above all other aspects has also affected the conception of what works of fiction are by way of narratology. Currie, for example, suggests that success in narrative communication is a matter of enabling the audience to see

the artefactual function of the narrative, as "narratives are intentional-communicational artefacts: artefacts that have as their function the communication of a story, which function they carry by virtue of their maker's intentions" (2010, 6). There is a small glitch, however. Currie initially starts with the illustrative example of contrasting "the book" and "the axe", but once he moves onto narratives, he completely forgets about the book. He names the book "a representational artefact" because according to him, it is "like other vehicles of narration [...] something made for the purpose of telling a story, and it does so by being a representation of the story's events and characters" (ibid. 5).

As a representational artefact, a book can be representative of more intentions than just communicating a story in the sense of telling about events and characters. In other words, it might have been made for more than one purpose that "shaped its making" (Currie ibid. 6). *City of Saints and Madmen*, for example, acts as an artefact in at least two ways. First, it acts as a book-as-artefact, containing copious illustrations, most of which comment on or advance the stories. Secondly, it acts as a pure artefact, as several stories are presented as facsimiles of their publications in Ambergris. To sum up, while communication of a story is one of the purposes shaping the making of books as representational artefacts, it is not necessarily achieved by the book such as *City of Saints and Madmen* being a representation of the story's events and characters. In the following, it is argued that the communication of a mad writer narrative in VanderMeer's work as a whole becomes possible by means of speculative worldbuilding. In this, reader has to recognise and reflect on the various ways the work acts as an artefact in order to understand its premise and the way the premise is worked through in the book.

The notion of (literary) representations has been central to many debates. For example, idealist theories of the arts suppose some "higher" nature to be the preferred object of representation and assign the representation of ordinary life to "lower" genres, while more realist approaches tend to see the realm of romance as merely imaginary, fanciful representations (see Mitchell 1995, 15). Interestingly, the juxtaposition between high and low is present in fantasy fiction research, as well. Just think of the division between high and low fantasy, or the New Weird fiction writers' aim to subvert the romanticised ideas about place found in traditional fantasy (see VanderMeer and VanderMeer 2008, xvi). As a genre, fantasy fiction has often been seen as a lower genre because of its supposed inherent escapism, which gives its readers frivolous pleasure while they dwell on the faraway lands instead of focussing on the real problems of the real world. Certain preferences of what is or should be represented exist also in narrative theory. Many approaches based on cognitive narratology, for example, aim to discuss the universal patterns that can "tell us what it is like to be a human in this world" (see Farner 2014). Such preferences in objects of representation have had their consequences for the discussion of the purpose and relevance of fiction.

Both in speculative fiction and its research, the preferred object of representation has usually been understood to be the world, not necessarily the representations of "sustained

temporal–causal relations between particulars, especially agents" (Currie 2010, 27).[36] In *City of Saints and Madmen*, such relations are evoked in a manner, which highlights the materiality of the work. This practice, which applies to the work as a whole, is illustrated in a more compact form by "King Squid". It is introduced as a work by Frederick Madnok who, during the reading process, undergoes a transformation from a rather rational academician to a madman coming to terms with his trauma and, in a sense, moves from someone asserting the truth to someone whose credibility is subject to doubt. Madnok's transformation is communicated by changes in the style and the content of the text, and the "real" story of what has happened to its writer is embedded there but not explicitly communicated. On the surface, "King Squid" is an essay on the Giant Freshwater Squid and of the related Squid folklore. It is designed to look like an ambergrisian publication, complete with handwritten observations on Squid behaviour. Moreover, it makes use of the structure of a scientific monograph in order to delve deeper into the traumatic past experiences of the writer and, in doing so, exposes the horrible crime he has committed. The latter topics are introduced mainly by way of footnotes such as the ones recounting the moments when the writer was forced to escape the wrath of his deeply religious mother, or the ones like footnote number 44: "(Is this the 'breakthrough' in my personal development long promised by the resident gods? Strange. It feels more like a death knell. I sense a great abyss opening beneath me, a vein of deep water not previously negotiated by fish or squid.)" ("King Squid" 43.)

The main storyline of "King Squid" centres on the writer who wants to hide and reveal his crime simultaneously. The story as sustained temporal–causal relations between particulars, especially agents, is not directly communicated to the reader in the sense of someone reporting them to someone else. Instead, it is embedded into a 37 page long, "intermittently annotated" bibliography. First of all, under the bibliography entry *The Clash of Science and Religion: Personal Experience*, the writer divulges the day his mother destroyed his father's scientific research material that had taken seventeen years of trial-and-error to grow. Then, under *Sunset over the Squid Mills*, he describes finding his mother dead at the squid mills: "He must have known that I would find her there. [...] Her head rocked gently against the rotted pontoons, gold-gray hair fanning out. Her gaze seemed peaceful although I could read nothing in her eyes." ("King Squid" 80.) Finally, the true nature of the crime is revealed, although not in so many words:

> Sleeter, M.J., A Guide to the Mushrooms of Late Summer: The Poisonous and the Benign, Squid Mill Library Press.
>   (He was picking mushrooms in the forest behind the house and humming softly to himself. I paused a moment to marvel his calm, even though the late afternoon

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36   Currie uses this as a basis for how "narratives are distinguished from other representations by what they represent". According to him, "other kinds of discourse focus on causes: scientific theories, for example. But theories stress generality, law-likeness, and abstraction, while narratives focus on the particular, the contingent, the concrete." (Currie 2010, 27–28.) I will further discuss the relationship between the general and the particular in speculative fiction in Chapter 3.

sun, mottled through the deep silence of the fir trees, cast my shadow far in advance of his gaze. He must have known I would find him there.) ("King Squid" 81.)

At the end, the writer sees himself or hallucinates joining his fellow squid and disappearing from the "sight of the doctors and the attendants, impervious to their recriminations, once more what I was always meant to be" (ibid. 88). Although "King Squid" presents the reader with an abundance of information, the most crucial part of this story is never directly communicated. In this, "King Squid" resembles the famous passage in James Joyce's *Ulysses* (1922), where Leopold Bloom's verbal "stream of consciousness" is preoccupied with everything except what is really on his mind, his wife's infidelity with Blazes Boylan. The construction of "King Squid" is, therefore, inherently literary. Still, it is hard to view it simply in the frame of report or as making sense of the characters, situations, and events represented by the textual cues (Herman 2009, 17), as it actually requires a great deal of interpretation. This, in turn, relies upon the reader's exposure to prior texts and knowledge of certain agreements, in which *City of Saints and Madmen* trains its reader over and over again. At the end, however, sustained causal–temporal relations are evoked in order to give reason for the composition of the work as a whole.

In "A Letter from Dr. V to Dr. Simpkin", the first four novellas of the collection are presented as making up "that battered paperback copy of <u>City of Saints and Madmen</u> he [X] insisted on clasping to his bosom like a talisman" ("A Letter" n.pag; emphasis original), while the other eleven texts (excluding the letter explaining all of this) represent X's possessions. They consist of "various writings, which either originated with him or which he acquired during that brief period when he walked the streets of Ambergris as a free man" (ibid.). The texts following "Strange Case of X" and "A Letter" in VanderMeer's work can be interpreted against multiple contexts. First of all, they can be read as fantastic, standalone stories, all exposing different aspects of the city. In this context, the imaginary city serves as a common point of departure, as a unifying setting, but not in the sense of a storyworld, which is evoked by the reader's attempts to make sense of "who did what to whom, where, why, and in what fashion" (Herman 2002, 14). Rather, the structure of *City of Saints and Madmen* as an artefact contributes to the feeling of a multi-dimensional or networking world-as-construct. This is a world-external perspective, as it reflects, among other things, the author's reasons for publishing such an edition of the stories situated in Ambergris and for arranging them in this particular way.

Secondly, the stories can be read from the world-internal perspective as parts of a narrative that sheds light on what has happened to the mad writer X and what he has done to the texts. To put it briefly, there is a story of an insane writer who has effectively disappeared from both worlds he was known in. In the letter, Dr. V explains: "The facts remain the same, my good Simpkin: X gone with no trace of how he accomplished the feat and no sign of where he might have sought refuge. [...] It seems of little use to note that most of these writings deal with some form of transformation, a common enough concern of those who wish to leave their insanity behind." ("A Letter", n.pag.) One of such writings

is the beautifully illustrated story "The Exchange", where the layout is designed according to the description given in "A Letter": "X then carefully cut the pages, glued them to larger sheets, and added his own typewritten notes". The notes recount the relationship between Nicholas Sporlender and Louis Verden, the imaginary authors of "The Exchange". In this, the recognition of the work of fiction in its materiality remains in the background, but it does not make much sense to try to analyse the construction of the mad writer narrative as a case of reader positioning herself in the frame of a prototypical communicative model. In such a model, the work of fiction is primarily seen as representing a story in order to communicate something that has already happened, while *City of Saints and Madmen* illustrates the fact that the complexity of engagements cannot simply be described by noting that the relations do not take the form of linear sequences of events.

Thirdly, as a combination of the perspectives described above, the meaning of the mad writer narrative can be explored by reading the stories as comments on the writing process and the work of an author. In the section called "X's notes", placed immediately after "A Letter", the second note reads: "A writer in a prison. The prison is his own story. How can he make himself free?" ("X's notes", n.pag.) Besides encouraging a reading of the work as a medical report of an imaginary writer, *City of Saints and Madmen* can prompt the reader to see it, among other things, as a concretisation of the creative process ("Is there more to the Martin Lake story? Later years?"), or as a manifestation of the writer's obsession with his imaginary world ("Could easily write a biography of Voss Bender while in here"). "The Release of Belacqua", the story after "X's notes", recounts a story of an opera performer who has practically become the character he has been playing every night for ten years. He keeps a crumpled piece of paper in his pocket, and on this piece he has scribbled the stage directions and the lines of his character. Finally, he receives a message signed by X, telling him that he is not a character and that he has never been in a story. This brings about a profound change in Belacqua: "His fingers curled around the crumpled piece of paper in his pocket. The edges cut against his palm. Somehow he knew that when he took the paper out of his pocket, the words written there would be utterly, irrevocably changed." ("Belacqua" 14–15.) Dr. V's letter includes a rather cold analysis of the text: "Throughout the story, X communicates to the reader 'between the lines' in a rather pathetic manner. Such self-consciousness has clearly corrupted his writing." ("A Letter" n.pag.) "The Release of Belacqua" thus self-reflexively comments on a very particular case of madness, the assimilation of the creator and the created, or the artist and the artistic practice.

Drawing from the use of the double perspective in speculative worldbuilding, *City of Saints and Madmen* encourages the reader to reconsider the process of telling and reading stories – especially of fantastic ones – as its various speculative texts make it possible to view the city of Ambergris as living its own life, separate from the author's mind, while the author is just "channelling" reports orginating there. This mind-set, made visible over the course of VanderMeer's work, seems to be crucial for many speculative fiction writers attempting to create a sense of an imagined place for their readers. In addition to this, the

structure of *City of Saints and Madmen* is like a cross-section of postmodern culture: the elements of "high" and "low" and conventions of nonfiction and fiction coexist peacefully, and there are explicit links between the texts. Ultimately, the stories set in Ambergris do not appear to be so much a series as a domain of stories, where new texts are created in relation to the written ones, thus appearing as a concretisation of the creative process, which exploits the texts already read and generates meanings in relation to them.

In the end, the speculative premise of the work, the world-as-construct, and the actual construction of *City of Saints and Madmen* overlap. As a result, the way a world-as-process is based on the reading of a literary work, on engaging with the invented artefact, is highlighted and becomes the focus of our attention, and the representational logic is brought forward – something that supposedly exists prior to the engagement becomes explicitly constructed before the reader's eyes. This furthermore brings up the shortcomings of understanding a fantastic world-as-construct only in terms of an imagined physical space, inhabited by possibly existing characters and recognisable by certain locations and landmarks. Our ability to view Ambergris as an imagined world is the result of learned agreements and conventions. On the one hand, it results from the way of conceptualising a speculative fantasy world, conventionalised by Tolkien, and on the other hand, from the interpretative frame, which allows the reader to take up a position that further allows her to approach the characters, events, and the world in general as something that can be told about. However, these conventions are not part of our natural endowment or mundane experience, but must be considered side by side with the work in its materiality. This is also the basis of worldbuilding as a communicative practice, which entails the double perspective into the real and the imagined.

The world-internal perspective results from the user taking up certain conventions as props in order to engage with imagining things that could never be or could never have been true possibilities for her – despite the fact that these conventions are exposed and ridiculed in *City of Saints and Madmen*. The way they are exposed is based on systematic repetition of them in the effort of engaging the reader's imagination by means of worldbuilding. Ultimately, the tendency to emphasise solely the world-internal perspective disregards the possibility of discussing worldbuilding as a communicative and rhetorical practice. Such tendency is present both in fantasy research and narrative theory on fictional worlds. Most theories on estrangement and double exposure in fantasy concentrate on the relationship between the real and the imagined as the distinction between the primary and the secondary world, while the narrative communication model along with the emphasis on the frame of report requires the reader to move away from the actual engagement with the literary artefact. I suggested that if we ignore the external perspective and remain limited to the world-internal view, we lose the possibility to understand the "awareness of and a pattern for meaningfulness" (Attebery 2004, 309) and, therefore, miss something crucial about speculative worldbuilding as a rhetorical practice. In the next chapter, I will turn to the views that limit our engagement with works of fiction in interpreting the particulars and

their relations. I will widen the scope and focus on their interplay with the more general principles systematically worked through in speculative fiction.

3   WORLDBUILDING AND INTERPRETATION

The previous chapter argued that in various approaches on fictional worlds, our engagement with works of fiction as communicative artefacts is conflated with the narrative as a report or a representation of temporal–causal relations. A theoretical move in explicit contrast with such conflation is the endeavour to remove narrative altogether from the analysis of representational artefacts other than literature. In general, *simulation* has been, quite polemically, evoked by the ludologists in order to free game studies from theoretical imperialism supposedly attempting to reduce everything into narrative (see Eskelinen 2001, Frasca 2003, Aarseth 2004). This chapter puts the ludologists' views forward as a way of opening up a new angle on familiar debates of narrative theory, such as narrativity and interpretation. Narrativity is usually seen, by definition, to require a communicative source (such as an author or a narrator) "behind" the representations or, at least, the feeling of a story being related (e.g., Abbott 2012), despite the fact that it is also understood as a scalar concept, in which a text is felt to be "more or less narrative". Games typically lack a sense of a story being *told* and are, therefore, not compatible with the communicative model constructed on the basis of literature. Simulation, on the other hand, is often deemed incompatible with both narrative and literature in respect to elements such as the particulars, sequentiality, and distinct temporality. I will return to the prototypical understanding of narrativity in relation to games in Chapter 4, while here I will bring the concept of *simulativity* to the field of literary studies in order to better describe our interpretative engagement with works of speculative fiction.

The larger idea behind the assumption that narratives represent the telling of something that has already happened is that narrative is the mode of thought by which we make "meaningful sense" of people (ourselves and others), their doings and interactions (see Bruner 1986, 12). Problems ensue, however, when narrative is understood *both* as a mode of thought for making sense of our individual experience as human beings *and* as a representation, of which meaningful sense can primarily be made through and in relation to such experience. As a result, interpreting a work of fiction and making sense of people and their interactions as the prototypical content of narratives are often plainly equated. Psychologists Raymond A. Mar and Keith Oatley, among others, state that the "function of fiction" is the abstraction and simulation of the social experience by means of narrative, and

that "consistency can be found in what narrative fiction is about, autonomous intentional agents and their experience" (2008, 174; also Palmer 2004). The studies on the so-called theory of mind in the field of narratology essentially share this outlook. Lisa Zunshine, for example, has argued that even media as different from each other as reality shows and novels "build their appeal around human cognitive universals, such as our ability, need, and desire to read minds in social context" (2012, 119). In cognitive narratology, this is further advanced by the idea that we make sense of our experiences and the world primarily by constructing narratives (see Herman 2009).

It should be noted, though, that narrative (however elemental for human thinking it may be) is only one of the modes of thought, which we use to discern complex states, connections and relations. Other operations include, among others, spatial, abstract, systemic, and haptic ones (see Walsh 2012, 263). When it comes to works of fiction, these modes enable frames of interpretation which are part of our processes of making "meaningful sense", both in the sense of relevance and the aesthetics. In other words, they are connected with both what fiction is about and what its appeal is. This chapter focusses on the more general, systemic and abstract frames beside narrative by way of worldbuilding. The frame of interpretation explicates the userly act of generating meanings within and in relation to a certain system or context.[37] These frames should not be understood simply as something that limits the process of making meaningful sense, but also as something that enables the process in the first place. I therefore put forward the idea that in relation to the interpretative engagement, worldbuilding should not be seen as being restricted to the domain of the narrative frame, the one that is intent upon the particulars and their relations, like the category of *storyworld* is. This, furthermore, means that some assumptions related to representation must be reconsidered, as the narrative frame of interpretation which focusses on a "structured time-course of particularised events" and highlights the "pressure of events on real or imagined consciousnesses" (see Herman 2009, xvi) is often seen dominant when it comes to reading novels, for instance. The concept of simulativity, which I will introduce in this chapter, is designed to highlight the fact that abstract and general ideas that are worked through systematically are crucial to the rhetoric of speculative fiction alongside with the particulars and the specific causal relations.[38]

My case study is the novel *The Causal Angel* (2014, TCA), the finale to Jean le Flambeur trilogy by Finnish-born writer Hannu Rajaniemi. After examining prison models and identity through memory in *The Quantum Thief* (2010), and addressing the cycles of storytelling in the second instalment, *The Fractal Prince* (2012), the trilogy turns to the

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37   I have chosen to use the term *frame* instead of mode in order to emphasise the user's perspective and the idea that meanings are actively attributed to various elements in a work of fiction, instead of them being innate to the elements.

38   The way I use the concept of simulation to describe our understanding of systems, therefore, differs from the way simulation has been used in the psychological and enactivist approaches to fiction to describe the userly experience of projecting themselves into the represented events or simulating the bodily experience of being inside the worlds of fiction.

juxtaposition of permanent, determined selves and the radically fluid selves adopted in gameplay. The novel is used to illustrate one of the most distinctive features of speculative fiction, which cannot be analysed by concentrating solely on the narrative frame: the potential of working more abstract and general models into concrete and particular. In Rajaniemi's far-future version of our Solar System, radical advances in technology have transformed humanity to the point where the concept of an individual is almost trivial. The posthumans ruling the system have either gained power during the massive mind uploadings and, thereby, acquired the command of a large number of "gogols", identical copies of a small number of Prime humans (the Founders), or they have abandoned the need for stable, determined selves by turning to the fluctuations of quantum reality (the Zoku). Following this, the way of structuring representation in speculative fiction is more *systemic* or simulation-like than in other genres: it invites the reader to approach the discourse *as if* it was based on a model, operation of which is represented during the course of engagement over time.

This is the process of making meaningful sense which speculative fiction (especially science fiction) interestingly explores. As Farah Mendlesohn (2003, 9) has argued, speculative fiction is typically about our relationship with the world and the universe instead of the intricacies of inter-human relationships. I suggest that as two frames of interpretation, narrative and simulation intertwine and complement each other in this process. Ignoring simulation not only oversimplifies the workings of narrative in relation to it, but can also lead to the categorisation of speculative fiction as "weak" or "low" genre of fiction, if elements such as autonomous intentional agents and their interactions are overemphasised. The poetics of literalisation call for a very specific use of different frames of interpretation in speculative fiction, and simulation as a frame of making sense of complexity and phenomenon of emergence is important to worldbuilding. In comparison with the case study in Chapter 2, *City of Saints and Madmen*, the complexity of Rajaniemi's novel is rather different. It is both structurally and stylistically rather conventional, but quite challenging when it comes to making meaningful sense of its thought experiment, for example. In line with my previous arguments, I argue for the view that emphasises the affordances of different media and disputes the role of narrative as the exclusive object of interpretation.

3.1   Narrative and Simulation

Although the relationship of narrative and other frames has been addressed, very few researchers have linked it to worldbuilding as a communicative practice, or explicitly to

interpretation.[39] Simulation has been used in the analysis of the fictional or imaginative dimensions of games because it is not tied to the basic assumption of somebody communicating, or at least choosing the sequences of events presented to the user. Ludologist Gonzalo Frasca argues that narrative is a particularly influential form for structuring representation, while simulation, according to his definition, means "to model a (source) system through a different system which maintains to somebody some of the original system" (2003, 223). Frasca chooses a flight simulator as an example and concludes that it is not only a sign, but a machine that generates "signs according to rules that model some of the behaviours of a real plane" (ibid.). He attempts to describe the fundamental way in which legacy media (such as literature) and new media (such as digital games) differ from each other. While some aspects of his treatment on this difference are apposite, the difference is ultimately not based on any such feature that legacy media would be "representational, not simulational".[40] As Richard Walsh (2011, 76) points out, simulation as defined by Frasca is surely a form of representation: its object of representation is not (or not directly) the *particulars* of a spatio-temporal environment but rather something more *general* and abstract behind those particulars; it specifies a set of laws designed to reproduce the source system sufficiently well so that certain behaviours of that system are also, in analogous form, produced by the simulation.

Frasca's argument is based on the assumption that the meanings of literature – and therefore the interpretative work of the users – would be predetermined by their authors: "Narrative authors (or 'narrauthors') only have one shot in their gun – a fixed sequence of events" (ibid. 223). In the endnotes of his article, Frasca further defines this sequence as "one of the actual events". Game designer Greg Costikyan (2008, 6) points out that in games, by contrast, "perfectly these events" cannot be attributed to the author or the narrator. The assumptions concerning the "fixed sequence of actual events" and "perfectly these events" are, once more, an illustrative example of the underlying problem linked to the distinction between story and discourse. This distinction, called by James Phelan (2011, 58) "the mother's milk of narratology", is based on distinguishing the story – or the "what" of narrative, consisting of events and existents – from the discourse – or the "how", including the structure and medium. It has to do with the idea that a story corresponds to causal logic of some kind, which then forms the basis of the *definition* of the narrative. Digital artefacts that can be navigated through according to various different routes already question the view of the story as the actual or natural course of the events behind the representation.

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39   The notion of text type has been used to distinguish narrative as a genre from the text type 'narrative'. In the sense of a text type, 'narrative' refers to text that primarily represents events featuring event verbs. The two other text types usually alongside narrative are description and argument: the former primarily represents states (of objects) featuring static verbs, while the latter mainly represents omnitemporal and logical relations between abstract objects. (See Aumüller 2014, n.pag.)

40   As Janet Murray (2011, 66) puts it, the most significant difference between the computer and earlier media of representation is the computer's ability to represent and execute conditional behaviours. In legacy media such as literature and film, representation is static or unconditional. Chapter 4 returns to this discussion in more detail.

Game mechanics, for example, can embody innumerable potential sequences of events, none of them more real or right than any other (unless there is, for example, a puzzle with only one solution). However, the problematic nature of the distinction between the story and the discourse has also been brought up within narratology. Concerning our causal understanding of narrative and explicitly stated causal relations, Walsh argues:

> Even the most intrusive novelist will necessarily leave a great deal implicit, and in nonlinguistic media, the notion of explicitly causal relations is almost unintelligible. The interpretative activity this requires of the reader is not of a kind that strips away the discursive surface to expose an innate logic in the particulars of the narrative events; rather it is a process of narrative supplementation. (2007, 60.)

In other words, the causal explanation, which is given in the discourse or derived from it, does not evoke hidden logic independent of the discourse, but produces it. The story is rather a function of *interpretation* than a reconstruction of the author's "original" story that serves as the basis for the selections and arrangements of the realised discourse (see ibid. 66). Furthermore, construction of stories is the habitual, or conventional, frame of interpretation "meaningful sense" is being made of a representational artefact. Habitualities often get disassembled or exposed in speculative fiction, as I have already argued in Chapter 2, where I pointed out that the idea of a narrator who reports something from a world which is understood to be independent of his mind is one of such habitual conventions. However, this should not be taken to mean it is an innate quality of the engagement with *all* works of fiction, and, therefore, the story as a function of interpretation can work differently in different media, for example.

The habituality of story-construction is why I find Frasca's remark of narrative's ubiquitous nature illuminating, despite his somewhat strange opposition to the concept of representation. Frasca argues that we are so used to seeing "the world through the narrative lenses that it is hard for us to imagine an alternative" (2003, 224). Moreover, I agree with his aim to contest Mark Turner's (e.g., 1996) well-known argument of the "literary mind", the mind of stories and parables, which is not peripheral but basic to thought and which uses story as the central principle of the experience and knowledge. Turner's claim that even exotic and fantastic tales, such as *The Thousand and One Nights*, can be as significant for thought as logic and science is obviously valuable. His approach is, nevertheless, among the ones that have made the mind of stories too dominant: it seems that the only meaningful frame for the user of fiction would be the one of tracing the particulars and their relations.

My case study, *The Causal Angel*, challenges the habituality of narrative lenses or enables us to use alternative ones. In this, worldbuilding as an imaginative practice seizes not only the readily mutable aspects or "fault lines" of reality as we understand it (choices, actions, controllable events, and so on) but also the very model we base our understanding on (cf. Byrne 2005, 3). The fault lines are centred on the particulars, which are easily arranged in a causal sequence or explanation consisting of the particulars. In *The Causal*

Angel, however, one of the recurring themes is making meaningful sense of paradigms and, thereby, directing our attention to the workings of the world instead of particulars such as its people. As Ursula K. Le Guin has put it, science fictional complexity differs from realistic novels in that an "individual character is seldom the key" (2011, n.pag). This is illustrated, for example, in the prologue, in which one of the characters, Joséphine Pellegrini, is imprisoned in an old mindshell, a virtual environment, by a dangerous entity, a game-theoretical anomaly called All-Defector. As a Founder, Joséphine can command demiurge gogols, world-makers that fill the gaps of the virtual environment, to paint the current state of the Solar System for her: "Suddenly, she sees the pattern emerge, sees the hand of the All-Defector at work. She gazes into the face of an apocalypse, greater than any Matjek ever dreamt, woven out of orbits and battles and thoughtwisps. She watches the war for a long time." (*TCA* 5.) In other words, the primary interest of speculative fiction such as *The Causal Angel* lies in the paradigms from which patterns emerge, but even something as large and abstract as the system-wide apocalypse is woven out of small particulars such as thoughtwisps, transportable forms of minds that can be sent through empty space.

Making sense of the paradigms instead of the particulars recurs both structurally and thematically in *The Causal Angel*. Various frames for making sense of the world are, for instance, reflected in the outlooks of the characters: for the protagonist of the trilogy, the classic gentleman thief Jean le Flambeur, everything is a heist or job; for Joséphine, who commissions Jean and his companion Mieli to secure the Kaminari jewel, everything is a scheme; for Isidore Beautrelet, a detective and King of Mars, everything is a puzzle or a mystery. Zinda, a zoku girl Mieli grows close to, only jokes about being a narrativist (an obvious reference to the three-fold model of gamers developed in the RPG research),[41] while the serious Mieli, in her desire to see a purpose in everything, seems to be the true narrativist: "Just making sounds that do not mean anything, that do not shape any *väki*, or tell a story" (*TCA* 133; emphasis original). The instances of making sense of the paradigms and the patterns are not only related to the character attitudes but also to the science fictional setting of the novel, apparent in the various descriptions of the ways the characters attempt to make meaningful sense of the massive amount of data available to them.

At the beginning of the novel, for example, Jean tries to find out what happened to Mieli during the events that end *The Fractal Prince* and deploys a swarm of open-source cognitive agents in order to be able to scour "the System public spimescapes for public data on Earth's destruction" (*TCA* 8). The reader's position in relation to the novel's speculative environment is similar to Jean's situation as she is bombarded with information right from the start. The prologue presents objects like Dragons, destroying everything on their path

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41   The Threefold Model distinguishes three player attitudes of styles: gamists, dramatists, and simulationists (see e.g., Kim 2004). Dramatists have also been called narrativists, because they are concerned with the narrative qualities of the game, such as the exploration of themes. Chapter 4 returns to this model, but here I would like to point out that the player attitudes are related to my idea of frames of interpretation: they attempt to explicate the different ways the players of RPGs make meaningful sense of their gameplay experience, and as a result, direct their activities in the game.

by turning matter, energy and information into more Dragons, Joséphine being trapped inside an old mindshell, The Kaminari jewel, "the key to Planck locks", and demiurge gogols filling the gaps of the vir. The challenging nature of Rajaniemi's work stems largely from such concepts, because providing an extensive background for all these inventions in expositional passages is not part of his repertoire. It is perhaps an example of his sense of humour that the canonical occurrence of the information dump, a villain speech, in which a villain describes his plans to the hero who has been caught, is transgressed in *The Causal Angel* when Jean interrupts his other self in the middle of such a speech. He regrets it later, though: "I should have let my other self tell me his plan. Mental note: never interrupt a villain who is monologuing." (*TCA* 243.) All in all, Rajaniemi's novel *slows down* the readerly efforts of arranging information in the form of distinct particulars into meaningful patterns, because the larger context is, at the same time, both fuzzy and overtly detailed. This is one of the ways *The Causal Angel* increases the difficulty and length of gaining perception on the idea that is being worked through (cf. Shklovsky 1998), an aesthetic end, which was argued to be typical of speculative fiction in Chapter 1.

In this, *The Causal Angel* illustrates the way the structuring of representation in speculative fiction invites the reader to approach the discourse *as if* it was based on a model. In Rajaniemi's novel, the invitations are related to at least two different kinds of mechanics: the principles of game and the theory of quantum mechanics. An example of the former is the Zoku Realm, where Mieli is placed while Jean is searching for her. It is a simulated environment which can be constructed according to a very special set of mechanics which, in turn, can be used in order to manipulate a person's behaviour. In this case, the Realm has been constructed in order to create trust and determine what kind of a person Mieli is, based on her choices and actions inside the simulation.

The chapter concerning Mieli's experiences in the Realm is also constructed according to a very special set of mechanics – it is presented as a tale on revenge set in a classic setting of samurai stories. The tale is written in the second person with a style reminiscent of role-playing games: "You think back at the journey, at the choices. [...] You adjust your katana and start climbing. The wind brings a whiff of smoke. Somewhere, behind you, a white pillar rises to the sky. Your village is still burning." (*TCA* 23.) For their part, the principles of quantum mechanics are presumed to function not only on the level of atoms and subatomic particles, but also on a larger scale and thus even serve as the basis of the posthuman societies of the Sobornost Founders and the Zoku. The major story arc in the trilogy as a whole concerns the conflict between these two factions. Unlike the Sobornost, whose Great Common Task demands the rewriting of the laws of the universe in order to eliminate death, the Zoku have embraced quantum reality and surrendered the idea of a stable self. For example, a zoku trueform exists in an abstract "shimmering utility fog cloud [...] surrounded by a swirling mandala of zoku jewels" (*TCA* 52) but is capable of taking up any kind of particularised form.

Despite creating a basis for the story arc, some aspects of quantum mechanics can seem counterintuitive or even paradoxical. This is due to the fact that they describe behaviour quite different from the one observed on larger scales. On the level of everyday sense-making, which psychologist Daniel Kahneman has called the "illusion of understanding", they are especially puzzling as they do not follow the logic of explanatory stories people construct while making sense of their surroundings. These stories "are simple; are concrete rather than abstract; assign a larger role to talent, stupidity, and intentions than to luck; and focus on a few striking events that happened rather than on the countless events that failed to happen" (Kahneman 2011, 199). As such, the explanatory stories resemble the logic of everyday counterfactual thought which, according to Ruth M.J. Byrne, "do not tend to focus on impossibilities – that is, things that could have never been, given the way the world is" (2005, 10). However, speculative fiction focusses not only on the easily changeable joints of reality as we understand it (such as the few striking events) but also on the very model we base our understanding on. This combination both enables the user to follow up the working out of certain idea and its consequences and facilitates her cognitive and emotional engagement with (or "absorption" into) the worlds as possibly existing. Works such as *The Causal Angel*, therefore, challenge both the everyday sense-making and the prototypical view of interpretation and its object. The user is not only concerned with the particulars and sequences of events, but also with more abstract ideas and general relations. If the user only concentrated on the concrete rather than on the abstract, or assign the most important role to intentions, for example, the larger ideas worked through in Rajaniemi's novel could not take shape in her mind.

This is why the view that the user focusses keenly on "resolving the story", or sorts out the particulars and temporal sequences or changes of state is not sufficient for the analysis of the communicative practices of speculative fiction. In the previous chapters, I have discussed the defining feature of speculative fiction, the potential to work more or less systemically through certain ideas and the way the readers are encouraged to engage with "exercises in worldbuilding", as McHale (2010, 25) puts it. Walsh (2011, 78) combines these aspects when he suggests that to "derive a fictional world from a narrative is to use the narrative as the basis for an exercise in mental simulation". He sees such an exercise as a particular way of understanding narrative, as the counterpart of the cognitive process of understanding events within a simulated environment by narrativising them. In this, narrative is seen as a genre rather than a text type, and the exercise in mental simulation can be seen as a frame of interpretation. My emphasis is on the idea that the user's particular ways of understanding are directed towards a work of fiction instead of "narrative" or a "simulated environment", and therefore I focus on what Walsh calls "the interplay between particular and general" (ibid. 83) which speculative fiction in particular, makes use of as a communicative practice.

Speculative fiction like *The Causal Angel* is typically most devoted to systematic work through scientific accuracy and technical detail, and Rajaniemi, who holds PhD in Mathematical Physics, definitely takes the understanding of the scientific method

seriously in his novels, too. This method resembles that of argument, a type of text that "predominantly represents omnitemporal and logical relations, primarily between abstract objects such as concepts" (Aumüller 2014, n.pag). In Rajaniemi's novel – and in speculative fiction generally – such a method is intertwined with other types of texts, and this affects the frames of interpretation. At its most direct, the novel addresses the reader with the voice of the Kaminari, quantum gods of the universe:

> *You live on an island called causality*, the voice says. *A small place, where effect follows cause like a train on rails. Walking forward, step by step, in the footprints of a god on a beach. Why do that when you could run straight into the waves and splash water around?* [...]
> *Causality. It's a lens through which we see things. An ordering of events. In a quantum spacetime, it is not unique. It's just one story among many.* (*TCA* 40; emphases original.)

The words of the quantum gods highlight both the pros and cons of a "lens through which we see things". The lens both allows us to structure some aspects of reality around us and, in doing so, inevitably simplifies it, as it is easy to forget that it is only "one story among many". However, while being engaged with *The Causal Angel*, the reader is hardly like a train on rails or following one set of footsteps on the beach. I suggest that the reader is called to use two frames of interpretation: the one that moves from particulars to general (as in Tolkien's classic example of the world with a green sun) and the other that moves from general to particulars (as in the case of thought experiments in fictional worldbuilding, which are not merely conceptual but take a distinctive and particular form).[42] In other words, making meaningful sense of the particulars such as mindshells, demiurge gogols or Great Common Task of Sobornost, requires understanding of the larger idea such as the principles of quantum mechanics. Such a movement from particular to general (and back again) resembles the ideas presented in narrative hermeneutics, but it is decisively not only tied to narrative interpretation.

Following this, it can be argued that the "feel" of a world-like structure, an illusion of something more general and abstract behind the particulars or the surface of a story, results from engaging the reader with a distinctive frame of interpretation which – for want of a better term – I call *simulativity*. In short, simulativity is a frame intent on tracing the more general and abstract principles according to which the speculative world-model is worked though. Simulativity, and narrativity closely alongside with it, are qualities of inviting the use of certain kind of interpretative frames from the users. Compared with Walsh's (2011, 78)

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42   As an example of the move from the particulars to general, Tolkien writes how making a credible Secondary World commands special skill of the author, as Fantasy is difficult to achieve: "Anyone inheriting the fantastic device of human language can say *the green sun*. Many can then imagine or picture it. But that is not enough." (Tolkien 1983, 140; emphasis original.) As an example of the move from general to the particulars, I suggest the thought experiment in Le Guin's famous novel *The Left Hand of Darkness* (1969), which presents a society without definite genders and engages the reader to work the general idea through by means of particular characters and events.

approach on either understanding events within a simulated environment by narrativising them, or using the narrative as the basis for an exercise in mental simulation, I argue that especially in speculative fiction, simulativity and narrativity are complementary strategies for making "meaningful sense" of the representational artefacts such as novels. Narrativity has everything to do with particulars such as characters, events, actions and consequences – the elements which can be likened to the fault lines of reality as we understand it – while simulativity concerns the very model containing these mutable aspects. The previous chapter brought up Herman's view on narrative sense-making as gaining a sense of what is going on and who is doing what to whom. I will now place this definition of narrativity in contrast with the other sense of the concept, the quality of being narrative.[43]

In my opinion, it is not necessary to distinguish narratives from other kinds of representation – as Frasca has argued – but rather differentiate between various ways of making meaningful sense of representational artefacts. To say that a work of literary fiction such as *The Causal Angel* can invite simulative responses does not equate novels with simulations but implies that they can be used as basis for an exercise in mental simulation, side by side with narrative interpretation. In the same way, making use of a scientific method, or presenting a Realm structured according to mechanics reminiscent of RPGs do not equate a novel with a scientific experiment or a game as such. Rather, it invites the readers to view the novel as if it had some of their qualities.[44] As I argued in the Introduction, my emphasis is on narrative and various other elements in relation to speculative worldbuilding as a practice that transcends the boundaries of different media – in other words, it is a transmedial phenomenon. What I am suggesting, then, is that by means of speculative worldbuilding, works of fiction can draw their users into certain frames of interpretation, and this is a question of the attitude with which the reader is invited to approach the work. Next, I will turn to the logic of such invitations in *The Causal Angel*, where scientific method and game, in particular, are used as a form of analogous invitations.

3.2   Literalised Metaphors, Concrete Invitations

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43   Another concept that has been brought forward is *weak narrativity* to describe the ways avant-garde narrative poets, for example, treat narrative lines in their work. As McHale argues, in these cases "we intent that we are in the presence of narrativity. But at the same time our sense of narrative is being solicited, it is also being frustrated." (2001, 164; see also Tammi 2006.) Speculative fiction, however, does not typically rely on this kind of an effect.

44   Similar questions have been discussed in relation to the role of science in science fiction, since in science fiction many of the inventions are things that have been ruled out of court as literally impossible (e.g., faster-than-light travel). Instead of speaking of scientific "truths", it may be more precise to describe science as a discourse in which hypotheses are tested by experiment. As Gwyneth Jones has noted, the challenge is not to have scientific accuracy, but to have the appearance of "command over the *language* of science" (1999, 16; emphasis original).

Above, I mentioned Turner's famous argument for literary mind and his aim to prove that stories and parables are not foreign to the world of everyday thought. The argument is related to Byrne's (2005, 29) assertion that human rationality depends on the imagination: people are able to be rational at least in principle because they can *imagine* alternatives. Rationality should, therefore, not be understood as a quality of something being based on the understanding of the factual reality, but as a quality of human reasoning, which depends on the imagination of possibilities. Fictional worldbuilding in speculative fiction makes use of such rationality. In science fiction scholarship, similar argument has been made by means of concepts such as cognitive estrangement and thought experiment in order to explicate how even science fiction set in the faraway galaxies can provide us with something more than mere escapist pleasure. The terms are rather similar to J.R.R. Tolkien's idea of "recovery" (1983, 146), but the general tone of the theories reflects the differences in fantastic and science fictional forms of speculative worldbuilding.

According to Darko Suvin, both the features of cognition[45] and estrangement need to be present, and it is this co-presence that allows science fiction "both relevance to our world and the position to challenge the ordinary, the taken-for-granted" (1979, 8–9). The "main formal device" for Suvin is *novum*, an imaginative framework alternative to the author's empirical environment. For her part, Gwyneth Jones suggests that science fiction should be seen as a form of thought experiment, where "the consequences of some or other nova are worked through" (1999, 4). This means that it is the scientific method, the logical working through of a particular premise, which is important to science fiction, not the scientific accuracy (see also Roberts 2000, 10). I have discussed such thought experiments already in relation to speculative worldbuilding in general, while here they are linked to metaphors and concretisation which are in the heart of the aesthetics of speculative fiction.

The topic of speculative fiction's relevance to the mundane world is often connected to the informative emphasis: how can the readers gain knowledge or deeper understanding about something while reading a novel? Despite Suvin's emphasis on cognition with its rational and logical implications, the question concerns emotions, too: how can the readers find the events and characters in a faraway galaxy emotionally moving? Interestingly, with regard to the mundane world, Rajaniemi sees himself as more honest than the writers of conventional literature, who offer "hidden distortions" unlike writers using straightforwardly fantastical inventions: "Mainstream fiction is [...] not about the real world. It's about the world which is very much like our world, but which essentially is the author's perception of all the elements in our reality." (Qtd. in Lea 2010.) Similarly, science fiction writer Samuel Delany has suggested that science fiction "seeks to represent the world instead of reproducing it" (1994, 123), and this emphasis takes the discussion towards concepts such as metaphors. In

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45   With "cognition" and its rational, logical implications, Suvin is referring to the aspect of science fiction that cues us to understand the alien landscape of a science fiction story. For him, then, what is important about *science* fiction is that it is a discourse, which is rational rather than emotional or instinctual. One result of Suvin's approach was a contemptuous dismissal of fantasy as lacking such cognitive believability, although he slowly alleviated this position.

this subchapter I share these views in that I use speculative fiction and *The Causal Angel* as a case study for concretising many of the ways fiction can be said to be "about worlds". As Roberts puts it: "Instead of abstract, SF texts prefer the concrete, so, rather than meditate upon 'alienness', a SF novel is more likely to present us with an actual concretely realised alien, with blue skin and bug eyes" (2000, 14). This does not mean, however, that abstract ideas have no place in science fiction – a point which I took up above when I noted that the reader cannot only concentrate on concrete rather than abstract while reading *The Causal Angel*, for example. The potential to explicate more abstract or omnitemporal ideas into concrete and particular is one of the most distinctive features of speculative fiction, and here I will look at them in relation to the two frames of interpretation, narrativity and simulativity in worldbuilding.

The rise of cognitive approaches has inspired studies where the relevance of fiction is informed by the definition of narrative as a genre based on its prototypical content; that fiction is fundamentally about autonomous intentional agents and their interactions (e.g., Palmer 2004). Making meaningful sense of works of fiction is, therefore, linked to making sense of these particular elements and to their relevance to the user's experiences. The concept of simulation, on the other hand, has been brought into literary research especially in the psychologically inclined approaches, which distinguish between the two ways simulation is related to narrative. Firstly, it is seen in relation to experiencing thoughts and emotions congruent with the events simulated by the narratives (see Gerrig 1998), and secondly, in relation to viewing stories as modelling and abstracting the human social world, which allow the readers to project themselves into the represented events.[46] Mar and Oatley argue that "[l]ike other simulations (e.g., computer models), fictional stories are informative in that they allow for prediction and explanation while revealing the underlying processes of what is being modelled (in this case, social relations)" (2008, 173).

Putting fictional stories and computer models into the same category is far from unproblematic. It is often adopted when the "resources to understand the world around us" are analysed. N. Katherine Hayles, for example, argues that like computer simulations, "literary texts create imaginary worlds populated by creatures that we can (mis)take for being like ourselves" (2010, 6). For their part, Mar and Oatley suggest that literary fiction "provides simulations of social complexes as they unfold" (2008, 175). Simulations are based on designing a model of a real or imagined system. While the model stands for the system itself, the simulation represents the development and progress of the system over time. The purpose of simulation experiments, therefore, is to understand the behaviour of a given system or to evaluate the strategies for the functioning of the system. Compared to scientific studies, or the views that the function of fiction is to gain information on how minds work, speculative fiction is not necessarily aimed at revealing how a certain system

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46   These views have also been discussed in relation to narrative empathy, the sharing of feeling and perspective-taking induced by reading, viewing, hearing, or imagining narratives of another's situation and condition (see Keen 2013), and in the enactivist approaches discussing the act of cognitively taking up a position inside a world of fiction. Enactivism will be discussed further in Chapter 6.

works, but rather at experimenting and trying out some of the possible consequences of an idea. In order to avoid such category mistakes,[47] we must hold on to narrative and simulation as clearly distinguishable concepts. Rather than saying that literature inherently functions like simulations or provides simulations, I argue that we should look at the different kinds of interpretative engagement that representational, cultural artefacts such as *The Causal Angel* call from or enable for their readers. Imaginary worlds that Hayles refers to result from the interplay between such engagements.

Above, I brought up two possible frames for making representations intelligible: narrativity and simulativity. In speculative fiction like *The Causal Angel*, the particulars in the form of characters, their actions, and relations obviously have an important role, too, but to state that these are the material Rajaniemi's novel fundamentally deals with misses both the point and the appeal of it. The object of representation or, rather, the working out of an idea, which calls for a simulative approach side by side with a narrative frame of interpretation in *The Causal Angel*, is something else than "social complexes" or "interpersonal situations". The novel makes analogous invitations for the reader to view it in the context of at least two different systems, the principles of game and the theory of quantum mechanics. The assumptions related especially to the theory of quantum mechanics can be seen as the novum of Rajaniemi's trilogy and an imaginative model alternative to the mundane world. The analysis of the aesthetics of speculative fiction should not end here, though; its basis in alternative imaginative models serves as a means for bringing larger ideas into the discussion, as a part of speculative worldbuilding as a communicative practice. In what follows, I will look at the relationship between the particulars and the general through concretisation of metaphors and their visualisation.

In addition to preferring the concrete instead of the abstract (such as presenting us an actual alien instead of meditating upon alienness), speculative fiction makes use of figurative language in a rather special way. Seo-Young Chu notes: "Occurrences of figurative language in SF texts and contexts have an interesting tendency to elicit literal interpretation almost as a matter of course, especially among readers well versed in SF" (2010, 10). Compared with more conventional fantasy or science fiction, the concretisations in *The Causal Angel* are, more often than not, hard to grasp and follow, especially for the inexperienced reader, much harder than interpreting the literal sense of certain phrases. One reason for this is the sheer originality of Rajaniemi's inventions compared to the more clichéd fantastical imagery of wizards, elves, heroic commanders and phaser fire – despite the fact that there are various classic stock themes and situations such as spaceships, virtual reality, futuristic dystopias and all-out war in space. Le Guin has called such original inventions "box-words that the reader must open to discover a trove of meaning and implication" (2011, n.pag), and notes that imaginative leaps involved in decoding such inventions and appreciating their wit can give a reader much pleasure. For his part, Csicsery-Ronay calls them fictional neologies, which "engage audiences to use them as clues and triggers to construct the logic

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47   A similar category mistake occurs when fiction (or narrative) is seen modelling "life".

of science-fictional worlds" (2008, 5). In other words, the neologisms are indications for the user that the world is different from their own, that an alternative to our understanding of the factual reality has been imagined.

In Rajaniemi's novel, the neologisms such as the "strangelet bombs" (weapons made of hypothetical particles called strangelets) and "spimescape" (virtual reality environment populated by objects called spimes, which grant the user a four-dimensional view of the world) are usually based on rigorous scientific background despite having a poetic sound to them. Thus, a reason for the challenging nature of the novel is a matter of *what* is concretised, as *The Causal Angel* concretises, for example, the workings of a virtual and highly immaterial environment – in addition to the fact that the actions of the characters are strange from the perspective of the mundane world. In the following excerpt, Jean infiltrates the core of the Sobornost fleet, the Chen *guberniya*, in the middle of the battle between the Sobornost and the Zoku:

> I think carefully at the firmament. When I'm ready, I smile at him, my own grin this time. [...]
>
> Then I wrap him in the story I got from Axolotl the body thief, and make his mind mine.
>
> I bloom in the chen's mind and discard the Sumanguru mindshell. Fourth generation, Keeper-of-the-August-Dragon branch. *Good*. This gogol is senior enough to have a Founder aspect. I step into a higher-order-vir, look down at the seething fabric of the *guberniya* virs of this layer like a god, and speak to their gogols with a divine voice. *Find the impact point of an anomalous thoughtwisp*. Millions of candidate answers come in seconds. I create a vir and evolve a small gogol population to sift through the data according to the parameters I give them. I also lay down the foundations of an escape route. It is always good to have a way out. (*TCA* 254; emphases original.)

In the novel, the posthuman nature of Founders like Chen, Sumanguru and Pellegrini who control the Sobornost is concretised in the existence of gogols, copies of the Prime human. During the events of *The Fractal Prince*, Jean stole Sumanguru Founder codes, and this is why he is able to trick his way into the *guberniya*, "an unliving, immortal ecosystem where every dust particle and raindrop is a gogol" (*TCA* 253). The above excerpt illustrates the way particular words and elements represent or concretise a much larger idea or novum related to quantum mechanics, illustrating the interplay between one frame of interpretation intent on the particulars and the other directed towards the abstract and law-likeness. As Roberts (2000, 13) suggests, the novum of science fiction is a "part of the imagined world that stands in for the process of a whole environment". This approach forms the basis of deriving a world-like structure from the discourse: it is read as if they would make up a whole environment instead of seeing them only as analogous invitations, for example.

Delany (qtd. in Gregory 1987, 27) has famously characterised science fiction as a "play of codic conventions" that program the reader of science fiction to apply literal understanding

to potentially metaphorical phrases such as "Her world exploded", whereas a reader more accustomed to a different set of interpretive protocols might apply no literal understanding at all. Delany's formulation of codic conventions – as well as the frames of interpretation – can be likened to various frames that readers usually employ without further thinking, and to the approaches that suggest that the meaning of a word does not reside in language but in the context, something that will be further discussed in Chapter 5. Polvinen (2014b, 151) further builds on the idea that it is possible to see literary works as active interfaces that require their users to have certain perceptual frames in place to let the text engage their imaginations. In the case of speculative fiction, those frames are often manipulated, and this can help the readers to focus their attention on how texts make their imagination work (as *City of Saints and Madmen*, my case study in Chapter 2, demonstrated). Playing along with the codic conventions, however, entails the need to acknowledge them – and their manipulation.

As an example, the idea of a unique character can be negotiated in (hard) science fiction where the characters are on the verge of being interchangeable: sometimes they seem to fill a role of an observer, familiar from the scientific experiments. Jones has noted that when it comes to a typical science fiction novel, "in the final analysis the characters are not people, they are pieces of equipment" (1999, 5). Here, the science fictional prototype is clearly different from the mainstream prototype. An example of the former is Isaac Asimov's classic *The Foundation* series (originally published in book form between 1950 and 1953), which is often criticised for its stylised and flat characters. Crucially, as Jari Käkelä argues, "it is precisely this emblematic nature of the characters which contributes to creating the sweeping narration of the larger historical movement and societal dynamics" (2014, 16). This goes to show that if characters like Asimov's Hari Seldon, the developer of the great plan of psychohistory, are approached solely as representations of possible or "believable" persons, something crucial of the poetics of speculative fiction in general gets overlooked. The emblematic or archetypal characters present the instance where narrative comes close to abstracting generalizable principles, but unlike Mar and Oatley, I do not see them necessarily underlying an "important aspect of human experience, namely intended human action" (2008, 175), but rather as a way of emphasising the conceptual experiment or the idea which is worked through in speculative fiction. This is a communicative practice.

The characters of the Jean le Flambeur trilogy are not irrelevant (as the fact that the trilogy is unofficially named after its main character clearly proves), but as Gary K. Wolfe (2010, n.pag) notes, Rajaniemi's characters sometimes "approach pop culture archetypes" while the setting of his novels certainly creates an alienating effect, apt to slow down the user and increase the length of gaining perception on the idea that is worked through. The Zoku are the most direct (or self-reflexive) example of this dual effect. For example, the Gun Club elder Barbicane, who has a primary body made up of both biological and artificial components:

> Barbicane is not really a steampunk cyborg gentleman, he's a quantum-brain posthuman *playing* one. [...] Everything is a game. The tobacco smell in the room, the mahogany tables and armchairs, the gas lamp candelabras made of revolvers, the lemony taste of the Labsang Souchong tea – all of it is defined by the train's Circle, a game in which we bargain like civilised gentlemen in a nineteenth-century club room. (*TCA* 50; emphasis original.)

The alienating ideas, such as the existence of quantum-brained posthumans entangled in a volition system which allows the individuals to achieve new levels of advancement by performing actions in accordance with the particular zoku's goals and values, are weaved together with archetypal elements of steampunk imagery. The descriptions of Barbicane, the elder who has advanced extremely high in his zoku, and his nineteenth-century club room are constructed in a way which is easily recognisable as a cultural convention used as part of an invented artefact. At the same time, it participates in building a fictional environment *when it is read* in the context of speculative fiction. As such, it invites literal reading and is made accessible through means enabling visualisation – and evoke sensory impressions such as the tobacco smell and the lemony taste of tea. Rajaniemi's novel self-reflexively brings the effect forward by the "train's Circle", which is an obvious reference to the concept of magic circle introduced by cultural historian Johan Huizinga in his influential study *Homo Ludens* (1955). Entering the magic circle where the game takes place means taking up or creating a position from which meanings inside the circle become attainable. In addition to this, the larger familiar context is, of course, the one of role-play, which allows the reader to understand not only Barbicane's posing as a steampunk cyborg gentleman, but also the way Jean has adopted the persona of Raoul d'Andrezy, an émigré and antique dealer from Ceres inside the current Circle of the game.

In fact, the reference to game mechanics render the basic principles of Zoku community as a whole much more comprehensible. The Zoku are not so much an example of life-like action, but rather the closest baseline for their culture is the way life is abstracted in RPGs. The first edition of a classic pen and paper RPG, *Dungeons & Dragons* (1974, Gygax and Arneson) was influential in its abstraction of the human personality into a set of attribute scores and presentation of the concept of personal growth through life experience as the accumulation of experience points and "levelling up". In digital medium, which relies on a process of abstracting objects and behaviours as efficiently as possible (see Murray 2011, 54), other notable examples of such abstractions in RPGs include the mechanics enabling quests and dialogue trees. This context of game and the comparison with role-play are useful for the reader of *The Causal Angel*. During gameplay, certain abstract and general conventions[48] are made into "real" and particular characters through "real" agency inside the game world defined by certain rules. In Rajaniemi's novel, many of the characters are similarly sort of collections of generic memes, such as the gentleman-thief made iconic in

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48   With these conventions, I am referring to certain abstractions used in RPGs in addition to generic formulas, such as masterplots.

the character of Arséne Lupin.[49] In (digital) RPGs, of course, they are not only analogous invitations, as a simulation is both a system and a representation of the system: certain elements which enable the character development are coded in the game mechanics, for example. In *The Causal Angel*, the particulars like Barbicane and their relations and motivations can be made sense of on the basis of more general principles of the Zoku community. Their community is another example of a thought experiment: what if gamers were to construct a society of their own?

The process of making meaningful sense of the Zoku communities can, therefore, draw from either the similarity of the reader's actual but mediated experience of being engaged in role-play, or from the reader's idea of game mechanics – rather than from the reader's real-life experiences of being in contact with such beings as the Zoku. In addition to using the scientific method and language common to hard science fiction novels in general, I see role-play and the principles of game in *The Causal Angel* as the conceptual experiment Rajaniemi works through and the reader is invited to use, as well. Speculative fiction can, therefore, concretise workings of fiction's devices such as unique characters and expose the frames we use in interpreting them. In this, it does not so much distance us from our mundane world or from our actual experience of it, but from the ways we make sense of it or how we build order into it. Next, I will bring up the question of whether the combination of two frames of interpretation in speculative fiction – the one that combines the particulars (agents, relations, events) with the other, more general (systems, laws, rules) – can actually concretise the imaginative or creative processes. How is this connected with the thematic questions speculative fiction can address?

3.3   Complex Causality and the Aesthetics of Speculative Fiction

The phenomenon of emergence has been frequently brought up in the context of digital media. Tinsley Galyean's early account of the emergent narrative suggests that interactive systems exploit the natural human skill to navigate experience by creating stories: "We all construct narratives out of our daily activities to help us remember, understand, categorise and share experiences" (1995, 17). In this, Galyean comes close to the arguments emphasising the great role of stories in our everyday cognition, such as the one stated by psychologists Roger Schank and Robert Abelson: "all knowledge is encoded as stories" (1995, 2). Narratological studies suggesting that readers understand fictional characters by constructing their minds "just as in real life" (Palmer 2004, 11) draw on this view, while others have been more interested in ways in which narrative fails in the representation of a certain kind of complex causality. H. Porter Abbott (2008, 230) importantly points out how the pervasiveness of our capability of using narrative as our first response to the

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49   The central characters of the Jean le Flambeur trilogy are somewhat similar to the archetypal RPG character classes or gameplay styles: thief (Jean), warrior (Mieli) and witch or mage (Joséphine).

representation of events in time has made it difficult for us as a species to grasp forms of causality that cannot be accommodated to narrative form – these include forms like relativity, quantum mechanics, or emergent behaviour such as evolutionary paradigms. It is, therefore, interesting to look at a work of speculative fiction such as *The Causal Angel*, which bases a large part of its appeal on negotiating such difficulties and making them concrete. The analysis of the novel also highlights some of the risks in making narrative mean everything. Most of the novel's appeal would be gone if the difficulties did not exist and all knowledge would be encoded as stories.

There are two important aspects to the rhetoric of speculative fiction like *The Causal Angel* I want to point out. Firstly, the aesthetics must be viewed in relation to the science fiction writers' devotion to take the scientific process, the logical working through of a particular premise and its consequences, seriously. As a premise for writing, the story can be seen to arise from the writer's choices in designing a set of conditions around it. In speculative fiction, it is possible to define that set according to forms of causality which cannot naturally be accommodated to narrative form. The relationships between causes and effects are perhaps easier to grasp as sets of conditions, because what defines a *cause* and what defines an *effect* depends on the overall system of explanation where the presumed causal sequence is embedded. Secondly, as Roberts (2000, 16–17) suggests, the science fictional novum can be seen as a manifestation of something that connects it specifically with the mundane world. However, as a literary device, it is "drained of transcendental or metaphysical aura and relocated back in the *material* world" (ibid.). As a method, it is not poetic or lyrical as are the modernist novels, for example.

Rajaniemi's novel uses the novum of the principles of quantum mechanics functioning as the basis for system-wide societies in the discussion of two opposing views on identity and personhood: stable, unique and monolith-like self, versus playful, changing and fragmented self. Two metaphorical conceptualisations are relocated in the domain of the material: life or identity as pertaining to a given teleological purpose, as a story with a beginning and an end, and life as a game, where both the identity and the purpose emerge in relation to varying sets of conditions. Furthermore, this insight has the potential to show us why the concept of a fictional world has been misleading when it has been understood as a proxy for the real world. Rather than suggesting that the premise of Rajaniemi's thought experiment would be something pre-existing for the reader, I want to point out that the premise is often understood only after engaging with the world-as-process.

The question that *The Causal Angel* seems to be posing to the reader is whether sense can be made meaningfully of the construction of identity or self according to a story or another kind of system of causes and effects. As I mentioned above, the context of gameplay (or role-play, to be exact) can allow the reader to understand the way Barbicane and Jean pose as certain kinds of personas inside the train's Circle. The idea is further explored, for example, when Mieli realises during the battle between the Sobornost and the Zoku that she has to embrace the new self the Zoku have given her, a self which exists in a quantum

information instead of being tied to any particular form: "*The atoms of my body were disassembled by a picotech gate, duplicated as qubits inside the* Leblanc's *Realm. My thoughts are quantum information in a photonic crystal made of artificial atoms. I need to be someone else.*" (*TCA* 262; emphases original.) By giving her a new self, the Zoku also offered Mieli an opportunity to start over. In other words, she has the concrete chance of starting a new playthrough of life. The idea of complex causality is brought up in more detail when Jean is literally forced to face himself – or his "cluttered self", represented as a gallery of glass cells, inside each of which is a wax figure of him.

In the gallery, Jean does meet not his past self, but his other self, a partial entity with limited autonomy. The other Jean tells him that their Prime found the Kaminari jewel before his death but it did not accept him, because the jewel does not give the asker what he wants. Instead, it computes the Universe's coherent extrapolated volition and reacts accordingly: "In other words, what you would want if you weren't you anymore" (*TCA* 212). This is the reason why the Prime decided to become someone else by means of getting caught and purposely going to the Dilemma Prison, a virtual jail of the Sobornost. The Prime trusted that the evolutionary algorithms – an emergent behaviour at its most recognised form – would create a different version of Jean le Flambeur, a version which would be better at skills like altruism, compassion and cooperation.[50] Again, it is tempting to bring up a comparison with role-play and its characters sheets and statistics. They make up the mechanics for the development of certain character types (such as the Prometheus-like archetype of a thief) in various skills and therefore enable the emergence of different characters from a single template. This was the logic of Prime Jean's plan of creating the "best approximation of me – as far as I can tell – that the jewel might actually accept" (*TCA* 214).

The evolutionary algorithms did work in the way the Prime calculated: they allowed the emergence of a different version of Jean le Flambeur. However, the way this version would make meaningful sense of his experiences in the Dilemma Prison was not accounted for, and this causes the plan to backfire. The Jean who went to the prison refuses to do what the Prime expects and wants to end the game for good. The other Jean protests: "You don't know what you are saying. You are not *that* different from me. That's just a story you have told yourself." (*TCA* 216; emphasis original.) In the end, Jean uses the cluttered notion of the self to win the All-Defector who, in Joséphine's words "runs the simulations to predict what we do, that we can't even know if we *are* those simulations" (*TCA* 270; emphasis original). Jean sets up a formal game, in which the All-Defector's goal is to predict when Jean will decide to open the jewel. If the All-Defector really "can be him", he will erase Jean

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50   The Dilemma Prison is based on the game-theoretical prisoner's dilemma. It explains why two "rational" individuals might not cooperate, even if it appears to be in their best interests to do so. It has been discovered that altruistic and cooperative strategies do better when encounters are repeated over a long period of time (as is the case in the Dilemma Prison of Rajaniemi's novels). This, in turn, has been used to describe a mechanism for the evolution of altruistic behaviour on the basis of mechanisms that are selfish in origin.

at the exact right moment of the decision. During the game, Jean looks for a trigger to open the jewel in his memories:

> *I'll do it*
> *when Mieli breaks the wall of my cell.*
> *when I push the sapphire shard through my hand.*
> *when Raymonde, sitting naked at the piano, plays the first note.*
> *when Isaac shatters the third bottle.*
> *when I reach the end of the Corridor of Birth and Death.*
>
> On and on it goes, a thief's life, random memories and associations. The All-Defector is very still. I can tell it's working. Theory of mind. Modelling the behaviour of others. I'm trying to create a problem that is Jean le Flambeur-complete, that will require him to run a full simulation of me, not just one, but many and many and many. (*TCA* 273; emphases original.)

Jean keeps on going through the never-ending cascade of memories until the mindshell of the All-Defector is shattered and is replaced by a gallery of Jean's past lives and moments. In other words, Jean is able to beat the All-Defector by forcing it to simulate him so completely that his simulated copy is enough like him to break free of the simulation. Ultimately, this walkthrough of a thief's life, his random memories and associations, breaks down the idea of putting someone's identity and experiences into a single, explanatory story or a simulation where only a few assumptions make up its system. The excerpt even conjures up an image of Theory of Mind, "modelling behaviour of others", as something that is not inherently narrative in form – despite the fact that researchers like Lisa Zunshine have drawn quite explicit parallels between Theory of Mind as a "cognitive workout" (2006, 159) and fictional narrative. All in all, the idea being worked through is the one in which selves emerge in relation to the larger contexts and mechanics of in any given situation, and this is why contexts like gameplay can allow us to adopt radically different selves. This means that a myriad of patterns can potentially emerge from the "template" of a certain person.

Nevertheless, the human urge to create causality and order into the chaos always exists, whether it is in the form of a story – or a ruleset, as it is for the The Great Game zoku, whose purpose under Barbicane is to "remove elements of chaos" (*TCA* 228). Despite their resistance to the idea of permanent identity or the fact that they base their technology on the unpredictable quantum states of matter, the Zoku subscribe to the principles of game: they simply alter their identities to suit the latest game. The lust for closure also remains, as Mieli reaches the Kaminari jewel and decides to end the game. When it opens for her, her sense of causality becomes undone and she becomes all the possible Mielis at once. The jewel listens to their wish and grants it, creating an emergent pattern of causality: "Many things are born from one. A path is chosen through a forest of possible orderings. Chaos crystallises into a diamond of causality." (*TCA* 285–286.)

The end, of course, is not final. The epilogue recounts Joséphine's plans to come up with a new and better common enemy for the Sobornost, Mieli and Zinda sitting in a new world with the rest of the Supra City, and a door opening in a Dilemma Prison cell where a man is sitting and letting his mind drift to "memories of a boy in a desert, to a choice he made, to the paths he did not take" (*TCA* 290.) The situations of three central characters of the trilogy reflect their fundamental view on their identities. As a Sobornost Founder, Joséphine more or less stubbornly stays the same, Mieli has finally let go of her "old self" with a quest for the lost love as its defining feature, while Jean is in the beginning of a new playthrough with slightly altered set of conditions. The template of a human male thief remains, though: everything else can be part of the game. Despite its radically advanced posthuman society, *The Causal Angel* seems to hint that some stable traits are important for a character like Jean.

At the end, then, there is always a frame which can make us blind to other possible frames. Rajaniemi's novel is an illustrative example of speculative fiction which can concretise this by making us see both the constraints and the possibilities of such frames and our agency within and in relation to them. Speculative worldbuilding can be called a specific imaginative practice, where both the readily mutable aspects of reality and the model on which they are based are seized. This means that not only fictional characters, events, actions, and consequences are imagined, but also the more general model in which they appear – as a result, the causes and motives for particular actions and events, for example, differ from the ones that may be assigned to them according to our understanding of the factual reality. During the engagement with a work of fiction, the model is used as a relevant context for the particulars, but this should not be taken to mean that it pre-exists the userly engagement in the similar sense that a fictional world has sometimes been understood as a proxy for the real world. Instead, it is more a function of interpretation than a reconstruction of something "originally" dictated by the author (cf. Walsh 2007, 66).

The approach developed in the course of this chapter forms the basis for my treatment of worldbuilding in various media, a topic which I will bring up in the next two sections of this study. However, speculative fiction such as *The Causal Angel* proves that themes such as the construction of identity or self can be explored also in the form of a novel through a frame of interpretation that is not narrative. It was suggested that speculative fiction, in particular, can extend analogous invitations for making meaningful sense of a work of fiction, and that in the case of *The Causal Angel*, one of these invitations was role-play and the frame of game as part of the conceptual experiment Rajaniemi works through. The treatment thus challenged – or complemented – the prototypical understanding of the primary content of fiction and the object of both imaginative and interpretative activity.

CONCLUSION TO SECTION II

In this first section of the study, worldbuilding was defined as a distinct way of putting the user's imagination at work, and *speculative* worldbuilding, furthermore, was argued to be unique in the way it enables the different uses or aspects of imagination to come together. In general, imagination can be seen as a way of highlighting something from the present reality by means of imagining an alternative: our thoughts are not tied to facts, as they can go beyond facts to encompass other possibilities (Byrne 2005, 1). While in mundane life, our understanding of reality leads us to readily think of several possibilities for certain facts (choices, actions, controllable events, forbidden actions, and so on), speculative worldbuilding serves the valuable function of enabling us to imagine alternatives to the received reality itself, allowing us to think of the world as something else that it currently is (see McHale 2010, 23). As an imaginative practice, speculative worldbuilding does not only seize the readily mutable aspects of reality as we understand it, but also encompasses the very model we base our understanding on. Throughout these three chapters, I have referred to this model with the term *world-as-construct*, while the term *world-as-process* has denoted the ways this model is worked through and engaged with.

This creates a double exposure for the users: in other words, they are invited to engage with two world-models. They focus simultaneously on imagining the impossibilities, the representations of *what is not*, and on viewing these imaginings in relation to *what is* in the sense of their understanding of the factual reality. It should be emphasised that as a rhetorical practice – as a way of affecting the user's sense and understanding of what is (see Nielsen et al. 2015, 68) – the creation of such a double exposure is basically an imaginative practice but not inherently a fictional one. I therefore agreed with Henrik Skov Nielsen, James Phelan, and Richard Walsh in that conventional practices such as speculative worldbuilding can be used outside of the sphere of fiction. However, I argued that we need also to distinguish its distinctly fictional uses from the more generally imaginative ones. Fictional worldbuilding enables the usage of the double perspective, where a rather different sense of the familiar and the strange are employed in a twofold approach to worlds as being imaginable and artificial at the same time. I called these two senses the *world-internal* perspective (seeing the world, its events, characters, and such as possibly existing)

and the *world-external* perspective (seeing the world as a construct, as part of an artistic object in its materiality).

The twofold approach to works of fiction is so conventional that it is often rendered invisible, despite the fact that in speculative fiction, the various conventions are always in plain sight of the user: not only in the sense of maps, glossaries, and (long-winded) explanations of an imaginary world's history, but also in the sense of the premise which flags its artifice from the start. Still, it is only through the conventions and elements of the artifice that fictions engage the user with the imaginings of what is not, and in speculative fiction, the recognisability of the conventions can be used to enable the user to focus her attention on the fact that the imagination of unrealities is guided by the design of the work of art itself (see Polvinen 2012, 108). The rhetorical potential of speculative worldbuilding as a practice lies in the process of engaging the users in the familiar, learned agreements of building a world and then turning their attention to the agreements themselves. This view is contrary to the widely accepted paradigms which, as Walsh (2007, 148) notes, assert the userly "belief" in worlds and assume that an awareness of their artificiality inevitably produces user detachment instead of involvement. I connected these belief-oriented paradigms (which are present among both the speculative fiction research and the narratological theories of fictional worlds) to the prototypical assumption of a world as a model of physical space. Furthermore, they are tied with the classic rhetorical definition of narrative, which has contributed to cementing the idea that while being engaged with a work of fiction, the user has to "transport" to an alternative situation in order to be able to view the worlds as relevant or even imaginable.

In general, the conflation of the engagement with works of fiction with narrative communication or sense-making was found to be problematic. Despite my emphasis on the rhetoric and transmedial narratology, I set out to question the view of reading a novel, for example, as an instance of the user reconstructing a storyworld from the textual cues designed by the author and thereby positioning herself into a communicative situation. No other modes of engagement seem to even exist in this view – or they are simply corollaries of narrative communication. In relation to viewing worldbuilding as a rhetorical practice, the major problem in connection with this outlook is not the claim that works of fiction do indeed communicate stories, but some of the underlying prototypical underpinnings of the model where somebody is telling someone else on some occasion and for some purpose(s) that something happened (see Phelan 2007, 3). Because of the focus on such a verbal, sequential communication model, our understanding of the interpretative frames has been limited to those that prototypically adhere to narrative, and the focus has been on the particulars and their relations (like inter-human relationships) instead of larger and more general principles.

The emphasis on the particulars and their relations is problematic for analysing speculative worldbuilding as a communicative and rhetorical practice, because as I argued, it does not only seize the readily mutable aspects of reality as we understand it (choices,

actions, controllable events, and so on), but also encompasses the very model we base our understanding on. I, therefore, suggested focusing on the interplay between the two frames in speculative worldbuilding: *simulativity*, an interpretative frame intent on tracing the more general and abstract principles according to which the speculative fiction builds world-models, and *narrativity*, which has everything to do with the readily mutable aspects in the form of characters, events, actions, and consequences. As a result, the treatment demonstrated the strength of promoting the convergence of various theories instead of supporting the proliferation of multiple, medium-specific narratologies.

When it comes to the project of transmedial narratology, it is often afflicted (and restricted) by its emphasis on narrative – especially when it comes to worlds. The next section moves from literary fiction to the field of digital role-playing games in order to bring out the transmedial applicability of worldbuilding as a communicative practice. I will concentrate on the rhetorical potential of the speculative scale-model worlds and the ways they can enable the user to map a new relationship with her understanding of reality. The transmedial narratological approach adopted in this study, then, is not about "capturing distinctive narrative resources" (see Ryan and Thon 2014, 3) of different media, but about using the transmedial phenomenon of worldbuilding within the field of speculative fiction to challenge and refine the existing prototypical assumptions behind various concepts. These assumptions have made it hard to discuss worldbuilding as a communicative and rhetorical practice not only outside of literature as a medium, but also outside of the sphere of mainstream literature. The next two sections aim to mend this flaw.

III IMMERSIVE ENGAGEMENT WITH WORLDS

[R]evolution begins in the thinking mind (Le Guin 1974, 274).

This section concentrates on the userly viewpoint on worldbuilding and meaning-making in speculative fiction. As a distinct communicative practice, fictional worldbuilding engages the user's imagination not only in generating world models, but also in working through an idea or a thought experiment. The immersive experience of worldness arises from this curious combination: there is the sense of something more general underlying and guiding – or regulating – the particulars (the characters, actions, locations and such). However, immersion is not understood here as an attempt to maintain a mimetic illusion or as a case of pleasant absorption, which, in the case of speculative worlds, is seen to be hindered by a "painful period of initiation" (see Ryan 2015a, 13). Instead, the immersive mode of engagement is viewed as a form of active participation, where the double perspective inherent to fictional worldbuilding is utilised.

I challenge the views that argue that *either* one can immerse oneself in an alternate reality, or one can interact with a real-world artefact, but not both. My approach therefore speaks up for the key of *both/and* instead of *either/or*. Speculative worldbuilding is predominantly concerned with the unfamiliar, and investing a considerable effort to make meaningful sense of worlds should be viewed as part of the immersive engagement, not in contradiction to it. Furthermore, it is argued that the rhetorical potential of worldbuilding in speculative fiction lies in its double-layered nature, which *both* engages the users to imagine alternatives and possibilities and *hands* them tools to reflect on the ways they do this. This is also the basis of the user-based approach to the rhetoric: the user is conceived of as an active participant in the conversation where meanings and ideas emerge instead of being a receiver of authorial communication.

The analyses in this section focus on the larger theme of the encounters with difference and the unknown. Such encounters are a classic science fiction theme – so classic, in fact, that it has been considered to be a defining feature of the genre. Science fiction is lauded as the kind of art that can *expand* our understanding and therefore help us better comprehend difference. Seo-Young Chu, for example, equals science fiction, true to its name,[51] with "the

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51 'Science' comes from the Latin word 'sciere', to know. 'Fiction', for its part, originates in the Latin verb 'fingere', to make by shaping.

making of knowledge" and calls attention to the "crucial epistemological work that science fiction performs" (2010, 75). The belief in science fiction as the "realism of a larger reality" connects Chu's view with Ursula K. Le Guin who, in her recent speech at National Book Awards ceremony, demanded the "voices of writers who can see alternatives to how we live now and see through our fear-stricken society and its obsessive technologies to other ways of being, and even imagine some real grounds for hope" (Le Guin 2014, n.pag). Here, I see that from the rhetorical viewpoint, our immersive engagements with alternative world-constructs can enable us to reflect on our ability to generate meanings in relation to and by means of such constructs. The epistemological work should, therefore, be seen as an acquisition of an awareness of our ways of worldbuilding and meaning-making through such an engagement, rather than being directed towards the world that exists in the ontological sense.

One of the essential characteristics of speculative fiction is its potential to work abstract concepts such as strangeness or alienness into the concrete and the literal. This is often reflected in the analyses made of speculative fiction which concentrate on a superficial layer, on the descriptions of (im)possibly existing things and characters – and the distinct worlds achieved by the shifts in time and place. Marie-Laure Ryan, for example, has recently argued that in the genres of science fiction and fantasy, "the plot serves as a trail that takes the audience through the storyworld and provides a glimpse into its distinctive natural features and cultural institutions" (2015b, 24). Still, the significance of speculative practice of "translating an idea into a world" (as Ryan quotes Philip K. Dick saying) does not lie in creating a static model and placing it next to the mundane world, or in the user's cognitive skills of tracing its features, locations, and distances which resemble "a painful period of initiation" unless the user knows the world beforehand. Rather, it is situated in the processual and systematic manner of working the model through.

In this section, it is argued that in order to appreciate the rhetoric of speculative fiction – and to contribute to a fuller understanding of the appeal of fiction – we need to conceptualise the world from the userly viewpoint as something else than *either* an ontological *or* a cognitive construct. For the user, the former represents an imaginatively created model (world-as-construct), while the latter retains the user's skills of tracing the model and generating meanings in relation to and by means of such a model (world-as-process). I suggest that the close interplay between these two in userly worldbuilding should be analysed and taken into account in theorising both immersion and meaning-making. The treatments of the case studies focus particularly on the description and construction of characters, as they are typically seen as the source of our involvement with the works and as the "mediators" of fictional worlds. As Istvan Csiscery-Ronay argues, vast new ideas are "made real, impinging, and intimate by the protagonists' and audiences' encounters with the concrete phenomena that disrupt their sense of familiar existence" (2008, 154).

Chapter 4 will depart from literary fiction and moves on to the field of digital role-playing games with the discussion on reciprocity in worldbuilding as a communicative

practice. The case study, the *Mass Effect Trilogy* (2007–2012, BioWare) is constructed around the encounters and conflicts between (the mostly familiar) organic and (the mostly alien) synthetic life. The *Mass Effect* games position the player as an active agent inside the conflict, and thus concretise the agency of the user generating meanings within and in relation to the constraints of a system. This is relevant for the study of all works of fiction, especially speculative fiction. While in Chapter 3, I argued that the "functions of fiction" laid out by various researchers highlight only certain features of literary fiction, here I will look at another prototypical assumption: what it means to invite narrative interpretation within the frame of worldbuilding. I suggest that in digital RPGs, the invitation links with the evocation of a reciprocal communicative situation not only in the abstract sense but also in the sense of real-world feedback occurring between the player and the system. During gameplay, the player needs to be able to move from the general principles of the system into smaller details in order to engage with the game in a meaningful way. In this, the nature of stories is similar to the way the Zoku in *The Causal Angel*, the case study in Chapter 3, understand identity: instead of viewing stories only in the sense of teller-led performances that prototypically unfold within a single event from beginning to end, we should see them as fragments or resources used sequentially between the user and a work of fiction.

Chapter 5 will delve deeper into the concreteness or *materiality* of strangeness in speculative fiction. In various analyses concerning the aesthetic purposes of fiction, approaches where items and occurrences in fiction are interpreted as "matter" are often seen as either naïve or disquieting (see Andersson 2015, 61–62). Naïve (or vulgar, even) in the sense that readers would be skilled enough to understand metaphors or other literary devices only in their "non-aesthetic" and literal sense, and disquieting in the sense that this would lead the readers to interpret the elements of fiction simply as something we come across in our mundane life.[52] However, an approach like Andersson's, once again, overemphasises some ways of meaning-making over the others and sees the immersive mode only in the key of either/or. What such analyses potentially miss is that literalisation of metaphorical expressions or interpreting elements of fiction as matter are often a way of making meaningful sense of the abstract and general. In relation to this, I am especially interested in one of the powers of speculative fiction, the attempt to represent something utterly alien instead of something strange-looking, but with basically human concerns. In various approaches, alienness of this kind is dismantled or smoothed away – despite the fact that we encounter it every day. Writer Jonathan Safran Foer beautifully captures this in his book *Eating Animals* (2009), when he describes his dog as "an embodied secret":

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52   Greger Andersson, who represents a rather extreme take on the matter, argues that such "disquieting interpretations" occur when the critics change their frame of interpretation and start to discuss a fictional narrative as if it were some kind of factual information and as a consequence direct their interpretive focus on the world rather than on the story. Critics can, thus, analyse Prince Hamlet as if he were a real person, discuss what kind of insect Gregor Samsa actually was transformed into, or what snake it was that caused the fatality in Sir Arthur Conan Doyle's *The Adventure of the Speckled Band*. (See Andersson 2015, 56.)

> Just last night, I looked up from my reading to find George staring at me from across the room. "When did you come in here?" I asked. She lowered her eyes and lumbered away from me, down the hall – not a silhouette so much as a kind of negative space, a form cut out of the domesticity. (2009, 24.)

Foer's description of his dog as "a kind of negative space" is very much related to the strangeness in speculative fiction, strangeness which is in a very tangible or *material* manner cut out of – or brought in the middle of – something. By materialising the unknown, speculative fiction can depict our encounters in the material world with beings, things, and organisms whose identity is not defined by our reasoning protocols. In this, speculative fiction is material not only because it literalises ideas, but also because it is so immersed in the manner of its production. China Miéville's novel *Embassytown* (2011), the case study in Chapter 5, describes alien Ariekei whose language is completely different from ours, and with it, everything else about them is different as well. This way, Miéville's work focusses on the dual role of our language, as a tool of both communication and imagination – and therefore calls upon its reader to *both* make use of the language *and* acknowledge its status as a tool. Here, some principles of new materialism as advanced by, for example, Karen Barad (e.g., 2003) can be valuable to the analysis of speculative worldbuilding as a rhetorical practice: speculative fiction may actually shed light on the meaning-making processes in the material world. With this, however, I am not implying that fiction would expand our knowledge of the world *as such* (as Chu, among others, seems to be suggesting) but rather of our meaning-making processes.

Chapter 6 will turn to the identity-making and the transgression of boundaries such as human/nonhuman and mind/body. I will use Ann Leckie's novel *Ancillary Justice* (2013) and digital RPG *Deus Ex: Human Revolution* (2011) by Eidos Montreal as my case studies. Both of these works question the concept of natural, both in the sense of mimetic evocation of the mundane world and in the sense of "innate" or "essential". The chapter will focus on the ways the works bring forth the practices through which the boundaries between categories like human and nonhuman are stabilised and destabilised (see Barad 2003, 808). Still, my argument is that the case studies do not "make knowable" anything new of our reality such as it exists. Instead, they exemplify the ways of constructing – and transgressing – the difference in our here-and-now of interactions and, in this way, potentially change our awareness of the world around us. This way worldbuilding is used for the rhetorical means in speculative fiction: it is a practice that engages us to imagine alternatives and possibilities and to reflect on the ways this is done. In this sense, the most valuable or revolutionary function of speculative fiction is to lay bare the practices that maintain the world as it is – and point us towards using them to change it, if we will. Therefore, as Le Guin suggests, the revolution truly begins in the thinking mind.

4 AGENCY AND POSITIONING IN WORLDBUILDING

The previous chapter argued that works of speculative fiction can challenge the prototypical view of "functions of fiction" laid out by various researchers, whose theories suggest that users would be primarily concerned with the particulars such as characters and sequences of events. I will now turn to another kind of prototype while continuing my analysis of speculative worldbuilding. Narrativity and simulativity have already been outlined as two possible interpretative frames for making meaningful sense of representational artefacts in the genre of speculative fiction, and here it is argued that their interplay is crucial for the experience of worldness in digital role-playing games (RPGs). The sense of a world is often seen as one of the defining features of the RPG genre, in a sense similar to the way the experience of an imagined place is deemed central to fantasy. In order to analyse worldbuilding from the user-oriented viewpoint in RPGs, we need to consider the prototypical assumptions of what it means to invite narrative interpretation. While narrativity has everything to do with the particulars, in digital environment its communicative role cannot be put in terms of a report or a representation of temporal–causal relations. In what follows, I will argue that in digital RPGs, worldbuilding as a communicative practice relies upon *reciprocity* between the player and the system, and that worldness is crucial for the immersive engagement with them.

Digital games, in particular, have been celebrated as a democratic art form, a medium allowing the user to "actively engage" in a story rather than "passively receive" it (e.g., Holmes 2012). The aim of this chapter, however, is not only to comment on some unique characteristics of games as media and works of fiction, but also contribute to narrative theory as well as take the analysis of fictional worldbuilding outside of literature, the environment where it was introduced and developed. In (role-playing) game studies, it is important to recognise narrativity as part of the experience of worldness in gameplay, while literary narrative study benefits from the development of a more transmedial conceptualisation of narrativity. Finally, I will advance the understanding of making meaningful sense of digital games – in other words, interpretation – which I have defined as the agency of the person creating meanings within and in relation to the necessary constraints of a system. In my view, digital RPGs have the potential to concretise such an *agency* in a way that is relevant for the study of all works of fiction, especially speculative fiction.

In this chapter, my case study is BioWare's the *Mass Effect Trilogy* (2007–2012), one of the most acclaimed science fiction sagas in the digital RPG genre. The trilogy immerses players in the adventures of Commander Shepard, a playable character who strives to defeat a race of sentient machines called the Reapers who threaten to purge the galaxy of all organic life. The crux of engagement in these kinds of games is often pinpointed as the act of making choices. In one of the missions in *Mass Effect*, for example, the player must address a potentially dangerous situation involving Wrex, one of Shepard's crewmates, on the planet Virmire. Depending on how the player has played the game up to this point, she can either talk Wrex into remaining loyal, gun him down, or allow another character to kill him. The decision of whether Wrex lives or dies has serious repercussions for the later events in the trilogy. Such choices are identified as having the potential to create new types of stories in digital games. Interestingly, they are also regarded as a feature that eliminates narrativity in games altogether. At a minimum, the sense of stories being related is often deemed a necessary condition for narrativity to emerge,[53] and the emphasis on the prototypical narrative communication model has further added the need for a source "behind" the representations. These arguments are obviously problematic in the study of RPGs, as games typically lack both the sense of a story being related and the distinguishable communicative source.

Furthermore, the proposed arguments on the crux of engagement in games reduce the player's activity to choice-making. This both overplays the role of choice and obscures other significant aspects, such as the player's overall experience of and engagement with the game. In the above-mentioned mission on Virmire, the player must engage in a range of activities besides making dramatic one-off decisions, such as combating repeated swarms of enemies, driving a vehicle, and upgrading or modifying her characters' equipment. Concentrating on designer-led choices is also prone to obscuring the more creative and expressive sides of player activity and meaning-making. Furthermore, looking for "new stories" in games can be misleading. As Ruth Page (2012, 186) has found in her study on stories in social media, there is rarely a straightforward dichotomous contrast between the stories in old and new forms of technology. Instead, we should focus on the new ways of authoring and using cultural artefacts and keep in mind that they are "new" only in comparison to the text-oriented, literary versions of story and narrativity. This is especially important if we aim to understand the narratologically challenging features of digital games: some of these features follow from the fact that the games are realised digitally, while others arise from the game medium itself.

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53   H. Porter Abbott argues that narrativity has taken the position of a central term in postclassical narratology, because "the way the term has leant itself to a general shift away from the formalist constraints of structuralist narratology (where the term is rarely found) as attention has turned increasingly to the transaction between narratives and the audiences that bring them to life" (2011, n.pag). As my emphasis here is also on the userly experience, narrativity is a suitable terminological choice. However, the term "narrative" does not figure in my analysis as the other party in a reciprocal action.

I will attend to these challenges using the example of digital role-play, because this genre brings together achievement and goal oriented gameplay and the more imaginatively (and, to some extent, narratively) motivated player activities in a unique way. If describing repetitive, tactical aspects of digital RPGs verbally is difficult, capturing their more imaginative dimensions and the experience of play as a whole in purely formal terms is even more challenging. This is why RPGs are not always considered their own separate genre within the spectrum of digital games: the nature of the role-playing experience easily eludes definitive accounts. It may be true that they share many formal features and elements with other digital games (e.g., puzzles, combat mechanics), but much of their uniqueness stems from acting in a fictional game world via a playable character (see Hitchens and Drachen 2009, 7). This chapter will concentrate on this unique feature: the player's experience of acting as a role-playing character inside the game world, and the importance of worldness for the immersive engagement with digital RPGs.

As a starting point, a role-playing character not only provides a player with the means to grasp the goals and various possibilities of the game, but it also enables her to become an integral part of the game world. The character, thus, functions as a medium for player creativity and expression. In my analysis, I argue that speculative worldbuilding, for its part, functions as a practice to facilitate the reciprocal communication between the player and the system in a way that allows the player to make meaningful sense of the game. The resulting experience of worldness allows the player to *immerse into a game as world-like* both from the world-internal and the world-external perspectives.[54] Obviously, worldbuilding does not play such an intrinsic role in all game genres, but as abstract systems, RPGs like the *Mass Effect Trilogy* are designed around creating and developing the character while furthering the events and goals of what is often called the "backstory", such as investigating the events and goals of the villain of the game and eventually stopping his plans. These two goals – the one tied to the character and the other bound to the events – are closely interrelated: the player's actions and choices both develop the character and affect the events and opportunities to act inside the game world. However, the goals concerning certain particulars only become attainable within a more general system "behind" the particulars, a system of rules. Thus, the logic of approaching a work of fiction as if it was based on a model, operation of which is represented during the engagement over time, is made concrete. In this chapter, the analysis of the construction of a role-playing character will be one of the examples of how humans can be looked at in a very systematic way. Worldbuilding provides a way of understanding the meaning-making in such works of fiction, especially when they are part of the genre of speculative fiction.

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54 Lisbeth Klastrup has analysed "worldness" in relation to virtual worlds and defined her approach as the "systematic study of virtual worlds as virtual worlds" (2003, 262; see also 2009). Klastrup's conceptualisation of worldness is, therefore, quite close to the fixed sense of the term "narrativity", the "narrativeness" of narrative. My emphasis, however, is not on the identification of any aspects or characteristics of worlds, but on analysing the userly engagements.

4.1 Authoring and Control

Gameplay and stories are generally seen as a complicated combination. The most immediate problem for studying the interplay between narrativity and simulativity in games seems to be the one of authorial control and communication. RPG researchers Michael Hitchens and Anders Drachen (2009, 15), for example, point out that "a sequence of (typically) related events" that contribute to the "narrative element" of RPGs can be "portrayed" by digital games. In other words, the elements of digital RPGs cannot be termed narrative, because they lack authorial power in the traditional sense. For his part, game designer Greg Costikyan (2008, 6) has stated that a "story is [a] linear, controlled experience", whereas in games, the players cannot be "constrained to a linear path of events, unchangeable in order", else they feel that they are "being railroaded through the game, that nothing they do has any impact, that they are not playing in any meaningful sense". According to this perspective, interesting gameplay is based on freedom and choices, whereas an interesting story must rest on linearity and control. Nevertheless, as Costikyan (ibid.) notes in his article, there are innumerable game styles that combine gameplay and stories successfully, and they do so in ways that evidently appeal to wide audiences. It is not impossible to meet the demand for linearity: gameplay, like any human experience unfolding in the course of time, is linear.

The creative or expressive aspects of gameplay – such as the player's ability to interact with the fictional world, navigate it more or less freely, and make choices (such as deciding whether a fictional character lives or dies) – are seen to reject the effective communication of a story. Richard Bartle (2009, 107) has tried to resolve the situation by suggesting that "all stories are interactive, in that they're written for an audience", describing gameplay as "interacting with the designer", that is, being an audience to the designer's story. However, Bartle's contribution does not really tell us how the designer's story can be encountered. His view on the interaction occurring between the player and the designer is also misleading, since it ignores the affordances of the digital game medium. Overall, one might be justified in stating, like Miguel Sicart (2011, n.pag), that "players don't need the designer – they need a game, an excuse and a frame for play".

The quotes above offer just a few examples of the contributions that attempt to describe the nature of the stories and meaning-making in digital games. Partly, the challenges arise from the concept of the game, which can be used in more than one sense. The primary distinction between two elementary "layers", namely the core – or the game as gameplay – and the shell – or the game as representation and sign system – makes the structure of the concept slightly easier to grasp (see Mäyrä 2008, 17). Gameplay, the abstract rule-set governing everything a player can do, is typically named the core because it defines the games in digital media as games, and not, for example, as digitally realised films or animations. Moreover, the representative or semiotic shell implementing the rule-set plays an especially large role in digital games, and player activity is involved in both the core and the shell (ibid. 53). This should be kept in mind, for example, when discussing narrativity:

the invitations to use certain interpretative frames should not be placed simply at the level of the shell and viewed as based on represented sequences of events added on top of the core by the designers.

Some insights into the affordances of the digital games medium are useful at this juncture for understanding both the interplay between the core and the shell and the challenges faced by the existing theories on narrative. It is important to understand that the "primary representational property of the computer is the codified rendering of responsive behaviours" (Murray 1997, 74). In a digital game, this means that the player's configurative[55] actions and choices are tightly interwoven into the representative dimension. In other words, the events "portrayed" to the player in the *Mass Effect Trilogy*, for example, are essentially produced by the act of play. Digital RPGs, therefore, do not excel in presenting or evoking predetermined, unchangeable sequences of events in comparison to the so-called legacy media – such as literature and film – where representation is static or unconditional. This difference was already pointed out in Chapter 3, where I noted that simulation can be seen as a form of representation and not in opposition to it, as Gonzalo Frasca (2003) has suggested. Furthermore, the difference does not mean that narrativity would be eliminated altogether in the digital games medium.

Attempts to locate the authorial power and the differences in authoring fiction in old and digital media have often concentrated on interactivity. Unfortunately, interactivity is yet another term that is used both extensively and vaguely. Ryan provides an example of this in the context of "storytelling in digital age": she considers interactivity to be the greatest difference between old and new media. She suggests that interactivity does not facilitate storytelling, because "narrative meaning presupposes the linearity and unidirectionality of time, logic and causality, while a system of choices involves a nonlinear or multilinear branching structure" (2006, 99). However, this approach does not provide us with an adequate understanding of modern digital media. Bartle is, therefore, on the right track when he suggests that interactivity in itself is insufficient for making distinctions, since "all stories are interactive" in the very elementary sense that no story exists unless there is someone to engage with it. Ryan has refined her approach in a more recent study on "transmedia systems" and suggests distinguishing between three types of interactivity. She brings up digital games as an example of the second type, internal interactivity where the user's participation is strictly controlled by the system: "For instance, in most video games, users are told to play the role of certain characters and to pursue certain goals. But the user's actions do not leave permanent traces on the system; once you have finished playing a

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55   With configurative actions and choices, I refer to Espen Aarseth's influential discussion of the typology of textual communication. According to him, besides "the interpretative function of the user, which is present in all texts, the use of some texts may be described in terms of additional functions: the explorative function, in which the user must decide which path to take; the configurative function, in which scriptons are in part chosen or created by the user"; and the textonic function, in which "textons and traversal functions can be (permanently) added to the text". (1997, 64.)

video game, the game world will revert to its initial state for the next player." (2015a, 11.)[56] For someone playing the *Mass Effect Trilogy*, for example, it does not matter that the game world can revert to its initial state. More crucially, even Ryan's recent conceptualisation of interactivity addresses it as the behaviour of the audience ("users are told to play") and, therefore, fails to address the *reciprocity* that digital media can provide.

The most significant difference between the computer and the earlier media of representation is not the ability to contain structures, such as trees or rhizomes or the ability to enable the user to navigate a structure by clicking a mouse or pressing the buttons of a controller. After all, such interactivity can be generated by means of gamebooks, such as Choose Your Own Adventure. As Janet Murray (2011, 66) puts it, a more important property is the computer's procedurality – its ability to represent and execute conditional behaviours. Likewise, Ian Bogost (2007, 4) defines "the core practice of software authorship" in terms of procedurality, maintaining that "to write procedurally, one authors code that enforces rules to generate some kind of representation, rather than authoring the representation itself". Procedurality is, thus, understood not just as an ontological marker of digital games, but also as the specific way in which these games can build discourses of ethical, political, social, and aesthetic value.[57] Bogost's argument on procedurality, alongside his concept of "simulation fever", attempts to formalise how the game system contains meaning and how the player experiences it. However, as Sicart points out in his critical essay "Against Procedurality" (2011), proceduralists such as Bogost seem to believe that the meanings of game and play evolve from the way a game has been created and not from how it is played. Sicart states that meaning should not be viewed as procedurally created or generated by the computer; "rather, meaning is played" (ibid.). I agree with Sicart, and I will return to the topic of played meaning later in this chapter.

Other problems emerge if we take structures like trees or rhizomes to be the primary models for story construction in games. Ryan (2006, 99) concludes that narrative meaning, as "the product of the top-down planning of a storyteller or designer", clashes with the "bottom-up input from the user". The same distinction between top-down and bottom-up crops up in Ryan's recent article, where she suggests that these two can meet in a transmedia project that "allows users to post publicly visible comments or to contribute their own materials about a certain topic" (2015a, 12). With its inherent hierarchy, the division between top-down and bottom-up strongly resembles the analyses that treat the story/discourse distinction as an innate quality of the engagement with *all* works of fiction. What is more, modern digital RPGs have moved away from hard-coded systems

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56   The other two types of interactivity Ryan proposes are external interactivity, typical of databases, a type which "consists of the freedom of making choices among documents presented by a system to the user" (2015a, 11) and productive interactivity, which "leaves durable traces on the system, so that the user's contributions can be seen by other users" (ibid.) and can be used in transmedia projects, for example. Transmedial worlds will be discussed in more detail in Chapter 7.

57   Chapter 6 will return to the ethical, political and societal questions in the discussion of the digital role-playing game *Deus Ex: Human Revolution*.

that presented players with a series of challenges with a sole solution; this move has brought emergent complexity into play (cf. Costikyan 2008). Next, I will examine reciprocity in relation to authoring and player activity.

Noah Wardrip-Fruin (2009, 7) aptly notes that although it is common to compare the creation of media with writing text, composing images, or arranging sound in the digital environment, "one must think of *authoring new processes* as an important element of media creation" (original emphasis). The authoring of processes in digital media can be illustrated using the classic example of choices, which features both in Ryan's phrasing of "a system of choices" and in many well-known definitions of games that emphasise the freedom and the enjoyment of problem solving, such as Sid Meier's claim that "a [good] game is a series of interesting choices" (qtd. in Rollings and Morris 2000, 38).[58] In digital RPGs, choices typically stand out as an element of character development. The endless number of choices in *Mass Effect*, the first instalment in the trilogy, contributes to the repetition, which is a substantial part of gameplay experience in any digital RPG, even though the fictional worlds represented in the games can be extremely wide, diverse, and detailed. Although the contents and contexts of the choices in *Mass Effect* vary, their execution as part of conversations within gameplay is identical: a dialogue wheel presents "paragon choices" in blue, "renegade choices" in red, and neutral choices in white. The mechanics – namely the dialogue tree – are based on computational processes used by the game engine, which Wardrip-Fruin (2009, 46) has also called "operational logics". The numerous missions completed by Shepard and her/his[59] crew resemble each other, because the game engine's mechanism for tracking the player's progress is virtually identical in every mission or quest.

At the end of *Mass Effect*, the player, through Commander Shepard, faces the "final choice". A lone Reaper called Sovereign is attacking the Citadel, the space station at the heart of a galactic civilisation, with the support of the villain of the game, the Reaper-indoctrinated Saren. The objective of the game's last mission is to stop Saren from transferring control of the Citadel to Sovereign and to find a way to finally destroy the Reaper. If the player is victorious in the various battles during the final mission, Shepard will manage to gain control of all of the Citadel's systems; she/he then opens the communications channel. The first message she/he receives is a mayday call from the Citadel council's flagship, the Destiny Ascension. Next, Shepard's pilot, Joker, contacts the commander and says that he is with the entire Earth Alliance fleet and that they can save the Ascension if Shepard opens the mass relays – devices allowing interstellar travel – to the Citadel. Shepard must choose whether to tell the Alliance to save the Ascension and the council or to wait until the space station's protective arms open and then concentrate on destroying Sovereign. The first

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58 Meier's definition does not apply that well to games that focus explicitly on action (such as platformers). In general, the significance of choices to the player's overall experience of the game is often overplayed. As I mentioned earlier, in the *Mass Effect* games the player must engage in a range of repetitive activities such as combating swarms of enemies, driving a vehicle, and upgrading or modifying equipment.

59 As in most contemporary digital RPGs, the player can choose the gender of her playable character in the *Mass Effect* Trilogy.

option is the paragon choice, while the second is the renegade choice. Both choices have significant ramifications, not only for the ending of the first game, but also for the next two game instalments. If Shepard chooses to ignore the Destiny Ascension's pleas for help, the flagship will be destroyed and the council will die with it. This results in humanity's greater prominence in the galactic order, but it affects how Shepard is seen by the other races in the galaxy, as well.

I wish to make two important points here. First of all, the work of creating digital RPGs such as *Mass Effect* cannot be viewed simply as authoring "a system of choices" (Ryan 2006, 99) that make up tree- or rhizome-like structures and sequences of related events that are navigated through. For genuine *agency* to emerge, the digital environment must be meaningfully responsive to user input. As Murray (1997, 128) importantly points out, activity alone is not agency. The actions must be chosen and the effects related to the player's intentions. For this reason, the game's designers must author processes that enable the player to make choices, not "compose" the story or the representation as such. The processes and other elements, which position the player as Commander Shepard, are an important part of creating meaningful responsiveness in *Mass Effect*. The devices used are diverse: the above-mentioned mechanics for making choices (which can be viewed as a concretisation of the player's conversation with the system) and the fact that the player is addressed in the second person ("You have followed Saren to the Citadel"), along with other audio-visual representations of the player's ability. These are utilised to control the character inside the game world, and the character is developed through the use of such resources.

Secondly, such an understanding of authoring should not be taken to imply that players are "activators" of the processes that set the meanings contained in the game in motion, and nor are they just "derivers" of meaning from the system (see Sicart 2011). The process of worldbuilding becomes useful here, not only because the unique feature of RPGs is the player's experience of acting in a game world via her playable character, but also because of its processual nature, in which the premise is worked through in a systematic manner. The goals concerning certain particulars only become attainable within a more general system "behind" the particulars, a system of rules. The experience of worldness in digital RPGs is, therefore, *not* evoked simply by the existence of a game world in its inherent "worldness", but through the way the player is engaged to work through the premise by means of a world-as-process. As in speculative fiction in general, such a process is a way of turning the abstract and general into a particular and, therefore, communicable form.

Overall, the authored processes facilitate the player's participation in the game world, provide her with a frame for play, and engage her in a reciprocal action instead of allowing her to "complete" meanings that are prearranged prior to the act of playing the game. These processes can be seen as enabling conversation and as part of communicating possibilities in a way that is comprehensible to the players, since the human mind naturally does not work in the same way as a computer processor does (unless we are hackers, like the characters in Neal Stephenson's novel *Snow Crash*). Communication between the player

and the system might, thus, be situated in the representational capacity of the elements of the game system. In this capacity, they do not simply stand for the elements of the system but are designed to do so as communicative acts: the representational elements can "therefore interact with representational interventions by the user, conceived now [...] as a communicative dialogist" (Walsh 2011, 79). In the terms used by Mäyrä (2008, 53), the core, the abstract rule-set governing what the player can do, is communicated to the player by means of the representative shell. The view of the player as a communicative dialogist – or conversationalist – further illustrates the fact that player activity is involved in both the core and the shell, not only the core in the sense of gameplay. I will next explore the communication between the game system and the player from this perspective.

4.2   From System to User: An Invitation to a Position

The active role of users is usually highlighted in discussions on digital games. Unlike in literature, for example, the most immediate question in games is usually not "What does this mean?" but "What can I do, and what should I do?" This results in different affordances in relation to the work of authoring, and also reminds us that meaning is not procedurally created or generated by the computer either; "rather, meaning is played" (Sicart 2011, n.pag). In relation to worldbuilding, the unique features of digital games are not only based on the way they make use of simulativity as a way of structuring representation but, crucially, on the way simulativity is used as an invitation or a challenge to userly action. The act of taking up a position "inside" the game is important, because in addition to an abstract rule-set one can perceive another kind of abstract or general structure, which is separate from the programming code or hardware used for the implementation of a particular digital game (see Mäyrä 2008, 53). In RPGs, this abstract or general structure is usually conceptualised as a game world. However, as in other works of fiction, like literature which I have analysed in Part II, the user looks at the game world also as an "outsider". The player is aware of both the game world's artificiality and of her ability to manipulate its elements, such as characters and sequences of events, by following certain choices in relation to certain goals and plans on how to reach them. In digital RPGs, the awareness of this dual structure is quite explicitly located in the practices of worldbuilding, because the user's actions, which are oriented towards certain goals, directly affect the game world as a premise. Although this sort of duality is present in all engagements with fiction (as I have noted with the conceptualisation of the world-internal and the world-external perspectives), in digital RPGs it takes on a more concrete form: while providing the users with a frame of play, it makes use of the fictional worldbuilding and its inherent double-layered engagement.

Murray (2011, 70) notes that a major part of digital design in general is "selecting the appropriate convention to communicate what actions are possible in ways that the human interactor can understand". One aspect of this is the need to "script the interactors". The earliest successful example of scripting was Joseph Weizenbaum's natural language

processing program, Eliza (1964–66), and its simulation of a psychotherapist (DOCTOR). In addition to enabling the machine to process the users' responses to the scripts, Weizenbaum's program succeeded in scripting or positioning the interactor as a participant in the highly conventionalised and familiar scenario of a therapy session. The program, therefore guided the participant's behaviour in a way that made meaningful action possible within the confines of a relatively primitive system. In light of this example, one can argue that the player must be scripted in RPGs in order to understand what kind of behaviour is possible or desirable in the position of the playable character – what kind of actions she can perform and what kind of choices she can make in relation to the goals of the game.

The frame is further illustrated by the discussion on Johan Huizinga's (1955) concept *magic circle*. Katie Salen and Eric Zimmerman describe the idea in its very basic sense: "[T]he magic circle of a game is where the game takes place. To play a game means entering into a magic circle, or perhaps creating one as a game begins." (2004, 95.) In other words, entering the circle means taking up or creating a position from which meanings inside the circle become attainable. Salen and Zimmerman argue that "in effect, 'a new reality' is created, defined by the rules of the game and inhabited by its players" (ibid.). To take a simple example, before a game of Backgammon starts, it is just a board, two sets of checkers, and a dice. But once the game begins, the materials represent something particular: these checkers are you. Such meanings are not merely given, as David Myers (e.g., 2010) suggests with the phenomenon he calls the "aesthetics of play", where the elements of game acquire their significance from the performance of gameplay – the elements achieve their value in relation to the contexts the players themselves construct during play. Entering the magic circle or constructing a frame calls for taking up a position inside the game world, and this is connected with the playable character in RPGs.

The reciprocity of the digital games medium, coupled with the fact that many video game developers (such as BioWare) are intent on attracting new types of players to their games, contributes to the importance of recognising scripting and positioning. In the *Mass Effect Trilogy*, for example, the interactor is obviously scripted as a player, which enables her to use the game as a frame for play. However, as player actions (such as the order of completing quests) in digital RPGs can have multiple motivating factors, player activity is not solely about competition and winning. The designers, for their part, can anticipate these factors in addition to the multiple routes and chains of action the players can "concretely" choose. The more freedom the player has regarding whether to take on and complete quests, for example, the more the events of various quests must be taken into account in relation to each another for the system to respond "meaningfully" to the player's actions. In other words, the effects of the chosen action must be related to the player's intentions.

There are other kinds of aspects to this freedom, which is usually hailed as one of the generic features of RPGs. While different user functions have already been recognised in relation to cybertext (see Aarseth 1997), RPG researchers have discussed the players' varying approaches to game elements in more detail. The so-called Threefold Model distinguishes

between three player attitudes or styles: gamists, dramatists, and simulationists (e.g., Kim 2004). Gamists, for example, focus on the game's challenges and the optimal strategies to overcome them, whereas dramatists are more involved with the narrative qualities of the game. Simulationists, in turn, are interested in the consistency of the events that take place in the game and making sure that the events are caused by in-game factors only. According to this view, digital RPGs such as the instalments in the *Mass Effect Trilogy* can be played with various goals in mind, such as beating the game as quickly as possible or creating and enjoying dramatic scenes.[60] These different styles are somewhat similar to the frames of interpretation I discussed in Chapter 3: they attempt to explicate the different ways the players of RPGs make meaningful sense of their gameplay experience, and as a result, direct their activities in the game.

Designers also need to consider the varying other needs and expectations that players have. A topical issue related to this is the discussion on how gender and romances are depicted in games. In the *Mass Effect Trilogy*, for example, the third instalment introduced the possibility of pursuing a deeper same-sex relationship (with human characters). These issues are especially important to digital RPGs, which aim to give the players as full a range of character choices as possible. The so-called open world RPGs, such as Bethesda Game Studios' *Elder Scrolls V: Skyrim* (2011), go to great lengths with the freedom of this kind, and even the *Mass Effect Trilogy* does not base its character creation on the modelling of ready-made heroes. On the one hand, role-playing characters like Commander Shepard cannot be too ready-made, because as such they would be too distinct from the player. On the other hand, they need to offer a clear role with certain characteristics – otherwise it would just be as if the player was portraying herself in the game world. Due to this ambivalence, digital role-playing characters have traditionally been placed between two more extreme options, namely those of avatar and actor. An avatar is usually defined as a representation or manifestation of the player's presence in the game world, while an actor is defined as a character that can be distinguished from the player on the grounds of her/his own personality and characteristics. These two options are, of course, a simplification or a blueprint for game designers, but they can offer us an interesting viewpoint on the question of the scripting and mental models that playable characters can evoke.

Such mental models were first highlighted by Donald Norman's seminal study *The Design of Everyday Things* (1988), which brought attention to the models formed by the user, based on the appearance and behaviour of the object. As Murray (2011, 60) notes, effective mental models are particularly important for machines whose workings are usually hidden from us. She continues: "[i]n digital design we must ask ourselves what mental models the interactor will bring to the object" (ibid. 61). When it comes to Shepard, the player can perceive her/him as her representative or avatar in the fictional game world and as Commander Shepard, a fictional entity. As such, the role-playing character is situated both

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60 *Mass Effect 3* makes this feature quite explicit, as it provides the player with two campaigns titled "Action" and "Story" alongside the "classic" RPG experience that combines these two aspects.

on the level of rule-based gameplay (the core) and the representative layer (the shell). As an avatar, Shepard is an audio-visually represented manifestation that, in a sense, embodies the player's agency – that is, the player's means to act in the game world and interact with it. The avatar-Shepard, for example, belongs to a certain character class that enables the player to access certain active powers in combat, to increase health, shield and melee damage (measured in points), and to influence Shepard's reputation or morality. Actor-Shepard, however, can be perceived as an imagined, fictional character, with a past, a present, and a potential directed toward the future, but even then, Shepard is still dependent on player input.

Role-playing characters in digital form should be viewed, like any computational objects, as variables that can have multiple instantiations, and not as predetermined entities. When a role-playing character is created, it is not created as a single version of an object (or a person), but as many possible versions with many variations (cf. Murray 2011, 53). In Chapter 3, I discussed this type of a model of a person in *The Causal Angel* and noted how it breaks down the idea of laying someone's identity and experiences down into a single, explanatory story or a simulation, where only a few assumptions make up its system. A role-playing character concretises the idea worked through in Rajaniemi's novel, the idea according to which selves can be understood to emerge in relation to the more general contexts and mechanics of a current situation. This also means that a myriad of patterns can potentially emerge from the "template" of a certain person, and in RPGs, this forms a frame or model for the player's creative freedom.

Why does scripting and positioning matter in the discussion of worldbuilding and narrativity in digital games? After all, the narrative elements of digital games are traditionally considered to be those during which the player is passive, such as cut scenes. In past debates, this point has been raised, especially by ludologists, to argue that we should not only identify a "pure" game, but also remove the influences of other art forms from game design – such as straightforward narrative design (see Juul 2013, 23). Furthermore, the supposed passiveness of the player has been used to claim that we are stuck with existing narratologies that can explain "the story or narrative elements in games, such as cut scenes and backstories, which both ludologists and narratologists (not to mention narrativists) take to be narrative or story elements in games" (Eskelinen 2012, 232–233). Arguments like this illustrate why it is crucial to distinguish narrativity as a quality of inviting the use of a certain kind of interpretative frame from the understanding of narrativity as a quality of being narrative. In his article, focusing on the ways in which simulation can generate behaviour that is narratively legible, Walsh explains this further:

> To invite narrative interpretation means something more specific [than an event being susceptible to narration]; such a form of behaviour is necessarily communicative, since it implies an awareness of some narrative paradigm (some convention, genre, masterplot, or stereotype) that makes the representation narratively intelligible; and

it assumes the mutuality of that awareness between the sender and the receiver of the communicative act. (2011, 81.)

This account of narrativity opens up an important viewpoint on the question of why narrative interpretation matters in digital RPGs and how it relates to the reciprocal communication between the player and the system. The way digital RPGs use various narrative paradigms (such as the heroic quest or the stereotypical commander of a star ship) invites the player to make meaningful sense of the various particulars and elements as fictional characters, events, and consequences. However, understanding these paradigms and particulars in digital RPGs is not the same as analysing how the game system or the core is "gift-wrapped" (cf. Eskelinen 2001) into some master plot or examining how the playable character is modelled on some effective stereotype. As I argued above, player activity is connected to both the core and the representational shell (Mäyrä 2008, 53), and the player can be conceived as a communicative dialogist. Therefore one must focus on how the paradigms can be used to shape player engagement and frame the act of play.

In relation to the communicative dialogue, Murray (1997, 89–90) has brought rhetoric into the discussion: "Just as we now know how to think about what made Tolstoy propel Anna Karenina in front of that train [...], we need to learn to pay attention to the range of possibilities offered us as interactors in the seemingly limitless worlds of digital narrative". Murray's example bears a resemblance to Phelan's understanding of narrativity as a double-layered phenomenon that involves "interaction of kinds of change: that experienced by the characters and that experienced by the audience in its developing responses to the characters' changes" (2005, 323). Phelan's understanding is obviously tied to the prototype of literary communicative situation, and cannot be applied to digital RPGs as such. In digital games, it is rarely relevant to define the narrating instance or agent, or to suggest that game fictions would be narrated either by their authors or by their characters, which is the core of Walsh's (2007, 84) argument against narrator as a distinct narrative agent intrinsic to the structure of fiction. One reason for this is the fact that games change from one playthrough to the next. Therefore, it is not possible to conceive an agent who would be responsible for structuring the "wholeness" of the work.[61] It is of course possible to go around the issue by suggesting that there can be "indeterminate narrators not telling the same story every time" (Eskelinen 2012, 194). However, in digital RPGs, the fact that the player is given a range of possibilities as an interactor is not only related to various routes or strategies of winning the game, but also to the expressive or creative side of player activity. Instead of looking for a "somebody" that authors the meanings of digital RPGs, or asking what kind of narrator-like figure meanings can be traced back to, we should focus on the processes and cues shaping the act of play when discussing frames of interpretation such as narrativity.

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61   In film studies, such agent has been called "cinematic narrator" (Chatman 1990) while in comics studies, the narrator can be marginalised, "strictly limited to the function of tying down the temporal and spatial relationship that links or separates the panels" (Mikkonen 2008, 308).

When acting or making any kind of decisions in the *Mass Effect Trilogy*, the player must think about the experience of play resulting from the game in actuality, both in terms of representation and as a dynamic system evolving based on certain rules (see Sihvonen 2009, 146). Worldbuilding as a communicative practice is related to this in the sense that by evoking the experience of worldness, the logic is conveyed in a meaningful fashion to the player. Furthermore, in digital RPGs, the processes and elements enabling the player to role-play the character lie at the heart of such communicative practice, as the game's progression structure and the meanings this structure potentially evokes are linked to the playing of the character. This results in an ambivalent situation, which Espen Aarseth (1997, 127) captures by describing the playable character as "an empty body, a contested ground zero". In relation to shaping the act of play, this body is contested or empty precisely because it is simultaneously the player's tool for constructing a story (or "secret plot", as Aarseth calls it) and an integral part of that story. There are also two kinds of player attitudes or perspectives inherent in this position. The option of perceiving Shepard as a possibly existing person is a feature that digital RPGs share with more traditional forms of fiction. Moreover, as RPGs are, first and foremost, games, the imaginative dimensions of character construction are directed toward certain goals and are closely linked to configurative activity. This illustrates the interplay between narrativity and simulativity as relevant frames, when the abstract and the concrete become overlapped. Using an example from *Mass Effect 2*, I will next look at how this close linkage can be considered a method of communicating the potential of the game and its world to the player.

One of the most important storylines running through all three *Mass Effect* games relates to the genophage, a biological weapon that was deployed against a warrior race called the Krogans by two other races, the Salarians and the Turians. The weapon was designed to severely reduce Krogan numbers by infecting the species with a genetic mutation, but it was not intended to completely eradicate them. In *Mass Effect 2*, Shepard recruits Mordin Solus, a Salarian scientist who participated in the modification of the genophage. As Mordin is still coming to terms with the consequences of these past actions, one of the so-called loyalty missions in the game is closely related to genophage. The mission "Mordin: Old Blood" initiates when Mordin informs Shepard that a group of mercenaries has captured Maelon, his former protégé, who assisted Mordin on the genophage project. Maelon's capture raises security concerns, meaning that he must be saved from the Krogan home planet Tuchanka. It is possible to reduce the mission to a list of gamist challenges and options and to document it in a walkthrough guide, area by area, such as the "Hospital Approach" or "Hospital Interior":

> Entering the hospital you only have one way to go down the stairs to your left. At the first landing you find a dead human body. Selecting this starts a conversation with

> Mordin and you can learn about the experiments being conducted [...] ending the conversation with the options earn a few morality points.[62]

In addition to showing us how the walkthrough guides describe player activity, the account above tells us something crucial about the relationship between narrativity and sequentiality in digital RPGs. Alexandra Georgakopoulou's work (2007) on stories in interactional environments, for example, has revealed the limitations of viewing stories as fully-fledged, teller-led performances that unfold within a single event from beginning to end. Instead of communicating the inevitable "big story" of the genophage and Maelon's research, the mission on Tuchanka unfolds sequentially between the player and the system. These sequences are realised through the player's actions via the playable character, and in this, Commander Shepard can be seen as the player's tool for answering the question "What should I do?" in accordance with certain goals, such as "winning", "making up a dramatic story", or "developing the character".

However, if a digital RPG is well designed, the layers of player action and more imaginatively oriented character development work together quite seamlessly. At the end of the mission, for example, Maelon is found safe and sound. When Mordin confronts him, Maelon reveals that – out of guilt – he is working with the Krogans to undo the genophage. Shepard is finally given the decision of what to do with Maelon's research data, and the options are presented to the player through four different dialogue options. In short, Shepard can convince Mordin to either destroy or save the data. Choosing to destroy the data will earn the player Paragon points and contributes to the commander's positive moral status. Alternatively, saving the data increases the Renegade score and contributes to a more ruthless or calculating Shepard. Therefore, the immersive engagement in character development does not only involve imagining Shepard as a possibly existing person, but also "prospecting" into the future of gameplay: the player has to consider the effects of a more virtuous or ruthless playable character for the challenges to come.

The example above illustrates how inviting the player into the position of the playable character is part of the meaning-making processes, but positioning does not create or communicate anything to the player as such. In a sense, positioning provides a *unifying frame* that makes the game, its workings, and its goals much easier to understand. Furthermore, one can argue that the narrative coherence of digital RPGs is not based on the idea that some kind of instance or agent is responsible for organising the material into a cohesive or meaningful whole. The functions traditionally linked with the narrator (or implied author) – such as maintaining coherence or constructing the work as a whole – are based on the processes that enable the player's positioning in the character role. In strategy games, for example, there is no need to invite the player into a position "inside" the fictional game world. Instead, the player is given the ability to indirectly control game units under her command and, to facilitate this, a godlike view of the world.

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62   This walkthrough can be found in the Mass Effect wiki at http://masseffect.wikia.com/ wiki/Mordin:_ Old_Blood.

In digital RPGs, the position inside (or outside of) the world is not the object of representation, but rather an indirect consequence of representing other objects (such as the fictional game world with its existents). This is also reflected in the use of the second person in RPGs: "you" are positioned vis-à-vis various objects and events, as the user of various resources. In other words, when the player is invited into a position, she is positioned in relation to the existents and events in the game world and as a participant in configurative activity. In this, the player of a digital RPG is simultaneously an actor who fills a certain role and a viewer or receiver of a story, constructed around the role. Next, in the final part of this chapter, I will examine player performance in relation to worldbuilding and communication.

4.3   From User to System: Performing in an Emergent Story

It should be clear by now that narrativity in digital games cannot be viewed in relation to cases of somebody communicating something predetermined to somebody else or as players completing meanings that are determined prior to the act of playing the game. Instead, I have analysed above how narrativity can emerge in games in relation to directing and informing the player's action, and discussed the role of scripting and positioning in this emergence. Compared with work previously done on "interactive narrative", the approach developed in this chapter aims to take the reciprocity of digital media into account, and this is why I will next highlight the meaning of performance as a communicative act. This is especially significant in the context of RPGs, because one of the defining features of role-play is the player's performance of who she is in the game world as a playable character. One can ask whether the game system in digital RPGs is designed in a way that enables the player to position herself as a user of multiple resources (e.g., various game elements, familiar storylines, character traits, and other similar elements) in order to actively perform as a character such as Commander Shepard. The player's performance is important not only for the sake of enjoyment or immersion, but also for communicative purposes and worldbuilding as a transmedial practice, in which narrativity and simulativity are complementary strategies for making meaningful sense of the representational artefacts. The question remains, however, how freely can the player perform her role and not be railroaded along a path of some kind toward Shepard's inevitable destiny? I will examine this question of freedom from the perspective of emergence and communication.

In order to be a truly emergent phenomenon, Commander Shepard's character story, for example, must result from the reciprocal interaction between the player's own representational strategies and the input of the game system itself. Walsh (2011, 82) has argued that genuinely emergent narrative is possible in RPGs, but only if the player maintains the duality of her performance: "playing a role must be simultaneously action and communication – behaviour as representation". In other words, in the representational capacity, playing a role is not only action within the confines of a system, but also a way of

communicating what kind of character the player is performing. Walsh discusses live action role-playing in relation to this idea and concentrates on the way the players perform for one another. The duality of performance in the *Mass Effect Trilogy* is perhaps not as obvious a phenomenon as when one is observing two people engaged in face-to-face role-play, but it is nevertheless crucial in the digital environment, too. I already mentioned Murray's argument that "the primary representational property of the computer is the codified rendering of responsive behaviours" (1997, 74). In a sense, this is a very concrete example of behaviour as representation. Scripting, furthermore, is not only about communicating to the player what kind of behaviour is possible or desirable inside the fictional game world, but also a way of enabling her to communicate her actions and intentions to the computer. Sicart (2011, n.pag) has phrased this aptly: "[W]hen a player engages with the game, we enter the realm of play, where the rules are a dialogue and the message, a conversation". In my view, this results in a specific, *reciprocal* form of worldbuilding, where the player's understanding of the general system affects the way she understands the particulars (such as the playable character and the possibilities of action), while the particulars represent the way she can interact with the system and change it.

The experience of worldness emerges from the interplay between narrativity and simulativity. It requires both the "feel" of a world-likeness, a general and abstract structure, and the particulars in relation to which this structure becomes accessible. Discussing simulativity is rather simple in digital RPGs, as the system "behind" the particulars can be likened to the game system and the rule-set. But what kinds of cues and devices do digital RPGs use in order to evoke narrativity, and how are they related to gameplay? One principal way of introducing such cues and devices in the *Mass Effect Trilogy* is by framing Shepard as a larger-than-life space opera hero and inviting the player to play her/him accordingly. In other words, the player is invited to use a very specific frame for the interpretation. A simple example illustrates this: at the beginning of the games, the player creates her playable character (unless she wishes to play either the default male or the female Shepard, or downloads her custom character from earlier games in the cases of the second and third instalment). This is done by means of a system called "Profile Reconstruction", which has been fashioned after a military service record. In this process, the narrative cues are most apparent in making a choice concerning Shepard's pre-service history and her/his psychological profile. Nine different combinations are available, and one of the possibilities includes combining the pre-service history of "Colonist" and the psychological profile of "Sole Survivor":

> You were born and raised on Mindoir, a small border colony in the Attican Traverse. When you were sixteen slavers raided Mindoir, slaughtering your family and friends. You were saved by a passing Alliance patrol, and you enlisted with the military a few years later.
>
> During your service, a mission you were on went horribly wrong. Trapped in an extreme survival situation, you had to overcome physical torments and psychological

stresses that would have broken most people. You survived while all those around you fell, and now you alone are left to tell the tale.[63]

These short introductions are similar to character backstories in many game genres, and they definitely show the effectiveness of stereotyping. They are especially important to RPGs, because one of the primary goals of such games is not just using the playable character as a tool for achieving victory, but also developing the character as extensively as possible and adopting a dual attitude to the character in the process. The selection of Shepard's pre-service history, for example, affects gameplay directly, because that decides how many bonus Paragon or Renegade points the player's character has at the start of the game. The points mechanically open up special "good" or "evil" dialogue options that, in addition to other actions, grant the player more points.[64]

It has been argued that compared to media such as literature and film, the process of "representing meaning" in a digital medium should be thought of as a process of abstracting objects and behaviours as efficiently as possible (see Murray 2011, 54). Similarly, Sicart (2011, n.pag) proposes that meaning should not be viewed as having been procedurally created or generated by the computer. However, we should ask more precisely what the process of representing meaning, or the idea that meaning is played, imply. Related to Murray's argument, the process of abstracting objects and behaviours can be observed in the systematic way human behaviour and development are looked at in RPGs. In Chapter 3, I mentioned the strong influence that *Dungeons & Dragons* has had on the RPG genre with its abstraction of the human personality into a set of attribute scores and presentation of the concept of personal growth through life experience as the accumulation of experience points and "levelling up". In addition to this, abstractions in the *Mass Effect Trilogy* obviously include the mechanics enabling the choices available in conversations. Processuality should not simply be equated with meaning-making – instead, it should be connected with the way the player makes use of the abstractions in the act of play. As Myers (2010) has argued, game elements gain value within the *contexts the players themselves construct* during the play.

So, while Profile Reconstruction in the *Mass Effect Trilogy* initiates the player's scripting in character role with certain effective stereotypes, these abstractions further enable her to perform as the kind of a hero she wishes Shepard to be. Game mechanics keep track of the resulting reputation points, for example, and translate or communicate this to the system. The importance of being able to create and perform different types of Shepard is further highlighted in the *Mass Effect Trilogy*, because there is no purely gameplay-driven motivation for avoiding a particular type of action. The games keep track of the Paragon

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63   All options for these combinations of pre-service history and psychological profile can be read on the Mass Effect wiki at http://masseffect.wikia.com/wiki/Commander_Shepard.

64   The renegade choices are not always downright "evil" – more often than not they are expressions of impatience, quick temper, or inappropriate sense of humour. In other words, they cannot be considered "paragon".

and Renegade points separately instead of representing them on a single axis. A good action will, therefore, not simply make up for an evil one, or vice versa. In *Mass Effect 3*, the points have a significant impact on the resolution of another major storyline – the relationship between the Geth and the Quarians. The Geth are a race of networked artificial intelligences, originally created by the Quarians as labourers and tools of war. In the past, the Geth became sentient and began questioning their masters, which led to the Quarians' attempt to exterminate them and, finally, war.[65] The Geth won the war and reduced the Quarians to a race of nomads. During the trilogy, the Geth often appear as the antagonists, as many of them have chosen to co-operate with the Reapers. In *Mass Effect 3*, they have allowed themselves to become under the control of the Reaper code, believing the loss of their free will to be an acceptable price to pay for avoiding extinction. The Geth and the Quarian forces finally meet at Rannoch, the original Quarian home planet, and Shepard has a chance to try to broker peace between the two races.

The description above of the relationship between the Geth and the Quarians highlights the specificity of reciprocal worldbuilding and illuminates the experience of worldness in digital RPGs. As Myers (2010) points out, the contexts are constructed during the play, and this is where I find worldbuilding especially relevant when it comes to digital RPGs. During gameplay, the player makes use of the speculative premise and works through it by enacting or performing the world-as-process via a playable character. In this, the experience of worldness emerges from the interplay between the general system and particular character and actions, of which the interactions with Geth and the Quarians are an illustrative example. The *Mass Effect Trilogy* creates the sense of worldness most efficiently by positioning the player as an active partner or an agent in the crisis between the two races, and thus the player's (or Shepard's) past actions come back to haunt her at Rannoch. For example, if during *Mass Effect 2*, Shepard's Quarian crewmate Tali was exiled from the Migrant Fleet – the Quarian's mobile home consisting of fifty thousand ships – the likelihood of achieving peace is greatly reduced. Conversely, taking time to save one of the Quarian admirals on Rannoch in *Mass Effect 3* adds to the chances of success. Therefore, narrativity as an interpretative frame does not emerge from the designers communicating the history of the Geth and the Quarians to the player; the player also creates a history of her own with them – which, in turn, is shaped by the player's performance of who she is in the game world, of her working through her world-as-process on the basis of the premise she has initially chosen. In addition to performing favourable past actions, the player must manage to accumulate sufficiently high Paragon or Renegade scores for her character.

This history weighs heavily on Shepard's attempt to broker peace. War would result in one or the other of the two races being obliterated in the conflict. Choosing to broker peace (or gaining the ability to do so) is neither simply a question of creating a happy

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65   The conflict between the Geth and the Quarians also serves as *mise en abyme* of sorts in relation to the main conflict in the game, the conflict between synthetic and organic life. During the "Leviathan DLC" of *Mass Effect 3*, it is revealed that the Reapers were similarly created by organic masters before turning against them.

ending for the war in the *Mass Effect* universe nor a chance to gain experience or reputation points for the character's development. The way dramatic situations of this kind are tightly intertwined with the more gamist goals in digital RPGs can be further illustrated by making a comparison to digital games that are more inclined toward the genre of interactive drama, such as *Heavy Rain* (2010, Quantic Dream). In *Heavy Rain*, there are no significant motivations for the choices made during dialogues, for example, except for their contribution to the story, even though the game is operated by adventure game mechanics. In *Mass Effect 3*, on the other hand, one of the main objectives is to accumulate war assets, which in turn indicate the galaxy's readiness to produce Effective Military Strength (EMS). The war assets have a direct effect on the consequences of Shepard's final choice in the trilogy. For example, a very low EMS score results in the vaporisation of Earth, if the player chooses to destroy the Reapers instead of controlling them or merging organic and synthetic life forms into one. As both the Geth and the Quarian fleets are valuable war assets, brokering peace between the two obviously has a gameplay-driven motivation. Even so, this is one of the points where the way the player has chosen to play her character – that is, how she has played the game – will influence the events.

Abstractions and goal-oriented processes obviously have consequences in game fictions, but many researchers remain somewhat sceptical on the ability of games to succeed as works of fiction. For example, Wardrip-Fruin (2009, 79) states that there is a mismatch between the great variety of situations in which digital games are expected to "perform a fiction" and the simple model of fiction and character embodied in their processes. According to him, this mismatch results in a tendency toward a breakdown that takes a shape determined by the underlying processes, and it is therefore uninteresting. The shape denotes the system of rules and the computational processes used by the game engine. In other words, Wardrip-Fruin suggests that when these are recognised, the player's imaginative involvement with the game world and the characters would break off. This is, once again, an example of the idea suggesting that the enjoyment of fiction is a *complete* experience, while recognising the shapes and structures is viewed as negating the immersive engagement. However, as Laura Ermi and Frans Mäyrä have argued, gameplay "immersion is a many-faceted phenomenon with different aspects that can appear and be emphasised differently in the individual cases of different games and players" (2011, 100). Furthermore, recognising the shapes and structures does not mean that game fiction has failed – instead, this recognition itself is part of the player's immersive engagement in the game.

The immersive aspect of games cannot therefore be simply viewed as imaginative absorption into the game world. As mentioned above, stories in interactional environments, in particular, should not be viewed as fully-fledged, teller-led performances that unfold within a single event from beginning to end (see Georgakopoulou 2007). In the *Mass Effect Trilogy*, the character story of Commander Shepard is not monolithic. Instead, it is a result of many small fragments used in the performance or reciprocal communication between the player and the system, and this means that narrativity should be understood differently

in digital RPGs compared with the prototypical understanding of the term. While the double perspective is crucial for the userly experience of all works of fiction, digital RPGs make use of the double-layered engagement encompassed in fictional worldbuilding in order to provide a frame for play. Overall, recognising structures and shapes as underlying processes is important, because the player needs to be able to move from the general principles of the system – such as how quests are structured – to smaller details – such as how they will contribute to the development of the playable character.[66] This also brings forward the complementary role of simulativity and narrativity in digital RPGs: while narrativity concerns the particulars, simulativity addresses the very model containing these aspects that can be developed and changed.

As digital RPGs must abstract the devices and elements of, for example, quest narrative, the player who recognises the underlying processes can consciously "tweak" the stories to her liking while playing the game. This attitude is both gamist and narrativist in nature, because it can be used simultaneously to beat the game and to perform as a certain kind of fictional character. Despite the tweaking, there are still operations that the player cannot subvert: the only character you can play in the *Mass Effect Trilogy* is Commander Shepard. Positioning the player as the generic hero of a space opera and acting according to more or less stereotypical moral standards introduces its own limitations, as well. These limitations and rules should be seen as possibilities, however, and this sheds light on another important aspect of narrativity of character stories in digital RPGs. The fictional *Mass Effect* universe can be perceived simultaneously as being a possibly existing world that is experienced from the inside – as if the events were happening to the player – and as being an obvious construction, made according to certain strategies and using, perhaps, familiar building blocks.

This is apparent in one of the essential themes of the trilogy: the relationship or boundary between human and non-human, an archetypal element in science fiction. *Mass Effect 3* attempts to resolve the tensions and uncertainties between various races during the trilogy by positioning the player in the role of Shepard to gather all the races in the galaxy into one united front. This way, the rule-based goals, based on the operational logic of digital RPGs, and sequences of events unfolding inside the fictional game world become interwoven. The final choice in the trilogy is all about the relationship between the organic and the synthetic lifeforms. The decision to destroy the Reapers does not spare the lives of the Geth, who might have evolved into individuals, while the decision to synthetise all lifeforms into one in effect destroys them all as we know them. The decision to control the Reapers, in turn, transforms Shepard into the new Catalyst, the strange entity controlling them. Compared to various other digital RPGs (such as *Deus Ex: Human Revolution*, which I will be using as my case study in Chapter 6), the *Mass Effect Trilogy* is perhaps not the strongest when it comes to themes, but it serves as an excellent example of the experience of worldness in

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66   Chapter 6 returns to this topic when the rhetorical effects of abstractions and their concrete applications in science fiction are studied.

making meaningful sense during the gameplay. In the act of creative play, where storylines and other similar elements can be used as resources, the *Mass Effect Trilogy* engages the players into a reciprocal relationship with the game system, enabling them to act or perform in a fictional world they enjoy.

My analysis on narrativity and the various resources used in the act of role-playing a character in a fictional game world has shown the limitations of viewing stories as linear, narrator-led performances. I have discussed the inherent problems of the existing theories on interactive narratives, since they have long ignored both the reciprocal nature of digital media and the importance of player agency. These problems originated not only in the traditional model of narrative communication developed in the literary environment, but also in the more formalist approaches to games that ignore players as co-creators and performers. Recognising the reciprocal communication between the player and the system has highlighted the emergent role of stories in meaning-making during the act of play and resulted in the abandonment of the view that stories form trees or rhizomes of some kind, determined by designers. Positioning opens up new viewpoints on digital role-play as a phenomenon that can combine gamist goals and narrativist ambitions quite seamlessly. Finally, the way the player can consciously use the system in the double-layered understanding of game worlds as fiction highlights the participatory nature of digital media which has already affected the use and reception of all media profoundly. Media now appear to us as something that can be cut, pasted, reassembled, and distributed with ease (see Murray 2011). This will be discussed further in Chapter 8, in which all of my case studies will be from fan fiction.

Because contemporary media such as digital games represent a "new norm" compared to the prototypical narrative developed in the study of literary fiction, McHale has recently predicted that narrative theory "might become divergent and various, multiple *narratologies* instead of one – a separate narratology for each medium and intermedium" (2015, 302; emphasis original). I do not think that such a future development would be a good one for narrative theory. Instead, the various theories should converge in a similar way that contemporary media has done. This way, refining a conceptualisation of narrativity through the analysis of digital games can contribute to the literary narratology – as this chapter has demonstrated. The prototypes might vary from mainstream literature to speculative fiction and games, and we must account for this in the analyses, but the principles according to which they are made use of in the interpretative engagements stay the same. This is why I have committed this study to advancing "prototype-conscious" narratology instead of promoting the proliferation of medium-specific narratologies. The next chapter will discuss the features of speculative worldbuilding which have made the works of speculative fiction appear "unnatural" compared with the norm of mainstream literary fiction.

5   ABSTRACT AND MATERIAL IN WORLDBUILDING

In the previous chapter, I suggested that the experience of worldness resulting from the interplay between frames of narrativity and simulativity allows the user not only to make meaningful sense of a work of fiction, but also to immerse into it as world-like. The interpretative interplay occurs crucially between the particular and the general, as the user moves from the smaller details to the general principles of the model and back again. This chapter will further explicate such interplay in worldbuilding from the userly viewpoint as the relationship between the abstract and the material, and analyse the two ways in which the portrayal of strangeness in China Mieville's novel *Embassytown* (2011) can be approached. I put forward the idea that for the user, speculative worldbuilding is a way of making sense of *both* abstract relations *and* concepts, as well as the material phenomena and things. *Embassytown* makes for an especially interesting case study, because it thematises the relationship between the abstract domain of language and the realm of the material world. Furthermore, through worldbuilding as a rhetorical practice, Miéville's novel highlights the way that speculative fiction in general materialises the unknown and makes it communicable to the user.

My discussion draws on Richard Walsh's argument that rhetorical means come prior to any representational means. He (2007, 160) has suggested that both the mimetic and the thematic dimensions of a literary character, for example, should always be seen rhetorical from the outset. Consequently, we need to reconsider the prototypical views on world employed in the analysis of userly engagement. Philosopher Markus Gabriel has recently (2013) contested the classic definitions of world, such as "world as totality of all spatiotemporal things" and "world as a totality of facts".[67] For him, there is no all-encompassing context which would settle all matters of existence once and for all: both witches and the natural number between 3 and 5 exist equally, because "to exist is to appear in a context". In my view, especially the idea of world as an ontological construct reflects the classic definitions Gabriel questions. Furthermore, such classical understanding of world has made works of speculative fiction seem "unnatural" compared with the norm of

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67   In his talk at a TEDx event organised in Munich, Gabriel (2013) posed a few illuminating questions to contest these definitions; he asked, for example, that if world consists of all spatiotemporal things, where in spacetime exists the fact that the Earth is bigger than the Moon? And if world is a totality of facts, how could you come up with a way of writing down a list of "all that is true"?

mainstream literary fiction, especially when it comes to strangeness and encounters with difference. In this chapter, I will argue that the prototype of world has presented a view on userly worldbuilding in which rhetorical objectives – and the objectives of a speculative thought experiment – have appeared subordinate to mimetic objectives.

The efforts of users are typically seen to concentrate on understanding an alternatively existing world, rather than focusing on working out an idea in a way that Catherine Z. Elgin has attempted to capture by describing literature as laboratories of the mind. According to her, literature makes use of our ability to "adopt certain kinds of hypotheses in order to make sense of large amounts of disorderly data" and therefore enables us to see or recognise "truths that we would otherwise miss" (2007, 51–53). Seo-Young Chu has presented a theory on science fictional representation, specifically in order to link strange and sublime representations with the truth. She argues that what unites different types of science fiction is "their capacity to generate mimetic accounts of aspects of reality that defy straightforward representation" (2010, 10). Both Elgin and Chu's accounts point towards theorising worldbuilding as a communicative practice in the spirit of Samuel R. Delany's assertion that science fiction "seeks to represent the world instead of reproducing it" (1994, 123). Still, they subordinate the rhetoric to mimetic goals. One of the inherent problems in Chu's approach, for example, is the underlying idea that mimetic representation is understood as imitation of reality or truth, and that this would explain the way fiction performs epistemological work, helping us to acquire and awareness of the world around us. This is, in a sense, a logical conclusion, yet, I tend to agree with Monika Fludernik's argument that mimetic representation does not imitate but "*recreates* and *evokes*" (1993, 454; emphases original).

When it comes to speculative fiction, I would argue that the idea of recreation and evocation needs to be taken further: worldbuilding is also about making a leap towards something which does not yet exist (or which, in Gabriel's words, does not yet appear in any context). From the users' point of view, worldbuilding in speculative fiction is fundamentally twofold in its nature. Firstly, worlds are vehicles for drawing connections – in other words, *making things appear* in a context. This way, these things become communicable or shareable. Secondly, worlds are vehicles for imagination. The practice of making things appear in a context is not so much about imitating "virtually unknowable" aspects of reality than it is about positioning us so that we can map a (new) relationship with these aspects. Especially in science fiction, inventing something that should be understood as a concrete representation of something possibly existing (such as the faraway planet Arieka with its indigenous, enigmatic Ariekei in *Embassytown*) can be about making something abstract (like our encounters with something strange that we cannot easily categorise or "naturalise") appear in a way that is communicable and shareable. Unfortunately, this is an aspect of the rhetoric (and the aesthetics) of speculative fiction which is quite often underrated or misunderstood by the mainstream literary critics. I have already mentioned Greger Andersson's (2015, 61–62) argument that reading literally is naïve – or vulgar –

and missing the *raison d'être* of literary fiction, which, according to him, is not reading for information but for aesthetic purposes.

I agree with Andersson in that the elements of literary fiction should not *only* be interpreted as something possibly existing or as *matter* during the reading process. The prototypical view of speculative worlds, in particular, sees them as imaginative environments where fictional characters act and further their goals and where various events unfold. These environments – or, spatiotemporal containers – can vary from huge, detailed created universes complete with their own languages and peoples to unspecified, neutral spaces. Such understanding is a variant of the classic definition of world which Gabriel has criticised. However, contrary to Andersson's aggressive *either/or* approach, I argue that by engaging us with a world which is meant to be interpreted as matter, speculative fiction offers a way of making sense of the abstract and general. Dick's expression wonderfully captures the communicative aspect of this practice, and we truly should appreciate the aesthetics of it. In my view, the two senses of the concept of world are intertwined in the meaning-making: a world is a container of spatiotemporal things and a more abstract system or context of relations.

Chapter 4 argued that it is the reciprocal communication between the player and the system that enables the player to make meaningful sense of the game, and that in this, digital RPGs draw from speculative worldbuilding as a communicative practice. In literary fiction like *Embassytown*, the reader is similarly engaged as an active participant in the creation of something which does not yet exist, and worldbuilding is used to communicate the abstract by means of the particular and material. In my analysis of Miéville's novel, I will concentrate on the way the novel highlights the dual role of human language as a tool for both communication and imagination. This also illustrates the way speculative fiction is immersed in its production: *Embassytown* calls upon its readers to make use of the language and acknowledge it as a tool, therefore asking them to reflect on the status of the novel as an artefact in the world.

5.1 Things that Do Not Yet Exist

The practice of speculative fiction in creating things which do not yet exist is usually concentrated on creating something strange or unknown. Elements that Darko Suvin (1979) has called nova are seen to *challenge* both the user's imagination and her cognitive skills. As imaginative frameworks alternative to our mundane reality, nova function as a way of imagining what is not and as a way of prospecting into something that does not yet exist. In the following, I will argue that as a practice of enabling us to encounter the strange and unknown, speculative worldbuilding fulfils these two goals simultaneously. Hence, it should not be viewed as something in which the user reconstructs *either* ontologically separate realms *or* abstract cognitive constructions. With *Embassytown*, it might be tempting to emphasise the former, because initially, the strangest features in

Miéville's novel seem to originate from the remoteness of its world, characters and events. The protagonist and first-person narrator Avice Benner Cho is an immerser, a traveller on the immer which is a sea of space and time below the everyday. She has now returned to Arieka, her childhood home, with her newly-wed husband Scile. On Arieka, the only link between the communities of humans and the Ariekei (or the "Hosts") are the genetically-engineered twins known as Ambassadors who can speak the Ariekei language (referred to simply as "Language"). The peaceful life on Arieka comes to a sudden end when EzRa, a new ambassador who has not been genetically modified, arrives and causes a dangerous crisis on the planet. Avice attempts to solve the situation before both the humans and the Ariekei are destroyed, but in order to do so she must address the Ariekei directly. This, however, is impossible for her, as the words of Language must be spoken simultaneously with two voices, joined together with a shared consciousness, and nothing that actually exists cannot be referred to:

> For Hosts, speech was thought. It was as nonsensical to them that a speaker could say, could claim, something it knew to be untrue as, to me, that I could believe something I knew to be untrue. Without Language for things that didn't exist, they could hardly think them; they were vaguer by far than dreams. What imaginaries any of them could conjure at all must be misty and trapped in their heads. (*Embassytown* 96.)

Even a short summary like this is enough to demonstrate the central questions in the novel. They are, in quite a self-reflexive manner, entwined with the twofold character of language as the means of communication but also of creation. How is it possible for us to communicate with someone who is completely alien to us? How is it possible for us to imagine and verbally describe things that do not (yet) exist? A more immediate challenge for the reader of *Embassytown* is comprehending the novel's content in the way I have described above. Here, the narration is not hard to follow the way it can be in more experimental forms of fiction, but the world can be called strange for a good reason. It is impossible for us, not only in the sense that the imaginations of fiction are always compared to the everyday "even ifs" and "what ifs", but also in the sense that it is unimaginable for most of us until we start reading the novel. Our initial attitude as readers is probably similar to the reactions of the humans setting their foot on Arieka for the first time: "The theory is that we're hardwired with Terre biome, that every glimpse of anything not descended from that original backwater home, our bodies know we should not ever see" (*Embassytown* 74). But despite the initial confusion, human language functions here as a vehicle for imagination, and does exactly what the Ariekei Language cannot do. With it, we can imagine events, creatures and whole planets that could never be possible in our "backwater home". There is nothing odd about that. So where do those encounters with difference take place, then?

In literary research, the analyses of userly construction of worlds – and thus our encounters with difference – have typically concentrated on either the domain of the material (that which is not) or the domain of the abstract (the way of prospecting into that which

is not). The ontological understanding emphasises the material: fictional world appears as a version of our commonsensical definition of a world as a totality of (spatiotemporal) things. Ryan, for example, asserts (2015b, 16) that the concept of a fictional world is in itself constituted by that world's difference from the mundane world, a difference that lies in its mode of existence. She (ibid.) suggests that one way to conceive the mode of existence, or more precisely the "coming-into-being" of such worlds, is to associate them with future states of the real world – such as a distant future where humans have long ago left their original backwater home. Ryan's approach draws from the possible worlds theory – which I referred to in Chapter 1 – where fiction has been viewed as a possible state of affairs in relation to the mundane world that is actual instead of being a representation of unrealised possibilities. Understood in this sense, fictional worlds concretise virtual constructions. In my view, one of the strengths of applying the possible worlds theory to the analysis of userly engagement with fiction is the fact that interaction between the actual and the virtual that is there in the interpretative work appears.

Furthermore, as versions of the commonsensical take on the world, fictional worlds can be discussed as concrete artistic phenomena in the sense of "the world which came first" (see Miéville 2009). In *Embassytown*, the world which came first has been built by means of literary affordances and devices. In colloquial use, this understanding of a world is apparent in the expressions such as "Tolkien's world" – to take a classic example. In short, "Tolkien's world" is taken to mean something imagined and then realised by J.R.R. Tolkien in his writing, something which comprises all the things that are necessary for anything to be called a world (characters, locations, geography and so forth) and which is "separate" from our mundane world. An idea that similarly centralises the author can be seen in Tolkien's own influential theory on primary and secondary worlds, which I discussed in Chapter 2. Ryan (2015b, 17) connects this with another explanation for the existence of possible worlds, which places their origin in the act of the mind – fictional worlds, in other words, can be seen as created by the minds of authors for the benefit of audiences. However, the rhetorical means do not figure in either the tolkienian approach to worlds or in the possible worlds theory, despite the fact that speculative fiction often thematises (and even toys with) our fossilised assumptions about worlds as constructions. A work of speculative fiction such as *Embassytown* can, thus, exemplify our commonsensical means of worldbuilding by selecting and bringing to the fore all the things that are usually (or, at least, culturally) are deemed necessary to be added together in order to have a world (cf. Ryan's list of such elements in 2014). Using Brian McHale's (1992, 247) terms, works of fiction which highlight such constructions (usually belonging to science fiction or postmodernism) are governed by an ontological dominant: they are engaged with questions such as what is a world, how is it constituted and how do different worlds differ from each other.

As an example of an approach that concentrates on the domain of the abstract, the cognitive approach to worlds links them to cognitive processes and asks how the mind constructs stories and their world(s), either as an encoding (productive activity) or as a

decoding (interpretative activity). David Herman's concept of *storyworld* has already been discussed in this study – particularly in Chapter 2. Herman (2002, 14) has introduced storyworld as a concept to replace that of story, since the readers of literary fiction, for example, do not just construct linear or causal sequences of events while reading but create more complex structures about who did what to whom, where, why and in what fashion. As a result of the emphasis on the communicative situation, a structure such as a storyworld can effectively map questions with intent on information and questions associated with communicative challenges. It is perhaps best suited for the analysis of fiction governed by the epistemological dominant (such as modernist fiction or, among the genres of "genre fiction", detective fiction) which raises and explores questions like what is there to know about the world, who knows it, and how reliably (McHale 1992, 247).

There are at least two considerable problems in seeing world as *either* ontological *or* as a cognitive process, universally shared by all users. I have already mentioned the first one in this study: fictionality is turned into an abstract ontological category (see Walsh 2007, 153) and the world is seen reconstructed by the user. Partly, the distinction between representations and that which they assert to represent is so deeply "entrenched within Western culture" (Barad 2003, 806) that it seems downright natural. In particular, that which is represented is understood to be separate from practices of representing – representations are thus supposed to serve a mediating function. As Karen Barad (2003, 813) notes, this view separates the world into the ontologically distinct domains of words and things, and this results in the prototypical idea that the world is a construct composed of individuals with separately attributable properties. The second problem is that in literary research, we are both as readers and researchers required to move away from the actual here and now of being engaged with fiction. For example, most theories on estrangement and double exposure in fantasy ignore the perspective that I have called world-external. Herman's approach to storyworlds is particularly explicit with the transportation metaphor, as the process of reading a novel, for example, supposedly transports the users from "the space-time coordinates of an encounter with a printed text [...] to the here and now that constitute the deictic centre of the world being told about" (2002, 14).

Together, the two problems more or less deny the possibility of the readers actually using their awareness of artificiality as a resource while imagining, for example, what Arieka or a character living on it might look like. Furthermore, the interplay between the abstract and the material in worldbuilding is obscured. Consider the following passage:

> It was Language that he was there for, of course, but he wasn't blinkered to other strangenesses. Ariekene biorigging astonished him. At the houses of friends, he would stare like an appraiser at their quasi-living artefacts, architectural filigrees, their occasional medical tweak, prostheses or similar. With me, he would stand at the edge of the aeolian breath, on balconies and viewbridges in Embassytown, watching the herds of power plants and factories graze. Yes, he was staring into the city at where the Language was, but he was looking at the city itself as well. Once, he

waved like a boy, and though the far-off things can't have seen us, it seemed as if one
station twitched its antennae in response. (*Embassytown* 78–79.)

Avice's husband Scile's viewpoint to the strangeness of Embassytown illustrates the
viewpoint of the reader in relation to the aesthetics of speculative fiction: the Ariekei
Language is probably among the strangest fantastic inventions in *Embassytown*, but by no
account does it stand alone. This Language is a conceptual, elaborate thought experiment
on a language different from ours, an experiment on whether a word can communicate
something *other* than itself.[68] However, the reader is not blinkered to other strangenesses,
such as Ariekene biorigging, described in the excerpt above. While Scile sees Embassytown
as the city where the Language is, the reader is similarly "staring into" the thought
experiment and, simultaneously, looking at "the city itself as well" with all its artefacts,
filigrees, prostheses, balconies, viewbridges, power plants, factories, and stations. This is
the kind of concrete or material strangeness that is usually overlooked in the narratological
approaches[69], and its relation to worldbuilding as a whole is ignored.

Fictional worldbuilding is always dependent on representation in some medium
(although it is capable of harnessing several), and the resources used in this practice go
together with the creation and understanding. With this, I want to point out that the
world in works of fiction such as *Embassytown* is built in the process of comprehending
the context in which things appear, and this is the basis for immersive engagement where
the awareness of the artificiality of the work does not "constitute an anomalous rational
action that works against immersion but is necessary for the immersion to happen in the
first place", as Merja Polvinen (2012, 108) has argued. Compared with the transportation
metaphors – which seem to require the user to first build a more or less richly detailed
representation of the world before attempting to become immersed in it – the premise is
an opposite one. Representation is the product of the interpretative process which makes
use of various elements and strategies. In other words, our understanding of the world as a
concrete artistic product or an ontological construct is created during the engagement with
an artefact and through interpretation. Similarly to Joseph T. Rouse, Barad has pointed out
the remarkable role that representation plays in science, noting that "both scientific realists
and social constructivists believe that scientific knowledge (in its multiple representational

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68   This is a reference to the quote that opens the novel: "A word must communicate *something* (other than
itself)". The quote is Walter Benjamin from his "On Language as Such and on the Language of Man" (1996,
71).

69   For example, in his treatment of "impossible storyworlds", Jan Alber briefly touches upon materiality in
his analysis of Cary Churchill's play *Traps*, which transcends traditional notion of time (and space) by playing
around with the principle of noncontradiction. Alber suggests that we can make sense of such a logically
impossible chaos by interpreting the mutually exclusive options as "materialised scenarios [which] actually
represent the character's fears" (2009, 93).

forms)" (2003, 805–806) mediates our access to the material world.[70] To sum up, they seem to purport that representations are our fundamental way of gaining knowledge of the material world surrounding us. Rouse (1996, 209) links this presumption to the Cartesian legacy, "a linguistic variation on Descartes' insistence that we have a direct and privileged access to the contents of our thoughts that we lack towards the 'external world'".

Rouse and Barad's critique on representationalism suggests that representations are not our fundamental way of gaining knowledge of the world, but rather a by-product of this process. This by-product serves as a fuel for our imagination: unlike the Hosts of *Embassytown*, our imaginaries are not vaguer than dreams and trapped in our heads but communicable and capable of taking a particular form. This also explains why I do not believe Chu's formulation of science fiction that is able to "generate mimetic accounts of aspects of reality that defy straightforward representation" (2010, 10) to be correct. Chu deliberately posits the simplest possible conception of mimesis and in doing so, accepts as "a postulate the capacity of language to reflect a reality ontologically prior to representation" (ibid. 2). However, even originally, mimesis was not only about imitation or pure copying. In fact, in many cases the term is best translated as "representation", as Plato noted that artists sometimes represent things that have no counterpart in real life. Furthermore, Stephen Halliwell has traced back to Aristotle the view that what mimetic art aims for is the experience in which "appreciation of both medium and 'object', of the material artefact and the imagined world that it represents, *coalesce* in a complex state of awareness" (2002, 181–182; emphasis original). Instead of generating representations that would truthfully mediate our access to the material world and, therefore, expand our knowledge of it, works of fiction like *Embassytown* enable us to build representations that result from our attempts to make sense of and understand the various aspects of the works themselves.

In order to understand the rhetoric of speculative fiction, theorising about the creation of strange realms as constructs or universally shared processes is not enough. In order to be something else than mere static models beside the mundane world and to *communicate* something other than themselves, these constructs become the sites of worlds-as-process. This is a reciprocal process between the abstract and the material; the thought experiment becomes accessible only through the apprehension of these concrete constructs. The exercises in fictional worldbuilding are not merely conceptual experiments, but take a distinctive and particular form, as two different aspects of imagination are combined: the foreign world is imagined both as a possibly existing realm and as a way to imagine alternatives, to prospect into the unknown. The dimensions of possible and virtual are fundamental in this process and this is why I want to emphasise the view of world-processing as a work-in-progress, which is hard to reach in retrospect. In this respect it differs from concepts like story used in narrative studies, although a story, too, results from the interpretative work

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70   Barad notes that while both groups subscribe to representationalism, they, nevertheless, differ "on the question of referent, whether scientific knowledge represents things in the world as they really are (i.e., "Nature") or "objects" that are products of social activities (i.e., "Culture")" (2003, 806).

and is no more a representative of causal logic supposedly underlying the narrative form.[71] A story, however, is more like an explanatory outcome than a transitional period, which better characterises the world-as-process. During this period, any possibilities opened up by the text can still be actualised in various different ways. After the reading has finished, it can be impossible to reach the possibilities and alternatives that did not come to fruition. The reader of *Embassytown*, for example, might find it hard to remember how she pictured the catastrophe following EzRa's arrival while reading about it for the first time:

> That was the moment everything changed. EzRa looked at each other, smiled. Their first official pronouncement. If it hadn't been an absurd faux pas I think we would all have clapped. I'm sure many people hadn't really thought them capable.
>
> We were busy listening to them speak, and gauging their abilities. We didn't notice anything change. I don't think any of us at that moment noticed the reactions of the Hosts. (*Embassytown* 104.)

Such tensions caused by the open possibilities and the order of reading are often made use of in *Embassytown*. Next, I will analyse the relationship between two different ways of conceptualising a world – as a possibly existing environment or more cognitively understood as a process – in more detail. Fantasy fiction research, in particular, has emphasised the user's imaginative absorption into the world, while narratological studies have focussed on world as a naturalising or explanatory vehicle[72], and as a result, the rhetorical aspects of worldbuilding have escaped the attention of the researchers. I will attempt to bridge this gap and look at the materiality of the worlds.

5.2   Materiality of the Slowed Down Worlds

One of the main questions related to strangeness in works of fiction concerns its location: should it be located in the fictional world, or in the devices and conventions making up the world? In recent years, the so-called unnatural narratology has quite emphatically attempted to tackle this question. In an article that summarises the key points of the unnaturalists, Jan Alber, Stefan Iversen, Henrik Skov Nielsen and Brian Richardson suggest that narratives are full of unnatural elements and that many of them "defy, flaunt, mock, play, and experiment with some (or all) of [the] core assumptions about narrative" (2010, 114). They argue that the core assumptions, "along with most definitions of the term

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71   This understanding of a story is based on the classic distinction between story (*fabula*) and discourse (*sujet*) introduced originally by the Russian formalists. Simply put, it is a distinction between what happens in a narrative and how it is narrated. Fabula, thus, consists of the narrative motifs in their (naturally) chronological or causal order, which is reconstructed by the reader, while sujet refers to the order in which the motifs are arranged in the text – in other words, the order in which the reader encounters them.

72   Enactivist approaches can be considered an exception to this rule, and enactivism will be further discussed in Chapter 6. Here, however, I deliberately juxtapose my approach with these two alternatives that crop up frequently both in narratology and speculative fiction research.

'narrative', have a clear mimetic bias and focus far too extensively on the idea that narratives are modelled on the actual world" (ibid.). Consequently, the definitions ignore the elements of narrative which James Phelan (e.g., 2007) has termed synthetic. I see the problems that unnatural narratology discusses as symptoms of larger, more general issues. First of them has to do with the stance of *either/or*, which I have already mentioned. In Phelan's terms, this means that works of fiction are seen eliciting *either* a mimetic *or* a synthetic response in the reader, not both at the same time. In this study, I have argued against such stance and suggested that a double perspective is characteristic of fictional worldbuilding. I definitely subscribe to the view that various analyses of works of fiction ignore the synthetic (which I have called the world-external perspective). The synthetic is, however, best understood as a response to a work of fiction, not as an independently existing "element of narrative" which can be either mimetic or synthetic.

This brings me to the second larger issue: the tendency to view narrative as the primary or *only* form of meaning-making in the engagement with works of fiction. The study of unnatural narrative is said to be "directed against what one might call 'mimetic reductionism', that is, the argument that each and every aspect of narrative can be explained on the basis of our real-world knowledge" (Alber et al. ibid. 115). I find it problematic that the objective conflates two very different things. Firstly, the idea that we make sense of works of fiction on the basis of our real-world knowledge and – more crucially – the idea that we understand both the world and the works of fiction primarily by means of narrative. However, the fact that we can make meaningful sense of an element in a work of fiction by means of something else than narrative or by seeing it modelled on the actual world does not fundamentally make it "unnatural". In fact, this is a very "natural" response by the user of speculative fiction, as was suggested in the analysis of the interplay between narrativity and simulativity in Chapter 3. So instead of calling some elements in a work of fiction (however, not in a narrative) unnatural, we could see them as elements yielding to other kinds of meaning-making.

The reason why many theorists seem to hang onto the term "narrative" to the extent that we need conceptual binaries like "natural/unnatural" is probably due to the fact that either conversational storytelling or literary mainstream fiction and the way they make use of narrative elements are seen as the prototype, from which all other forms deviate. In other words, works of speculative fiction (and, obviously, games) become unnatural compared to the norm. I subscribe to the view that we do not need to stretch the term "narrative" until it covers every possible element in every possible work of fiction, nor should we label elements "natural" or "unnatural" on the grounds of a prototype, such as literary mainstream fiction. The elements that the unnatural narratologists discuss in their article do not so much defy, flaunt, mock, play, and experiment with the core assumptions about narrative than they do with the assumptions about a certain kind of literary fiction. Such assumptions can be compared to the way Jeff VanderMeer's *City of Saints and Madmen*, the case study in

Chapter 2, was seen to test and stretch the boundaries of the definitions of fantasy as a genre.

In my view, the most valuable contribution of unnatural narratology for the narrative research has been that it takes notice of the fact that making *meaningful* sense of literature is not an automatic process. As readers, we need to engage in a considerable amount of work in order to interpret, for example, the novel at hand. As Maria Mäkelä (2013b, 145) has argued, "the reader" should not be construed as a simple sense-making machine but as someone who can just as well choose the improbable and indeterminate. Unnaturality of this kind is not a feature typical only of experimental fictional texts of various degrees, as unnatural narratology usually seems to presume. On the contrary, it is found in the literary conventions themselves (see Tammi 2006, 30).

While unnatural narratology aims at overturning the "mimetic bias", Chu (2010, 2) has posited her understanding of science fiction as an alternative to the views, which portray it as a genre that operates beyond (or even counter to) mimesis. She maintains that science fiction can generate mimetic accounts of reality even when it comes to things that defy straightforward representation (such as cyberspace or traumatic experiences), and by these means, science fiction performs crucial epistemological work: "To make something available for representation is to make it knowable" (ibid. 75). I support the spirit of Chu's argumentation, but I find its core assumptions problematic – including her usage of mimesis. I would not call speculative fiction, in general, a genre that operates beyond or counter to mimesis. Instead, speculative fiction should be seen as able to evoke mimetic responses in its users. As Phelan puts it, "responses to the mimetic component involve an audience's interest in the characters as possible people and in the narrative world as like our own" (2007, 20).

Chu's approach to science fiction is especially problematic when addressing inventions and thought experiments that are clearly impossible – which are, in other words, not modelled on the actual world as we understand it. In *Embassytown*, the words of the Language and the things they purport to represent seem to be completely intertwined. The linguist Scile asks Avice: "Does it ever occur to you that this language is impossible, Avice? [...] They don't have polysemy. Words don't signify: they *are* their referents. How can they be sentient and not have symbolic language? How do their *numbers* work? It makes no sense." (*Embassytown* 93; emphases original.) What is more, not only is their Language incomprehensible, but also the Hosts themselves, their culture and their actions. Avice herself realises the gap between the humans and the Hosts for the first time, when she explains to Scile that it is "no one's job to understand them" (*Embassytown* 84). In other words, the Hosts are not the typical aliens represented in many episodes of *Star Trek*, for example: strange-looking but with basically human concerns. Scile notes: "It's like we can only talk to them because of a mutual misunderstanding. What we call their words aren't words: they don't, you know, *signify*. And what they call our minds aren't minds at all." (*Embassytown* 93; emphases original.) Indeed, one could argue that we can view *all*

fictional characters as possibly existing, because of a similar misunderstanding: their minds are not minds at all.

In Miéville's novel, there is plenty of reliable information available on the world and the characters, but the problem is that this information does not easily (or, to use Chu's expression, straightforwardly) contribute to the building of a world in the ontological sense. This way, *Embassytown* makes the construction of the world challenging for the reader by means that are quite typical of speculative fiction in general. In Chapter 3, I observed the way my case study, *The Causal Angel*, slows down the readerly efforts of arranging information in the form of distinct particulars into meaningful patterns. As Farah Mendlesohn has observed, "how the reader is brought into the speculative world influences the ways in which that world can be described" (2008, xiv). This also entails specific forms of engaging the user into a relationship with the fictional. Making things appear in a context is, therefore, not so much about imitating the "virtually unknowable" aspects of the mundane world than it is about *positioning* us in a way that we are able to map a relationship with the various aspects and elements. Because the first person narrator is Avice, someone who is native to the fictional world, many features and elements completely alien to the reader are not explained or described in the narration. When the reader encounters the Ambassadors for the first time, for example, the nature of their being is not explained apart from their physical appearance and behaviour:

> "What about the rest of the Ambassadors?" I said.
>
> We looked around the room. Many of their colleagues had arrived now. I saw EsMé in iridescent dresses; ArnOld fingering the tight collars wedged uncomfortably below their links; JasMin and HelEn debating complexly, each Ambassador interrupting the other, each half of each Ambassador finishing their doppel's words. So many Ambassadors in one place made for a dreamish feel. Socketed into their necks and variously ornamental, according to taste, diodes in their circuited links staccattoed through colours in simultaneous pairs.
>
> "Honestly?" said EdGar. "They're all worried." "To various degrees." "Some of them think we're…" "…exaggerating. RanDolph thinks it'll all be good for us." (*Embassytown* 52–53.)

In the excerpt above, it becomes clear that the Ambassadors are doppelgängers, working in pairs, that they are exceptionally close to each other, and that they are linked together by some sort of strange, advanced technology. The way this linkage is accomplished, and in particular why it is accomplished, is revealed only later when the nature of the Ariekei Language becomes explicit. Until that revelation, the readers just has to cope with the strangeness of the fictional world. Likewise, they must do their best in decoding words such as "Turingware" (a software that simulates an apparent consciousness for the computers) or "miab" (a way of sending messages through the immer). Although strangeness of this kind is perfect for impeding or complicating the reader's world-processing, it originates from the world, which the narration presents as actual in a very tangible or *material* manner.

This is the source of strangeness typical of the fantastic and science fictional narration especially when a subjective viewpoint like Avice's first-person narration is used. It makes use of the linearity of the reading process and, in doing so, piques our interest in the manner of telling. What do readers do when they encounter strangeness of this sort? In the frame of unnatural narratology, Jan Alber has argued that only a reader who adopts the "Zen way of reading" can simultaneously accept the "strangeness of unnatural scenarios and the feelings of discomfort, fear, or worry that they evoke in her or him" (Alber 2009, 83). For some reason, Alber associates strangeness with the negative or unwanted feelings. Such feelings may be common among the readers who immerse into the kind of texts that Alber has examined in his article. In them, reality as we know it is somehow threatened. His assumption does not, however, hold true with novels like *Embassytown* where the strangeness itself is the object of interest. In Chapter 3, I discussed inventions such as "box-words" or fictional neologies which signal to the user that the world is different from our own. As Istvan Csicsery-Ronay notes, they "engage audiences to use them as clues and triggers to construct the logic of science fictional worlds" (2008, 5). An illustrative example of such a neologism is "trid jewellery" (*Embassytown* 49) which, after a while, opens up to mean *tridimensional* jewellery, or the aforementioned "miab", which turns out to be an acronym of "message in a bottle". These neologisms demonstrate the fact that fiction governed by ontological dominant can be successful and pleasurable, precisely because it does not give its world away too easily but challenges the user instead.

It is sometimes argued that while ambitious genre fiction seeks not to be genre fiction at all, only "literary" works ask us to pay attention to the telling. Miéville's novel completely rejects this two-tier hierarchy between literary and genre fiction. *Embassytown* is a science fiction novel through and through, especially when it comes to its ending where the conflict is resolved and humans and Ariekei find a mutual means of communicating, "Anglo-Ariekei". Still, as Sam Thompson (2011, 21) notes, *Embassytown* confronts us, "sentence by sentence, with the spectacle of language representing what can't exist". It, thus, turns our attention to the distance between the words and what they purport to represent: a practice which is present in the work of decoding words, for example. In this sense, science fiction like *Embassytown* is very much concerned with the manner of its telling.

The challenging features in speculative fiction also highlight the literary strangeness, because the materiality I mentioned above *slows down* the userly world-as-process – and, therefore, increases the difficulty and length of gaining perception on the idea that is being worked through, an aesthetic end typical of speculative fiction. As an example, in mainstream literature, the representations and descriptions of characters do not usually force the reader to pause the way that the excerpt above concerning the Ambassadors or the gap between humans and the Hosts does – despite the fact that Viktor Shklovsky has argued that the purpose of art in general is to "make objects 'unfamiliar'" (1998, 18). I have something more specific to speculative fiction in mind here, however. Csicsery-Ronay discusses the effect by means of science fictional grotesque, following Geoffrey Galt

Harpham who treats grotesque as an interval, a gap shared by the object and the perceiver: "The grotesque obstructs the mind from completing its effort of quick understanding, arresting it when it wishes to get on with its routine of knowing, and forces it to learn something it is not sure it wants to know" (2008, 157). Csicsery-Ronay (ibid. 3; 157–158) connects this with his overall aim of characterising science fictionality with of two linked forms of hesitation, a pair of gaps. One gap lies between the conceivability of future transformations and the possibility of their actualisation, while the other resides between the belief in the immanent possibility of those transformations, and the reflection about their possible ethical, social, and spiritual consequences. In *Embassytown*, the gaps seem to function towards a goal that differs from the conceivability or possibility of certain transformations. Instead, they have to do with our experience of reading speculative fiction in general, a feature that I will bring up next.

At the same time, though, science fiction and fantasy often make use of various conventional stock elements which do not require that much effort from the users – particularly from those familiar with these genres. In its heavily canonised form, fantasy fiction can be seen making use of the agreed-upon or *consensual* ways of conceptualising a speculative world which has become almost as familiar as our mundane world. Same conventionality concerns science fiction, too, although I would not go as far as Le Guin and refer to such conventions as elements of "trash forms of science fiction" (2011, n.pag), as they are often used as shortcuts and easily attained props to the fictional world. Classic elements include beings such as elves or dwarves (or alien races fulfilling a certain role, such as warrior races like the Klingons in *Star Trek* or an elder race like the creators of the Reapers in the *Mass Effect Trilogy*), spaceships, magical weapons (such as swords), and so forth. These elements are usually meant to be taken for granted, and they are made visible only when they are transgressed – a strategy which is aptly demonstrated by contemporary fantasy fiction like George R.R. Martin's *A Song of Ice and Fire* (1997–), where, for example, the classic representation of a fantastic dwarf is transgressed in the character of Tyrion Lannister.[73] The effect on the reader is, of course, rather different from the one evoked by *Embassytown*. Martin's novels toy with the reader's expectations on the novel at hand as fantasy fiction. In a sense, transgressed elements such as the character of Tyrion may seem *unnatural* in the eyes of the reader who has certain core assumptions about fantasy fiction as a genre.

For its part, Miéville's novel highlights some features inherent in the reading of all literary fiction by means of speculative worldbuilding. Relating to the human protagonist Avice's description of herself as a child is not difficult: "[M]y face then was just my face now not-yet-finished, the same suspicious mouth-pinch or smile" (*Embassytown* 8). However,

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73   Tyrion Lannister is one of the major characters in Martin's novels. He is a dwarf, but not in the sense of Germanic folklore or post-tolkienian fantasy fiction: he suffers from dwarfism, and is short in stature, resulting from a medical condition. The fact that the character of Tyrion has various attributes commonly associated with dwarves of folklore and fantasy fiction (e.g., wisdom, wealth, using axe as a weapon in a battle) is a source of both humour and estrangement, as the reader recognises them as the conventions of fiction.

grasping her nature as a *simile* in the Language can be much harder. Simile is a rhetorical device that compares two different things that resemble each other in some way, usually comparing some unfamiliar thing to a familiar thing one known to the user. Hence, it is a device both of art and explanation. In the Language, nothing that does not actually exist can be referred to, so in order to make such a device speakable, the Hosts need to stage the events, objects or processes that it describes. As a result, Avice ends up "performing" a simile for the Hosts, and she is canonised in the Language as follows: "They spoke me: they said me. [...] *There was a human girl who in pain ate what was given her in an old room built for eating in which eating had not happened for a time.*" (*Embassytown* 28; emphases original.) In time, Avice's simile is shortened with use into "a girl ate what was given her".

Here, Miéville's novel confronts us not so much with the distance between the words and what they purport to represent, but with the way the abstract and the concrete are intertwined. The practice of performing or *enacting* similes[74] is equal to the act of materialising something abstract, such as a comparison made for rhetorical purposes. The Hosts need to make things literally appear in the world in order to be able to speak them, while for us, it is usually enough to grasp them in an abstract context of some kind. In this, their Language is perhaps not so foreign to us after all: our words not only "stand for" things but also participate in their creation. I referred to this above, when I noted that from the user's perspective, worlds are vehicles for both communication and imagination. The practice of making things appear in a context is about positioning us in a way that we can map a relationship with the unknown and the strange. In contrast to Chu, who has celebrated the science fictional practice of "the making of knowledge" (2010, 75), I would like to emphasise that speculative fiction is not alone in making knowledge, but relies on a tradition of rather particular conventions in doing so.

Above, I suggested that particularly in speculative fiction, creating something that should be read as a concrete representation of something possibly existing can be about making something abstract appear in a way which is communicable and shareable. Decoding the box-words, for example, is part of a larger interpretative process, in which the reader can view a world that is completely alien, yet addressing some issues in her mundane world. In speculative fiction like *Embassytown*, both imagining a concrete environment, entities and such and the more abstract relations between them, the events and locations require much work. From this viewpoint, the materiality of speculative fiction is connected to the concretisation of certain ideas and communicating them by means of "materialising" them. A practice such as this is the same as the Hosts' act of performing or enacting similes. *Embassytown*, for example, can be viewed as speculating the nature of human language by setting it side by side with the fantastic innovation, the Ariekei Language.

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74   Chapter 6 will develop my analysis of worldbuilding in relation to the enactivist theories which, in short, propose an alternative to dualism as a philosophy of mind. They emphasise the interactions between the mind, the body, and the environment, seeing them all as inseparably intertwined in the mental processes. (See Thompson 2007, 13.)

Furthermore, Miéville's novel thematises the functions of speculative fiction: the process of slowing down or making something visible is connected with the exploration of the border between the familiar and the strange, a hallmark of speculative fiction. The Ariekei of *Embassytown*, for example, are not a metaphorical representation of "the alien", but in the context of the fictional world, are very concrete, indeed. However, they also represent strangeness we encounter every day: something that we cannot easily categorise or naturalise or subordinate to our meaning-making protocols. They enact an abstract concept, perform it. When they are read or interpreted as "matter", they perform an encounter with the unknown. In this, Miéville's novel becomes a simile in its own right. It compares an unfamiliar thing, the Language, to a familiar thing, human language, which is known to the reader. As such, it engages in a feat of *meta-materialisation*, where materialisation as a means of communication in speculative fiction is materialised in itself. The practice is both of art and explanation. This sort of innovation would not be possible, or at least not as accessible, if it were not situated in a world that serves as a meaningful context for it. As Gabriel puts it, to exist is to appear in a context, and by creation of such a context, *Embassytown* calls the readers to make a leap towards something that does not yet exist.

My point is not that this practice would be unique to science fiction or fantasy but that a double structure of this sort is present in all works of fiction. Maria Mäkelä (2013b, 164) has argued that in the novelistic techniques of Flaubert, Tolstoy, and Dickens, the constant, doubled motion between surface and depth is what introduces a delay between a text and cognition. Works like *Embassytown* just bring it to the fore by slowing down the reception of the worlds as "matter", not only cognitively "defamiliar". This way, slowing down the constructive work is also about making the required work visible. The materiality of speculative worlds is already apparent in Tolkien's conception of the coherence of an imaginary world. While laying out his view of fantasy as a developed device, not merely a "fanciful" one, Tolkien notes that anyone who possesses the fantastic device of human language can say "the green sun". However, to make up an imaginary world inside which such a sun would be credible, "will probably require labour and thought, and will certainly demand a special skill, a kind of elvish craft" (1983, 140). In addition to discussing the credibility of the created, Tolkien's discussion brings up an essential feature in the aesthetics of speculative fiction. A world, which lends itself to the communication of something meaningful to the user, is much more interesting than a world, which solely exist for the purpose of being a prop for battles situated in pseudo-medieval setting or in space. Next, I will analyse this in relation to the "logistics" and the abstract and the material in userly work.

5.3   Abstract and Material in Userly Work

Not only can the worlds be understood in more than one sense, but so can the roles, responses and actions of the users. Chapter 4 discussed the way the player of a digital role-playing game is positioned to use various resources while performing in an emergent story. In literary fiction, the reader is similarly engaged as an active participant in the creation of something that does not yet exist, and worldbuilding is used to communicate the abstract by means of the particular and the material. Some advances have been made in the field of cognitive narratology in providing tools for emphasising and analysing the readerly work when it comes to worldbuilding. Alan Palmer, who builds his approach on the possible worlds theory, suggests that reading – an access to a storyworld – consists of three elements. These are "the source domain, the real world in which the text is being processed by the reader; the target domain, the storyworld that constitutes the output of the reader's processing; and the system of textual features that triggers various kinds of reader-held real-world knowledge in a way that projects the reader from the source domain to the target domain" (Palmer 2004, 34). In Palmer's model, therefore, worldbuilding as a practice operates in one direction only: from the source domain to the target domain, while the system of textual features fulfil the mediating function. Fictional world is obviously dependent on the world where the reader who makes the choices and does the interpretative work, resides, but it also guides the reader to draw specific conclusions about the actions that she should take while reading, by suggesting assumptions and interpretations. As I have suggested above, the worlds are closely related to the interpretative process and meaning-making, and the user's awareness and assumptions of the constructed nature of the world can guide her interpretations.

I have argued that in order to imaginatively immerse into a fictional world we need to understand the way it is built and maintained, and this has to do particularly with its characters. Most of the theories on fictional worlds risk taking an analytical jump over the concrete work of art and, in doing so, ignore the devices and conventions involved in its construction. For example, Herman (2002, 15) has suggested that in order to understand reality, which is separate from her own world of experience, the user has to imaginatively transport herself into those spatiotemporal coordinates which determine the perception and interpretation of a fictional world. According to his argument, even the first sentence of *Embassytown* ("The children of the embassy all saw the boat land") would require the reader to perform a deictic shift into the world where the seeing and landing occur.

Marco Caracciolo, who has tried to redefine the metaphorical manner of being transported into a fictional world, has approached the phenomenon using the concept of a "reader's virtual body" that is "taken into" an imaginary world as a part of the mutual construction. He (2011a, 118) argues that one of the fundamental reader responses is "producing mental simulations", and bases his idea on the assumption that "[c]omprehenders are always virtually presented in the mental simulations, since imagination and perception seem subject to the same physical constraints: they are both centred on the perceiver's (imaginer's) body" (ibid. 134). In my view, the idea of a reader's virtual body seems to ignore

the duality that is present in the experience of reading literary fiction. Caracciolo's idea thus points into the right direction, but it does not take the constructed nature of literary fiction into account the way it should.

In addition to the discussion on worlds, the stance of *either/or* has had its effect on the analysis of the user's involvement with fictional characters. Emotional involvement with them, in particular, has been viewed as the user's confusion between fiction and reality, as her *belief* in fictional characters and pretending to feel what they feel by using her imagination. Uri Margolin, for example, has argued that as users we are "operating within the confines of a make-believe world, pretending that the narrators and storyworld participants exist independently of the text which actually creates them via semiotic means" (2003, 273). According to him, the user's interpretative work concentrates on making the imaginary world life-like. As Walsh (2007, 156) critically notes, the represented actuality – world as an ontological construct – "becomes the object of the assessment, and some substitute of belief is therefore seen necessary in order for emotional involvement to occur". This, furthermore, assumes "an irreducible conflict between a sense of character as being (which facilitates belief and hence emotional involvement) and a sense of character as construct (which inhibits both belief and involvement)" (ibid.). I agree with Walsh in that we need to resolve such an irreducible conflict in order to understand the user's experience of involvement with the imaginary world and its characters.

Instead of evoking the idea of belief, cognitive narratology has developed other kinds of tools based on our experience of the mundane world, in order to explain the user's involvement or understanding of the characters. Palmer (2004, 203), for example, suggests that the "basic cognitive frames relating to fundamental fictional world construction" impose a basic uniformity on fictional worlds that is necessary in order for us to be able to access them. Building upon Ryan's theory (see 1991) based on possible worlds, he further argues (ibid. 175) that the reader can understand a character's mind as an embedded narrative by making use of what he calls the *continuing-consciousness frame*. This represents various causal networks behind certain character's actions, as the reader can construct "the whole of a character's mind in action: the total perceptual and cognitive viewpoint; ideological worldview; memories of the past; and the set of beliefs, desires, intentions, motives, and plans for the future of each character in the story as presented in the discourse" (ibid. 183–184). In other words, the causal networks provide explanations and motivations for character action. From the idea of such networks and basic cognitive frames, Palmer derives the assumption that we need to be able to use the real world frames to reconstruct storyworld or "they will remain unintelligible" (ibid. 203).

The concept of the continuing-consciousness frame is interesting in the sense that it reaches towards the understanding of how material, constructed representations of something (such as a character) are closely intertwined with cognitive constructions (such as the understanding of a character as a possibly existing being). However, it is not without problems. First of all, it confuses making sense of people and their interactions

with the prototypical content of narratives and interpreting a novel, something I criticised in Chapter 3. As a result, Palmer does not pay attention to the fact that the frames which enable worldbuilding are not necessarily familiar to us from the "actual actual world". Instead, they can be located in the conventionalised usage of certain structures and representations.[75] I referred to these above when I mentioned how the character of Tyrion Lannister can be seen as transgressing the conventional representation of a dwarf in fantasy fiction, and how descriptions of speculative beings like the Hosts can force the reader to pause.

Secondly, in speculative fiction, the networks which motivate the actions of characters and creatures can be quite divergent from those of real people. In Chapter 3, I analysed these in relation to the various frames of interpretation which the reader can use while making sense of Rajaniemi's *The Causal Angel*. Here, I would like to bring up a slightly different viewpoint to the same phenomenon: the way different fantastic beings relate to time. The most famous of such beings are Tolkien's elves, who do not age, fall ill or die of natural causes and the Ents, the shepherds of trees, who do age but do so very slowly and only by becoming more tree-like. The divergence from the actual cognition of this nature is relevant to the reader's interpretative work in the case of Tolkien's *Lord of the Rings*. The different experiences of being in time can be interpreted as motives for actions of the various people in Middle-earth, as well as an artistic concretisation of different stages of human growth (childhood, adulthood, old age). Another classic example of characters with different motivations and mind-sets are the androids, and I will return to them in Chapter 6.

All in all, fantastic or science fictional beings such as the elves of the androids are made understandable and imaginable in relation to building and comprehending the context in which they appear. In relation to RPGs, I mentioned how the implied position can be created by representing something other than a fictional character itself. Describing a strange world – and, especially, describing it with expressions like box-words which force us to slow down – creates an even more clearly defined implied position "inside" the fictional world. Such an effect is especially pronounced in novels like *Embassytown*, where the user's access to the fictional world is tied to the position of the first-person narrator. From this viewpoint, userly responses are not fundamentally about sustaining a believable illusion, or born from such an effect. Rather, they are a consequence of the process of reading and understanding the text: the characters are produced by their perceptions and not the other way round. In this sense, concepts such as Herman's (2002, 25) deictic shift are untenable, because they require the user to first transport into the spatial and temporal coordinates of perception. As Walsh (2007, 157) puts it, representation "follows from, rather than preceded the comprehension of the text, as the product of the interpretative (and therefore tacitly evaluative) process". As I suggested above, the representations, in general, result from

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75 Such structures, frames and representations are discussed in more detail in Chapter 8, where I will analyse fan fiction.

our attempts to make sense of and understand the various aspects of our reality. This does not completely dismiss concepts like Palmer's continuing-consciousness frame, however: they need to be seen as descriptions of complex evaluative interpretations which are based on the discursive elements.

Constructing a continuing consciousness which, in a sense, represents a character's mental model of the fictional world, is one of the userly ways of bringing order into "the textual chaos". It provides the means for determining, for example, whether an event presented in the discourse is real or belongs to a belief, wish, fear, dream, hallucination, or something generated by a computer simulation. This is one of the ways in which the possible worlds theory attempted to solve the afore-mentioned problem of naming "all that is true" in a fictional world. However, in literary fiction basic mechanisms of this kind can be brought to the fore by stretching them, toying with them, or even obstructing them from functioning.[76] As an illustrative example, let us consider the following excerpt which describes one of the Ariekei:

> Waving on a stalk-throat by its neck, its Cut-mouth terribly like human lips, the Host muttered; and at the level of our chests, where its body swelled, its Turn-mouth opened and coughed, emitting little rounded vowel sounds, *tao dao thao*. [...]
>
> stepped forward on four legs a little like a spider's, long, too-jointed, dark-haired, and extended its wings: from its back its auditory fanwing, in many colours; from its front, from below its larger mouth, its limb of interaction and manipulation, its giftwing. (*Embassytown* 91–92; emphases original.)

This excerpt would play a very different role in userly worldbuilding if it were possible to interpret it as Avice's dream or hallucination instead of viewing it as a description of the world presented as actual in the discourse. Above, I referred to this when I suggested that although strangeness of this kind is intended to for impede or complicate the reader's world-processing, it originates from the world which the narration presents as actual in a very tangible or *material* way. We only encounter the strangeness of the Hosts so powerfully because they are not metaphorical but material: they are concrete "blanks" cut out of – or brought in the middle of – the context in which they appear.

All in all, constructing the first person narrator Avice's "continuing consciousness" – viewing her as a possibly existing person – is one of the mechanisms directing the interpretation of *Embassytown* as a whole. This process points towards the so-called real-life experience in the sense that it creates an illusion of a linear progression of events, the experiencer of which is perceived as a human-like corporeal being, embodied in time and space. It, thus, participates in creating an impression that events in a fictional world happen to somebody and have an effect on somebody similarly to the world of our own experience. In part, this illusion is created precisely because the representations result from

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76   Similarly, certain "unnatural" but conventionalised elements (cf. Alber et al. 2010, 130), such as narratorial omniscience, streamlined plots, definitive closure and the reflector-mode in narratives of modernism can be made visible – especially in speculative fiction, and this will be the topic of Chapter 6.

our attempts to make sense of and understand the various aspects of our reality, and these attempts, like any human experience unfolding over the course of time, are part of a linear process. In relation to the encounters with difference in works of fiction, the crucial factor in Miéville's novel is the way the so-called human thinking is placed side by side with something unfamiliar, strange. There are two important aspects related to this which I want to discuss here at the end of this chapter.

The first has to do with the idea that works of fiction are modelled on the actual world, an approach which ignores the world-external perspective and therefore the other side of the awareness that, according Halliwell, results from "appreciation of both medium and 'object', of the material artefact and the imagined world" (2002, 181–182). According to the views that argue for the close correspondence between fiction and the actual world, worldbuilding as a process is similar regardless of whether it is directed towards our mundane reality or works of fiction. In my view, the way worldbuilding functions as a rhetorical practice in works of fiction sets it apart from any mundane processes of making sense of the world surrounding us. As Walsh (2007, 160) suggests, both mimetic and thematic dimensions of fiction should always be seen rhetorical from the outset. When it comes to the character of Avice, for example, the way we understand her as a possibly existing person is based on the literary composition of her mind, and not on her being fundamentally similar to any "real" counterpart. As readers, we habitually misunderstand and call a mind something that is not a mind at all. Fictional first-person narrators like Avice can craft their experiences in a manner that is motivated both linguistically and artistically despite the fact that they are hardly ever aware of how constructed they are.

This is concretised in the construction of *Embassytown* as a novel, an artefact in its materiality. It begins with a chapter called "Proem" which sheds some light on Avice's past: how she grew up on Arieka, how she became an immerser and how she met Scile, her future husband. After the first chapter, the narration alternates between two kinds of chapters, titled "Latterday" and "Formerly", before being merged into one timeline, halfway through the novel. The former ones describe the time before the crisis, while the latter ones recount how the impossible ambassador EzRa arrives on Arieka and changes everything. The ambassador's speech affects Ariekei like a drug, and little by little they slip into the pathetic state of drug addicts. The whole planet is plunged into an ever worsening state of decay, and finally its people find themselves on the brink of a war. As a result of the novel's structure, the reader reaches the narrative present only at the very end of the novel and during a few short fragments between the chapters, such as this:

> Later, the scale of the crisis that unfolded made this, retrospectively, a guilty memory, but when I first realised that things were not going quite to plan, the first time I met EzRa at the Arrival Ball, when I sensed that they were spreading some expected chaos in Embassytown, it had made me happy. (*Embassytown* 187.)

Embassytown questions claims made by, for example, Palmer according to whom the reader constructs the minds of others in novels "just as in real life" (2004, 11). Here, the double perspective on fiction crops up again: the structure of the novel backs up the idea of Avice's "voice" as a consciously constructed part of the similarly constructed work of art. In the end, the purpose of my argument is not to declare concepts such as the continuing-consciousness frame useless, but to point out their artificiality, conventionality, or their unnaturalness, if you prefer. The way the reader makes sense of fictional characters and engages with their experiences of the world around them can be compared to the way she makes sense of the literary text in general. Mäkelä (2013a, 138) has aptly noted that in literary representation, the cognitive trick lies in the fact that telling, experiencing, and the construction of a fictional world and its agents all happen on the same level – that of narrative discourse.

The second aspect I want to point out is that the world of *Embassytown* is understood as both an ontological construct, a possibly existing container of all things spatiotemporal and imaginary, and as a thought experiment built in the form of a simile, reminiscent of Suvin's novum. In the latter sense, gaining a perception of it is a work-in-progress running through our engagement with the material artefact. In this, the whole idea of a constructed world which foresees its own making comes down to my suggestion that Miéville's novel becomes a simile in its own right. It compares an unfamiliar thing, the Ariekei Language, with a familiar thing which is human language, known to the reader. Here, the novel engages our imagination in making a leap towards something that does not yet exist, both in the sense of making a fantastic innovation such as the Language and making up a context where certain things about human language appear. The practice is both of art and explanation: *Embassytown* is full of recognisable and conventional elements, which are there for the reader to grasp, not only "just as in real life", but also in relation to other artefacts. The rhetorical dimension of the Hosts (and their Language) is, clearly, in materialising the unknown and in making it communicable. Through them, *Embassytown* depicts encounters in the material world with beings, things and organisms whose identity is not defined by our reasoning protocols. Similarly, as the realist representation can be viewed as a rhetorical end of fiction, so can the science fictional representation of the Hosts. In this, mimetic objectives may be subordinate to rhetorical objectives, or to the objectives of a speculative thought experiment.

At the end of Miéville's novel, both the conflicts and strangeness are resolved. When the Hosts finally learn to "lie" – in other words, they learn to speak in human language – they cease to be incomprehensible. On the one hand, this development could be read as a hopeful description of the process, in which two initially distant communities resolve their conflicts, concretised in the way they *concretely* learn to speak the same language. On the other hand, the turn resembles colonisation. The humans arriving to Arieka are like the conquistadors of the 16th century, infecting the aboriginal people with their own viruses and destroying the indigenous culture in the process. In the context of Miéville's

other works,[77] the ending can also be seen as a result of his determination to write a classic science fiction novel. The process of colonisation is purposely seen through the utopian lenses of space operas like *Star Trek*. In the next chapter, my case study will present a rather different take on space operas and delve deeper into the construction of identities and strange protagonists, who nevertheless offer the user a chance of engaging with the world immersively.

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77   Miéville has said that he plans to write a novel in every genre. All of his novels include fantastic (or supernatural) elements, but in addition to this, they make use of genres such as steampunk (*Perdido Street Station*, in particular), nautical fiction (*The Scar*), Western fiction (*Iron Council*), hardboiled detective fiction (*The City and The City*), urban fantasy (*Kraken*) and young-adult fiction (*Railsea*).

6   DOUBLE CONTEXT AND LOGIC
IN WORLDBUILDING

In this chapter, I will explore the relationship between worldbuilding and the userly experience of double context in the engagement with works of fiction. Chapter 5 discussed the traditional options of understanding the world *either* as an ontological construct *or* a cognitive process from the userly viewpoint, and argued that in order to fully appreciate the rhetoric and the aesthetics of speculative fiction, we need to consider the ways these two intertwine. In other words, for the user, the world is a container of particular spatiotemporal things and a more abstract system or context of relations in which these things appear. If we accept that the meaning of a word or a thing is neither innate nor natural, but depends upon the context in which we encounter it, in speculative fiction, such context is usually much more definite, or at least less abstract, than a broader system or language[78], or a rule-set in games – of the oft-mentioned logic of everyday interactions and happenings. Earlier in this study, I have already put forth the idea that in speculative fiction, "modelling for" means to build a scale-model for developing some of the possible consequences of a certain idea (see McHale 2010). Here, I connect "modelling for" with the discussion of characters and their identities by means of how they are constructed through the userly experience of the two contexts in the engagement with works of fiction.

In relation to the theme of encounters with difference, I will focus on the ways my two case studies enact and transgress identities by means of worldbuilding, instead of reflecting worlds as "end products". My approach to the double context of fiction draws both from the recent concepts developed in feminist studies and on the enactivist view that a world is achieved rather than given (see Noë 2012). With the double context, I simply wish to restate my concepts of the world-external and the world-internal perspectives in the userly experience of how works of fiction become meaningful. There is the context of here-and-now of interaction, the time and place of encountering a work, and the context of a fictional

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78   In linguistics, Noam Chomsky's "Colourless green ideas sleep furiously" in found his book *Syntactic Structures* (1957, 17) is a famous example of a sentence that is grammatically correct, but semantically nonsensical. Its purpose is to demonstrate the distinction between syntax and the semantics. However, it also highlights the importance of context, as there have been competitions where writers have attempted to provide Chomsky's sentence meaning through suitable context.

world as immersive both in the sense of a construct and a process. In the frame of applying the enactivist view to the works of fiction, Marco Caracciolo suggests that "human meaning-making can detach itself from the here and now, exploring possibilities that would be difficult or even impossible to consider in actuality [...] through the recipient's imaginative enactment of the world of significance" (2011b, 373–374). Again, I want to contest the idea of "detachment" and argue that both the here-and-now and the imagined possibilities matter. Philosopher Alva Noë, for example, has brought up the duality of the perceptual experience: action is integral to our perceptual experiences, but so is the fact that we have learned the actions that make the world present to us. He, therefore, suggests that perceiving should be seen in terms of an active exploration of the world rather than passive reception of data from it (Noë 2012, 70; see also 2004). I look at the double context from the viewpoint of skilful actions of the user making the world available to be experienced. This is an especially interesting view on perception when it comes to digital games, as the imaginative mode of engagement is interwoven with the actual agency. This is the way digital games can address larger thematic issues and achieve rhetorical goals: it is accomplished through rule-based gameplay, where both the designer-led, often generic, conventions and devices *and* how the player chooses to use them are important.

I have chosen as my case studies *Ancillary Justice* (2013, *AJ*), a science fiction (or space opera) novel by American writer Ann Leckie and *Deus Ex: Human Revolution* (2011, henceforth *Human Revolution*), an action role-playing game (RPG) developed by Eidos Montreal and published by Square Enix. Both revolve around a very classic science fiction theme, the question of humanity side by side with the dichotomy of the natural and the artificial. Because both works create protagonists who embody the encounter with the unknown, speculative worldbuilding as a practice of working through a premise in a processual manner is here connected to the construction of characters and their identities – and the possibility of viewing them both as abstract and as material. *Ancillary Justice* introduces us to a character known as Breq, who is both human and non-human. Nineteen years ago, Breq was the *Justice of Toren*, a colossal sentient star ship controlling thousands of ancillaries, brain-wiped "corpse soldiers" in the service of the galaxy-wide Radch Empire. It is eventually revealed that an act of betrayal tore the *Justice of Toren* apart, and now Breq, the last remaining fragment of the ship's consciousness, has one purpose – to avenge the death of her colleagues on the Radch emperor Anaander Miaanai. *Human Revolution*, on the other hand, focusses on the ethics of transhumanism in a near-future era where new technology is used to enhance human abilities with augmentation surgery. At the beginning of the game, the playable character Adam Jensen, who works as the security manager at a biotechnology corporation Sarif Industries, is mortally wounded and submitted to surgeries that save his life but also replace large parts of his body with advanced prostheses. During the game, Adam's personal goal is to come to terms with his fundamentally altered body and, with it, his new identity.

Consequently, the thematic issues are embodied in these two characters and their perceptions. In *Human Revolution*, the player has to take a stand on transhumanist issues in the creation and development of Adam as a character, while Ancillary Justice more or less "unmetaphors" our understanding of gender and the relationship between mind and body. The protagonist Breq transcends the gender categories of man/woman, firstly due to her status as a former ancillary, and secondly because of the way that Breq's first-person narration reflects the Radch culture and defaults to the feminine. Breq's point of view presents everyone as she/her, and Breq's own gender is completely opaque. The possibility of technologically augmenting people and the ability to construct highly evolved artificial intelligences such as the *Justice of Toren*, offer a starting point to the questioning of the concept of natural, both in the sense of mimetic evocation of the mundane world and in the sense of the innate or essential. In speculative fiction such ideas can be explored through the character positions inside a world, where both their actions and identities need to conform to certain regularities and possibilities, which can be quite divergent from the so-called real-life contexts. This way, they can be seen to alert us to the ways we, in general, construct differences and opposing viewpoints, by means of worldbuilding.

6.1   Constructing/Transgressing Identity in Speculative Fiction

This subchapter will observe *Ancillary Justice* and *Human Revolution* in the light of the ways they become available to experience as world-like through their protagonists, concentrating especially on the ways they enable us to construct and transgress identities. The rhetorical potential of this practice is partly found in the user's ability to conceive of the fictional world as possibly existing from a certain character position, as dependent on the character's actions and perceptions "inside" it. I do not, however, want to imply that this would simply be tied to the understanding of a world as a life-like environment with believable characters – the view of world as an ontological construct ruled by reference or as a proxy for our mundane world. Instead, I introduce Nelson Goodman's (1981) influential analysis on worldmaking and the enactivist theories as theoretical points of comparison.

Goodman's analysis is based on the constructivist assumption that human beings do not have access to an objective reality. Rather, they generate subject-dependent constructs or *versions* of their world. Worldmaking is thus portrayed as a process which actively constructs patterns and versions instead of reproducing something given. The enactivist theories on perception seek to overthrow the idea that imagination is dependent on internal representations. In the enactive paradigm, "availability" or accessibility of objects and spaces is dependent on our own physical action in relation to the world. Evan Thompson argues that "a cognitive being's world is not a prespecified, external realm, represented internally by its brain, but a relational domain enacted or brought forth by that being's autonomous agency and mode of coupling with the environment" (2007, 13). Human perception is, therefore, not viewed as a mere receptive medium, but as a sensorimotor skill whereby the

embodied action of the perceiver makes the world available to experience (see O'Regan and Noë 2001).

Read against Goodman's formulation and the enactive paradigm, the current approaches to fictional worlds emphasise worlds as a necessary "end products", instead of analysing the "systems of description" (Goodman ibid. 2) or looking at the actual engagement with the works of fiction. One of the biggest problems in such approaches is that they are tautological. As Richard Walsh points out, "every aspect of contemplating the emergent fictional world in relation to the real one has necessarily been presupposed in the interpretative process of constructing that world" (2007, 44). In my view, the problems further include the fact that when a world is seen simply as an end product or an entity, the analysis of works such as my case studies typically settle for cataloguing the various recurring elements, recounting what sort of a world does a certain text "create", or contemplating how it differs from "our world". Marie-Laure Ryan's recent outline of a storyworld, for example, asserts that a world consists of recurring elements: existents, the setting, physical laws, social rules and values, events and mental events (see 2014).[79] Throughout my study, I have argued that as a communicative and rhetorical practice, speculative worldbuilding engages the user into working the speculative premise through in a processual manner. Neither *Ancillary Justice* nor *Human Revolution*, therefore, stop merely to present an environment that is different from our mundane world.

Furthermore, in its fictional form, speculative worldbuilding gives us a sense of the idea and the elements used in working it through, and juxtaposes these with the sense of the possibly existing world. As Merja Polvinen (forthcoming) suggests, we need to turn our focus towards the fact that the act of perception "is also of the artistic object itself". Thus, the actions we take while reading or otherwise being engaged with a work of fiction are based, not only on our sensorimotor skills as they are employed by world-like qualities, but also on our learned understanding of fiction and its differences from the real-world perceptions. The awareness of the artifice or artistic objects themselves should not be disregarded – an idea that I have discussed with the concept of the world-external perspective. In the frame of enactivism, Caracciolo risks conflating enactment, not only with stories, but also with interpretation when he suggests that "producing and receiving stories is one of the activities thereby human beings interpret – and therefore, enact – the worlds they live in" (2011b, 282). Instead, both of my case studies can be seen addressing the ways we, in general, construct differences and opposing viewpoints by means of worldbuilding.

Instead of focusing on a fictional element – such as a sentient star ship capable of distributing its consciousness into thousands of fragments, or a posthuman melding of man and machine – we should concentrate on the way such elements are used as a part of larger construct, therefore enabling the telling of a story or the introduction of a thematic issue, for instance. The "what if" question should similarly be viewed as a device, a starting

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79   Ryan's sketch is especially designed for use in transmedial narratology, as Ryan's project aims to understand how fictional worlds can still be recognisable as certain worlds when they travel from one medium to another – from literature to film, for example. I will return to transmediality in this sense in Section IV.

point, and not (only) as something that is significant in itself, because the aesthetics and the rhetoric of the speculative practice lie less in what actually is in a work of fiction than how it is worked out. One of the most famous examples dealing with posthuman characters, Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968), cannot be seen as simply asking "what if we could construct androids that were physically indistinguishable from humans?" The actions that make a speculative world present to us are often something we take quite consciously. We have learned, in other words, to "look at" works of fiction in certain ways, and I argue that when it comes to speculative fiction, worldbuilding or world-like qualities play an important role. The ways works of speculative fiction become meaningful to us are learned skills, and this is why I will next discuss my case studies in their generic context which is transmedially relevant.

Ancillary Justice and *Human Revolution* bring up various abstract networks of relations which include, for example, the conventions of genre fiction (such as space opera, cyberpunk or film noir), affordances of a particular medium, intertextual links, and when it comes to games, the rule-set. Both of these works make use of certain kinds of elements, conventions and structures, which not only reach certain rhetorical goals, but also guide the users to "look at" them in certain ways. Noë argues that technology can expand the world's availability to us, as what is available to us depends both on what there is, and crucially, on what we can do: "What we can do depends in turn on understanding, know-how, but also on tools and technology [...] and on where we find ourselves and what environmental or social resources are available to us" (2012, 114–115). As Chapter 4 argued, this is exactly what the digital media and speculative fiction do, too.[80] I am not, however, suggesting that speculative fiction would expand our knowledge of the mundane reality *as such* but rather our meaning-making processes: this is a crucial clarification. Moreover, there are fictions, which expand our knowledge of the ways that fiction expands our knowledge.

The meaning-making processes central to both *Ancillary Justice* and *Human Revolution* concentrate on the questions of identity. Broadly speaking, identity is a person's conception and expression of their own self-image, but in relation to works of fiction, one can also understand it as a tool by which the user can make meaningful sense of the characters. Narrative is often strongly emphasised in this connection, in the capacity of "basic human strategy for coming to terms with time and change" (Herman 2009, 2). Chapter 3 already discussed the various ways contemporary speculative fiction can address identity in relation to other frames than ones offered by narrative and inter-human, social interaction. I located such ways in the practice of worldbuilding, which joins together the abstract, general theories, ideas and models with the specific, particular characters, sequences of events and locations. Moreover, identity is *relational* and *contextual*. It has to do with the aspects of a person that make them unique, different from (but also similar to) others. As an example, gender identity dictates to a significant degree how an individual views

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80   Chapters 7 and 8 will explore the wider possibilities on "what we can do", made possible by the new media and technologies in relation to worldbuilding.

herself, both as a person and in relation to other people, ideas, and nature. When it comes to userly engagement with fiction, the contexts include the generic conventions, devices, and medium-specific affordances.

The concepts of gender identity and generic context are especially suited for opening up a discussion on Leckie's novel. *Ancillary Justice* can be seen as part of a continuum where the speculative encounter with difference is used in focusing on gender concerns. As Brian Attebery (2002, 5) notes, until the 1960s science fiction did not pay much attention to exploring gender and sexuality.[81] After this, however, writers like Ursula K. Le Guin, Joanna Russ and Samuel R. Delany have been writing novels, where these issues are placed in future societies or on other planets, with the result that by the turn of the century, gender had become an "integral part of the genre's intellectual and aesthetic structure" (Attebery ibid. 10).[82] Veronica Hollinger has been more critical and pointed out that even though science fiction as a genre would be ideal for providing "imaginative challenges to heteronormativity", it often passes on that opportunity. She continues: "On the whole, science fiction is an overwhelmingly *straight* discourse, not least because of the covert yet almost completely totalising ideological hold heterosexuality has on our culture's ability to imagine itself otherwise" (2000, 198). This was acknowledged in the end of Chapter 3, as the template of human male thief always remains the same for the protagonist in Hannu Rajaniemi's Jean le Flambeur trilogy. Despite its radically advanced posthuman society, *The Causal Angel* seems to adhere to the idea that attributes like gender or sexuality cannot be part of the play. *Human Revolution* follows this pattern, as well, since the player cannot choose gender or sexual orientation of the playable character in the way this can be done in digital games like open world RPGs, which aim to give the player as full a range of character creation options as possible.

The explorations of gender and sexuality are connected with the discussions of posthumans and cyborgs, with the aim of disputing the way that differences are understood in terms of binaries or dualisms. While the New Wave science fiction and feminism began the shift from outer space to inner space, cyberpunk, a literary movement developed in the 1980s, turned to cyberspace and focussed on the human/machine hybridisation effectively captured in the metaphor of the cyborg. While *Human Revolution* can be read against the backdrop of cyberpunk, the way *Ancillary Justice* discusses the boundary between human and non-human in relation to portraying a protagonist who lacks a discernible gender aligns it also as a part of the continuum initiated in 1960s. The most famous example of

81 From the 1960s onward, two movements affected the most radical changes on science fiction so far: the New Wave and feminism. As Dunja M. Mohr notes, "the former brought along a growing ecological awareness and cultural pessimism, while the latter initiated a shift from *science* fiction to science *fiction*, from the foregrounding of outer space to inner space" (2005, 43).

82 Not all science fiction writers and fans agree: Hugo Awards in 2015 saw the emergence of a group of science fiction writers who named themselves the Sad Puppies. They wanted to reverse what their spokesperson Brad Torgersen "called the Hugos' favouring of works that were niche, academic, overtly to the left in ideology and flavor, and ultimately lacking what might best be called visceral, gut-level, swashbuckling fun" (Flood 2015, n.pag).

this continuum is probably Le Guin's *The Left Hand of Darkness* (1969), a novel set on a freezing planet called Winter, where its citizens spend the majority of their time as asexual potentials, adopting sexual attributes only once a month during a period called "kemmer". In her essay "Is Gender Necessary?", originally written in 1976, Le Guin ponders: "Why did I invent these peculiar people? Not just so that that the book could contain, halfway through it, the sentence: 'the king was pregnant' – although I admit I am fond of that sentence" (1992, 137).[83] In addition to Le Guin, Samuel R. Delany's *Stars in My Pocket like Grains of Sand* (1984) famously addresses similar issues by adopting a fictional variety of English which uses gendered pronouns and words like *man* and *woman* in an ambiguous way. At times, the novel confuses the readers by changing the logic of gender, sexuality, and language (see Väätänen 2014).

Leckie's usage of "she" as a default pronoun works the same way. The rhetorical potential of *Ancillary Justice* resembles Donna Haraway's well-known arguments in her manifesto: "Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves" (1991, 181). In Leckie's novel, dualisms regarding gender are erased or dissipated – or, the novel refuses to commit to such binaries especially in the portrayal of its protagonist. Haraway's designation of a cyborg is a transgressive metaphor aimed at the binary oppositions, a self that "skips the step of original unity" (ibid. 151) and, thus, opens up a whole new venue for the imagination of differences. In *Ancillary Justice,* the body or material form of Breq/the *Justice of Toren* creates such a venue or context where issues related to gender, for example, appear. In her study on feminist utopianism, Lucy Sargisson discusses "transgressive utopianism" as an alternative approach to what we perceive as reality, and suggests that its profit lies in the opening of further alternatives and possibilities that "transgress dominant and restrictive *ways of construing the world*" (1996, 16; my emphasis). Such alternatives reject the determinist, teleological link between the past, the present and the future. This, obviously, is a utopian resource, granted by our ability to dream and imagine future possibilities. Dunja M. Mohr further proposes that transgression details "fluid moments of suspended binary logic, when distinctions between either/or are nullified" (2005, 67).

Speculative fiction is especially suited for transgressing the boundaries separating binary oppositions and discussing their artificial nature, despite the fact that it often passes on that opportunity, something lamented by Hollinger (2000, 198). With the questioning of a given reality – whether scientific or social – speculative fiction provides a unique tool for speculating issues such as femininity as a social construct or societal reconstructions (Mohr ibid. 46). Among the most classic transgressions are the boundaries between human/alien, human/non-human, mind/body – and, after the 1960s, male/female. Obviously, there is science fiction that articulates the differences simply by reinstating the "normality", while

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83   Le Guin chose to use the non-specific pronoun "he" throughout *The Left Hand of Darkness*. Due to this choice, the novel received some fierce criticism, particularly from the feminist writers, saying that Le Guin's choice resulted in that there are no *women* on Winter. Le Guin subsequently regretted her choice (see Le Guin 1992, 145).

difference is a deviance from that norm. Typically, the science fiction convention of the alien is opposed to an uncomplicated view on humanity. This is a problem which shows like *Star Trek* sometimes suffer from: the future society depicted in the show presents us with a consciously idealised version of humanity against which various alien societies are mirrored. Such move attempts, of course, to encourage us to mirror our own current society (which the societies that the *Enterprise* encounters represent) against what it could be. However, it does not necessarily enable us to recognise and question our unconscious attitudes and automatic modes of thought in the way that *Ancillary Justice*, for example, does.

Compared with science fiction such as *Star Trek, Human Revolution* makes use of a very different future society, a dystopian one complete with cyberpunk elements: high-tech world of sky-scraping mega-cities ruled by corporations. The game is set in 2027, into a time when multinational corporations like Sarif Industries are more powerful than national governments, and the contrast between the "haves" and "have-nots" is quite stark. The contrast is connected with the human augmentation technology by means of the drug Neuropozyne, which is necessary for the augmented people, because it prevents a build-up of scar tissue that obstructs the electrical signals between human tissue and the electrodes of the argumentation. The distribution of the drug is controlled by powerful corporations, who seek to profit from its commercialisation. This way, Neuropozyne physically separates those who can afford to "advance" themselves beyond the usual human capabilities and those who cannot. It concretises the dystopian view of technology not as a misused neutral tool but as the totalitarian logic of the future (Mohr ibid. 30) – particularly because the corporations are secretly guided by the Illuminati which, in the game world, reached its height of power during the early 21st century.[84]

The thematic potential of the augmentations is realised through the playable character Adam Jensen who, despite being a more or less perfect melding of man and machine, struggles with his identity throughout the game. At the beginning of the game, terrorists attack the Sarif Industries' headquarters, and mortally wounded Adam is put through the augmentation procedures with Sarif's most advanced technology. He does not have a say in the matter himself, as he says in the tag line of the game: "I never asked for this". *Human Revolution* is thus aligned with the tradition of physical augmentation narratives, of which the most popular examples include an American television show *A Six Million Dollar Man* (1973–78), its spin-off show, *The Bionic Woman* (1976–78, reimagined in 2007) and The *RoboCop* franchise (initiated with the 1987 film, directed by Paul Verhoeven). *RoboCop*, in particular, explores similar issues to *Human Revolution*, although they are not as extensively extrapolated to the society at large – over the course of the film, RoboCop, who begins as

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84   In relation to the treatment of the Illuminati, *Human Revolution* also includes elements of the so-called alternative history genre, in which one or more events unfold differently from how it or they did in reality. The Illuminati was founded in 1776 by Adam Weishaupt in Bavaria, but it declined or dissolved within two decades from its establishment. Of course, modern conspiracy theories have argued that the Illuminati survived, possibly to this day, and it controls and manipulates the world events the same way it does in *Human Revolution*.

a human police officer, retains some of his former identity, and this is contrasted with his current existence as a constructed tool or device, or a *product*.

This way, science fiction can examine the ways of constructing differences without reinstating the normality. Roberts has discussed how an expression of material difference (such as an alien or a machine) might be used "as a means of exploring what it is like to have the label 'different' imposed on a person by some normalising system" (2000, 100). In my case studies, the boundary or relationship between body and mind is closely related to this: the bodies of both Breq and Adam have a distinct effect on, for example, how others see them. Living in the body of her sole remaining ancillary, Breq is not what she seems (completely human), while Adam's body has a rather machine-like appearance with his cybernetic arm and leg prostheses. Adam's mind, however, is out of sync, as one of his surgeons remarks: "The body may heal, but the mind is not so resilient". Breq's and Adam's bodies affect the way they understand themselves and their position in the world. The question of "what it is like" does not only focus on their experience of being different from others or from their past selves, but also on their constraints and chances in the world. This further resembles Istvan Csiscery-Ronay's idea that science fiction can be conceived in terms of hesitation that occurs when we are faced with two intertwined but distinct questions: "On the one hand, it asks whether the imaginary changes are possible; on the other, what their social and ethical implications might be" (2008, 158). *Ancillary Justice* and *Human Revolution* focus on the latter question by means of changed – and in a sense, grotesque – bodies. In this, both works make use of certain kinds of elements, conventions, and structures, which not only meet certain rhetorical goals, but also guide the users to "look at" them in certain ways. Understanding the generic context can be important because speculative fiction certainly requires learned skills. It needs our able engagement in much the same way that certain medium-specific affordances do, a topic which I will discuss next.

6.2   The Context of World and the Context of Here-and-Now

Above, I suggested that from the userly viewpoint, worldbuilding in speculative fiction is a process of building and, therefore, conceiving the context in which things appear. We are, thus, involved with the context of a fictional world and with the context of the "here-and-now of interaction", the time and place of the encountering. In narrative studies, the idea of a double logic is certainly not new, but the interest in it has traditionally been minimal in discussions beyond narrative temporality. Seymour Chatman has posited that what makes narrative unique is precisely this "chrono-logic", the doubly temporal logic: "Narrative entails movement through time not only 'externally' (the duration of the presentation of the novel, film, play) but also 'internally' (the duration of the sequence of events that constitute the plot)" (1990, 9). In other words, when we read a "non-narrative text type" like this study, the only time involved is the time it takes for us to read it, and in principle, the only order we can follow is that of the text. When we read a novel, however, we are

aware of both the time that the reading takes and the order in which the events occur, and of the time the events are supposed to take and the order in which they supposedly occur. Ryan's media-consciously tuned concept of storyworld brings up the same distinction, when she separates the "world-internal and world-external features" (2014, 40), as does my discussion on worlds as constructs and processes and on the two perspectives. Thought experiments do not necessarily need fiction or narratives in order to be realised, but in speculative *fiction* they are tied to the double context. This is an idea which I presented already in Chapter 1, when I argued that as a term, *fictional* worldbuilding encompasses such a double-layered engagement.

The idea that the story would precede the narrative discourse and would, therefore, be mediated by it has long been disputed by literary scholars.[85] For Jonathan Culler (2000, 105), it is an ambiguity which will never be resolved, and this is what he calls the "double logic" of narrative: the story appears to precede and follow the narrative discourse, simultaneously. As I noted in Chapter 4, such ambiguity is one of the fundamental reasons why the concept of narrative has been problematic in game studies. Despite the fact that the demand for linearity is possible to meet in (digital) games, it is impossible to separate, for example, the order in which the game events are played and the order in which they supposedly occur – at least if we are discussing contemporary digital games like *Human Revolution*. However, we do not need to consider the events to be perfectly chosen by the authors or the narrators (cf. Costikyan 2008, 6), if we see the playable character in digital RPGs as the player's tool for performing in an emergent story. The duality still remains, as the player is simultaneously aware of the position of the playable character inside the game world and her position outside of it, as the user of the various resources making up the character.

Noë suggests, in relation to understanding perception in general, that we need to "reject outright the inside/outside, interior/exterior metaphor" (2012, 154). While the two aspects of the perceptual experience are undoubtedly merged, especially during immersive engagement with works of fiction, I would not simply reject the metaphor. Instead, I wish to make theoretical use of it in order to understand the rhetoric affordances of speculative fiction. Polvinen (forthcoming) suggests that fiction sets us the task of experiencing both "the constancies of fictionality" (the knowledge of how to look at a work of fiction so that it can be made meaningful sense of) and the "perspectival" experience of the world being represented (how it looks "real" when looked at from "here"). These two experiences are not opposed but complementary to each other, and Polvinen suggests a useful pair of concepts to illustrate this: fiction may work on our awareness rather than on our *attention*. This means that we can be aware of looking at a work of fiction and the world being represented instead of devoting our attention to either one of these two experiences.

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85   Chapter 5 addressed a similar question related to representation. I criticised the understanding of representations as something that mediate our access to the material world, and suggested instead that works of fiction enable us to build representations as a result from our attempts to make sense of and understand the various aspects of them.

Following this, our awareness of the two experiences contributes to the rhetorical potential of worldbuilding as a practice that engages us both to imagine alternatives and possibilities and to reflect on the ways this is done. Noë's well-known introductory example of this is a painting in the art gallery and his description of how the user may open up an unfamiliar art work so that it becomes meaningful, how the user may perceive something in the work that she could not perceive a moment ago. According to him, this is "how the world shows up for us in experience only insofar as we know how to make contact with it" (2012, 1–2). Works of fiction are not, however, only about "understanding". We need to acknowledge the doubled experience in the sense of actively exploring both the world and the way it shows up. The double context – the context of a fictional world with the context of the "here-and-now of interaction" – is, therefore, one of the ways facilitating our immersive engagement with the work. These ways are also medium-specific, and next I will attend to *Human Revolution* and *Ancillary Justice* separately to appreciate these different affordances.

Human Revolution and the Logic of Simultaneity

The attempts to discuss fiction in relation to (digital) games have often run into trouble. Jesper Juul (2005, 121–122) argues that fiction is commonly confused with storytelling, although games can "project" fictional worlds through a variety of means. He wants to assert, in other words, that a fictional world in a game does not automatically connote a story.[86] Here, however, I will continue my approach on worldbuilding as a communicative practice in games, and focus on the way the player experience of acting as a character and the awareness of the double context interconnect with each other. Juul has brought up a rather similar view on the duality in games. According to him, a statement about "a fictional character in a game is *half-real*, since it may describe both a fictional entity and the actual rules of the game" (ibid. 163; emphasis original). With this, he refers to the duality of player action: the fictional world of a game depends on the mundane world in order to exist (see ibid. 168). I suggest that instead of "half-ness", we should discuss *simultaneity*. Juul (ibid. 176) also notes that the fictional world presented by the game cues the player in the real world into making assumptions about the rules of the game.

Following Janet Murray, I pointed out in my analysis of narrativity and agency in the *Mass Effect Trilogy* that "the primary representational property of the computer is the codified rendering of responsive behaviours" (Murray 1997, 74). In other words, the events "portrayed" to the player in *Human Revolution*, for example, are essentially produced by

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86   Juul himself uses "*fiction* to mean any kind of imagined world, whereas, briefly stated, a story is a fixed sequence of events that is *presented* (enacted or narrated) to a user" (2005, 122; emphases original). In Chapter 1, I argued that imagination and fiction are not interchangeable concepts: although speculative worldbuilding draws the user into the mode of imaginative engagement, as a communicative practice it can be used in works of fiction and nonfiction, alike.

the act of play. Rune Klevjer has similarly suggested that in a digital game, "the cybernetic feedback loop between the player and the computer is also a representation of an action in a fictional world" (2002, 200). The game event is, therefore, both configurative and representational, referring to the machine as well as to the fictional world. In RPGs, this means that only by actively exploring the game world can the player understand it and the rules it follows. As an illustrative example, in the world of *Human Revolution*, the so-called "Praxis kits" can be understood as fictional, mechanical tools which bypass the locks of new augmentations and advance the process of implementing them. In addition to this, each kit also awards the player with one Praxis point, which make up a system of skill points in the game. In the immersive engagement with a game, a Praxis kit is, in other words, *simultaneously* perceived as a representation of a possibly existing tool inside the fictional world and in relation to the rule-set and goals of the game. However, only the latter view produces actions in the real world.

The fact that for the player fictional game worlds are both "an actualised explorable and mentally imagined universes" (Klastrup 2009, n.pag) is another aspect related to simultaneity. Compared with literary fiction like *Ancillary Justice*, where the reader has to mentally visualise different aspects of the worlds, they indeed are more actualised. Even so, the more "rational" aspects of the imaginative engagement – in particular, in the sense of prospecting – are common to all fictional worldbuilding. The world of *Human Revolution*, therefore, is not only something that the player can explore by means of actions taking place in the real world (such as pressing buttons on a controller) but also something that she actively imagines and complements. In Chapter 4, I mentioned Miguel Sicart's aim to dispute the notion that the meaning of a game and play would procedurally evolve from the way the game has been created and his suggestion that "rather, meaning is played" (2011, n.pag).

Sicart's attitude towards proceduralism corresponds in part to my critique on the view that worlds are "end products" instead of something that the user constructs during her sense-making and interpretation of the work of fiction. I say "in part", because my attitude is somewhere between Sicart and the proceduralists: in my analysis of the *Mass Effect Trilogy*, I noted that the player is, for example, invited into the position of a playable character, which means that the player is not completely free to choose how to play the game or to make meanings of it, because worldbuilding is used as a communicative practice. This viewpoint opens up important aspects about the way digital games build discourses of ethical, political and aesthetic value. In digital RPGs, these discourses are typically centred on the playable character, and *Human Revolution* is no exception. The theme of human advancement is explored not only *via* Adam Jensen, but also *in* the construction of his character.

The world of *Human Revolution* is filled with people discussing transhumanist ethics, right from the beginning of the game, where Megan Reed, the head of neuro-scientific research on augmentations at Sarif Industries (and Adam's girlfriend) is shown watching

the news report. The Humanity Front, an anti-augmentation group led by charismatic William Taggart, has gathered in front of the headquarters of Sarif Industries in Detroit to protest the company's augmentation programme and Megan's research. The Humanity Front was originally formed as a response to the controversial ruling which declared it constitutional for individuals to have the right to mechanically augment themselves in order to have the same advantages as the augmented workers on the labour market. Over the course of the game, Adam himself is torn between his willingness to live freely and his reluctance to accept the augmentations which saved his life. As a starting point, this creates an interesting environment for the player to construct the way Adam perceives himself inside the world where the debates on augmentations take place. The player can, for example, construct Adam to become resentful towards his augmentations, or to make the best of the situation. Through such decisions, the player can explore the question of whether technology should be seen in a utopian or s dystopian light. Does technology grant us power to better ourselves as human beings or is it a dehumanising instrument especially in the hands of a totalitarian rule which can force the augmentations on people and ultimately control them?

The process of imagining and complementing does not only involve the world. It also includes the reconstruction of Adam's self-image under the new circumstances.[87] In relation to the rule-set and the goals of the game, this is about developing the character by gaining Praxis (or experience) points in certain skills. The issues concerning Adam's identity are not separate from the game mechanics and strategies. The repeated choices – such as whether to kill the opponents or to make non-lethal takedowns – and one-time decisions – such as whether to escape a gun-fight or to rescue a friend and co-worker Faridah Malik from the certain death – similarly participate in creating Adam's personality and attitude towards the world of *Human Revolution*. These decisions are not based on who Adam "really" is as a character, however, but on how the player chooses to play him within the confines of the rule-set, and imagines alternatives to his actions. This way, Adam is more than a stereotypical noir anti-hero – he is a character open to interpretations and a tool for the player to explore the game world, both concretely and in a more abstract sense. In the latter sense, the game provides the user a context where certain themes become explorable.

Traditionally, game scholars have situated thematic concerns in the *shell* of the games. As noted in Chapter 4, the concept of game can be used in more than one sense: the primary distinction of the two elementary layers, the core (or the game as gameplay) and the shell (or the game as representation and sign system), makes the structure of the concept easier to grasp (see Mäyrä 2008. 17). Game graphics are the most obvious feature included in the shell. For example, the Renaissance theme complete with a sepia-tinted colour palette in *Human Revolution* can be noted in relation to the way the game addresses the question

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87   Such a reconstruction is a typical narrative device especially in digital RPGs, because it offers a credible narrative backing for the various gaps in the identity and knowledge of the playable character. At the beginning of *Mass Effect 2*, for example, Commander Shepard dies and is revived only after two years of lengthy reconstruction done on her/his body.

of technological advancement. Characters who support the human augmentation dress in late-medieval Italian style, whereas characters who oppose augmentations or are neutral toward the matter wear clothing that resembles contemporary wear. This way, they make their attitudes towards the augmentations known to the world around them. As a result, thematic concerns (such as encounter with difference) are viewed as wrappings of some kind. These can be changed and discarded at will, or even completely forgotten, because "the rules of the game are the game. [...] The graphics, the viewpoint, the angle of the camera? They are all there just for one reason only – to allow us to play out the rules." (Brathwaite and Sharp 2010, n.pag.) Themes are, all in all, seen to be in service of gameplay, their role being the communication of the pre-existing or designer-led game rules embedded in the (digital) system, while the players are viewed as the "activators" of the process, setting the meanings contained in the game in motion.

My discussion above implies that themes are not put into practice by simply gift-wrapping the game into a certain kind of representational shell. The creation of personality for Adam Jensen by means of the player's actions embodies the debate on human augmentations and technology, in addition to the thematic interest in the definition of human and the relationship between mind and body. How much can you enhance or replace parts of someone until they lose their identity and humanity? After such an extensive reconstruction of his body, is Adam any longer "himself"? In *Human Revolution*, it seems that what you do is more or less synonymous with who you are. Performing someone in the sense of role-play is not only a case of mental identification, but also of acting in their role. Through the game and the playable character, the player can explore the question of whether technology, in the spirit of early science fiction literature, is something to be lauded and celebrated, or a dystopian cause of the worst of all possible futures. In the process of interpreting themes such as these, the player has to appreciate both the meanings evoked in her and the ways they are evoked.

In *Human Revolution*, the thought experiment centred on the augmentation technology functions fundamentally as a means to address inequality and the attempts of the strong to subordinate the weak, to function according to the aims and purposes of those in control. During the game, Adam finds out that he might actually be the key to a more equal world where people would no longer be divided into "haves" and "have-nots" in relation to the augmentations. Without knowing it, Adam has been carrying the secret of the universal augmentation in his DNA due to the experimental gene therapy he was subjected to as a child by a corporate-owned research facility. In short, this means that he can withstand mechanical augmentations without suffering from the syndrome treated with Neuropozyne, an expensive and controlled drug. The issue of whether all people should receive augmentations despite Adam's discovery is complicated in the game world, however. It is revealed that the Illuminati plans to control people via their biochips, which act as interfaces between flesh and machine and thus control all the mechanical augmentations in a person's body.

Towards the end of the game, Hugh Darrow, who was originally among the main developers of the mechanical augmentations, uses the biochips to cause the "Aug Incident", during which augmented people across the globe are driven to insanity and to viciously attack those around them. When Adam moves in to stop Darrow, he explains his wish for having restrictions on the technology by referring to a Greek myth: "I prefer to think of myself as Daedalus, watching helplessly as his child crashes into the sea…" Here, the story of Daedalus and his son Icarus, which is often referred to in the names of artificial intelligences during the game series, is brought up explicitly, as it is in Adam's dream where he rises, winged, from the operating table and flies towards the sun, until it burns away his wings. For Darrow, who feels that the augmentations do not meet his original purpose of enhancing humanity and improving the quality of life for everyone, the story of Daedalus and Icarus appears as an obvious allegory for the thought that humankind cannot yet conceive all the consequences of their technological achievements, while we are invited to see Adam as the "first human" in the revolution of a new DNA.

Through the rule-based gameplay and the way the player is invited to use various devices and resources, *Human Revolution* addresses the augmentation technology, not only in the frame of humanity, but also in relation to larger societal concerns. In this capacity, it can enable the player to perceive the world as constantly maintained: our view of the world is interwoven with our agency and our actions "inside" it. What we do affects the world, we make the world in both the abstract and the concrete sense. The game is highly self-reflexive in this regard, as the player herself is a cyborg of sorts, being plugged into or connected with the machine. Although we are not completely free to choose our actions in the game world, *Human Revolution* does not provide us with any definite answers to the question of whether technology is a salvation or a threat to the humankind. The means to answer or explore it are in the player's hands. Crucially, they are centred on the character of Adam, whose identity is developed and constructed simultaneously with the world and in relation to the world that imposes its own constraints on us along with the possibilities to act. Neither the story of Adam nor the world are monolithic structures. As I argued in Chapter 4, one can view them as the results of many small fragments used in the performance or dialogue between the player and the system.

Ancillary Justice and the Technology of the Text

In Leckie's *Ancillary Justice*, the questions on identity and humanity are centred on the technological domain not unlike the one in *Human Revolution*. The ancillaries, or "corpse soldiers", are forcefully created from individuals of conquered planets, and in the process of being attached to the ship, become almost mechanical parts of a larger whole. In the course of the novel, Breq's status as a single, lone entity is juxtaposed with the multifaceted totality of the *Justice of Toren*. Structurally, the juxtaposition is achieved by the narration which alternates between two timelines: one in the present of the first-person narrator

Breq and the other nineteen years in the past when she was still the *Justice of Toren*. Breq's unusual background is implied from the very beginning of the novel when she finds her former lieutenant Seivarden Vendaai – supposedly a thousand years dead – bruised and unconscious on a frozen planet: "Once I would have known her core temperature without even thinking, her heart rate, blood oxygen, hormone levels. I would have seen any and every injury merely by wishing it. Now I was blind." (AJ 5.) Compared to her former self as the all-seeing, omniscient ship, Breq feels that she is stumbling in the dark. The comparison Breq makes in her thoughts is repeated in the structure of the novel, and this way *Ancillary Justice* guides the reader to notice and consider the differences between the human and posthuman aspects of its protagonist.

The technique of setting two timelines beside one another makes use of the fundamental feature in literary dynamics, which has been well illustrated by Menakhem Perry's classic discussion on the linear character of language and the fact that literary material is grasped successively: "The ordering and the distribution of the elements in a text may exercise considerable influence on the nature, not only of the *reading process*, but of the resultant whole as well" (1979, 35; emphasis original). Compared to digital media and games such as *Human Revolution*, literature is unconditional in nature. If the components in a literary text were arranged differently, the new arrangement might result in the activation of alternative possibilities in them and, therefore, a recognisably different whole might be structured, whereas in games like *Human Revolution*, such varying arrangements are understood against the regularities and possibilities of the underlying system. Again, this should not be taken to mean that in literary fiction there is a pre-existing whole, which the reader then traces through her engagement with the text. I simply wish to point out the feature of the artistic object itself that the readers (and the authors) need to be aware of when they engage with a work from the here-and-now.

Perry's approach to literary dynamics is naturally based on the fact that a work of fiction is a verbal presentation, which is linear by nature. An illustrative example of such dynamics is the way the ordering of the text is used to create certain surprising – or estranging – effects in speculative fiction. In Leckie's novel, such an effect is most obviously evoked by the initially puzzling usage of the personal pronouns. Earlier in this study, I discussed worldbuilding as a communicative practice in relation to understanding communication as a report or a one-to-one situation. Here, it is important to note that although literary texts and the reading process are linear, the "resultant whole", as Perry calls it, is not. Furthermore in Chapter 5, I suggested that in order to be something else than static models next to the mundane world, the worlds of speculative fiction must also be understood as sites of what I have called world-as-process. I put forward my view of a world-as-process as a dynamic concept, which is not an explanatory outcome but a way of mentally navigating the work of fiction. Here, we need to consider the idea that the contexts encompass the doubly temporal logic of narrative, but are not limited to it.

In literary research, the view on narratives as representing the telling of something that has already happened has its emphasis on time and temporality. This is evident in the definitions of narrative which include elements such as sequentiality of events, temporal sequence, continuum, causality, consequences, change, physical events and human-like acting agents.[88] Susan Stanford Friedman notes the way narrative theory has emphasised narrative time: "Space in narrative poetics is often present as the "description" that interrupts the flow of temporality or as the 'setting' that functions as static background for the plot: as the "scene" where the narrative events unfold in time" (2005, 192–193). She further mentions (ibid. 194) the view that the reader can easily jump over descriptions without remarkable damage to her understanding of the plot. However, if the setting only functions as a neutral background and the descriptions can be skipped, there is no difference between placing the events of *Ancillary Justice* in, for example, the United States and placing them in the Radch Empire.

As I argued in Chapter 3, the more fundamental problem lies not so much in the definition of narrative or plot, but in the emphasis of narrative as the principal tool for understanding a work of fiction. This emphasises the temporal aspects, and often plainly equates interpreting a work of fiction and making sense of people and their interactions as the prototypical content of narratives. However, in order to understand the way in which characters such as Breq appear to us, we cannot rule out everything that is not in the form of temporal sequence, continuum, causality, consequences, change, physical events and human-like acting agents – in other words, everything that does not invite narrative interpretation as a response. In Chapter 3, I argued that narrativity has everything to do with elements, which I likened to the fault lines of reality as we understand it, while the frame of simulativity concerns the very model containing these mutable aspects. In order to understand the rhetoric of speculative fiction, we need to recognise this interplay, instead of focussing on narrativity in theorising the interpretative activity.

Fantastic or science fictional beings are understandable and imaginable in relation to the building and comprehending of the context in which they appear. *Ancillary Justice* is structured around Breq's quest for revenge, and this quest takes her to various locations inside and around the Radch Empire. Without the frame of this quest, and the movement and direction it includes towards Breq's goal, the novel as a whole would be quite hard to make sense of and interpret. This is one of the features related to the fact that speculative fiction does not so much explore the intricacies of inter-human relationships and inner-human happenings, but is typically concerned with "our relationship to the world and the universe" (Mendlesohn 2003, 1). Breq's identity and status as a character are built and understood in relation to her actions and position inside the fictional world, not so much on the basis of her "inner world". In *Ancillary Justice* – as well as in *Human Revolution* – the character's identity is inextricably connected with his or her capabilities of action,

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88   Here, I am referring to the definitions of narrative in the following sources: Genette 1980, 30; Rimmon-Kenan 1983; 8; Prince 1987, 59; Margolin 2003, 284; and Ryan 2004, 14.

in relation to the opportunities and constraints of the surrounding world. Leckie herself has noted that "[p]eople are who they are because of the world they live in, and the world is the way it is because of the people who live in it" (*AJ*, "Extras"). One could argue that the emphasis on action inside the world is one of the reasons why the speculative genres of science fiction and fantasy serve as the most popular starting points for the RPGs in the modern sense.[89]

David Herman (2002, 298) has suggested that narrative does not merely reflect spatial categorisations of space but is one of the chief means by which people go about building spatial representations of a world that they could not otherwise begin to experience at all. His more recent definition of the prototypical narrative includes elements such as "worldmaking/world disruption" and the capability of conveying "what it is like to live through this storyworld-in-flux" (2009, 9). Once again, I want to contest Herman's notions. When it comes to fiction, there is no experience of "what it is like" to convey or mediate. Maria Mäkelä has made a similar argument in her treatment of an apparently realist renderings of the inner discourse in literary fiction: "[A] narrative can only represent the *narrative* construction of an experience, not the 'raw feels' of immediate impression" (2013b, 163). While I am not discussing the narrative construction specifically, the experience of a character such as Breq or Adam is similarly constructed, not immediately impressed on the users. Instead, the position of the experiencer inside the fictional world is an effect or a sense brought about by the process of understanding and interpreting the world. Furthermore, narrative alone is not enough when we aim to assess the user's experience of "what it is like" for the characters to live in these constructed worlds. I will, therefore, analyse the two contexts through my conceptualisation of worldbuilding.

In her review of *Ancillary Justice*, Liz Bourke notes that Leckie's usage of the female-gendered pronoun made her re-examine all her assumptions about how worlds and gender fit together. She describes the effect as "trying to look at [the text] from five different directions at once" (2013, n.pag.). In the same spirit, Sargisson has described the way transgressive utopianism can reject the determinist views and express "wonder at rather than the possession of *one* reality and *a* future" (1996, 225; emphases original). Five directions are quite a lot. In fiction, the double exposure that I introduced in Chapter 1 is achieved both in terms of a parallel between our understanding of *what is* and engaging us with the representations of *what is not*, and in terms of our awareness of the engagement with an intentionally constructed artistic object. I propose is similar to how an element of a game – such as a Praxis kit in *Human Revolution* – can simultaneously be perceived as a representation of a possibly existing thing inside a fictional game world and in relation to the more artificial aspects, the rule-set and the goals of the game.

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89   The background of the RPG genre, especially in its tabletop form, lies in the battle emulation games developed and played by the European military staff officers. However, the defining feature of an RPG, the player's experience of acting as a role-playing character inside a (fictional) game world, was not introduced until the 1970s, with games influenced by the success of Tolkien's novels.

Leckie's choice to use the feminine as the default differs from the gender-neutral personal pronouns used in some languages. In Finnish, for example, "hän" can mean either "he" or "she", depending on the referent. While Finnish "hän" is gender-neutral, a reader who has been brought up in the culture of our world, associates the English "she" with females, and the connotations it evokes are far from neutral. The use of "she" as a default, a seemingly neutral pronoun therefore creates an interesting double exposure for the reader of *Ancillary Justice*. The reader can, for example, initially categorise a character as female because of the pronoun, then decide to swap the category for male based on the appearance or the actions of the character, and then criticise herself for the change of heart. Why should I think this character male because s/he is aggressive and has closely-cropped hair? Why should it even matter? Consider the following excerpt where Breq and her accidental travelling companion Seivarden have arrived to the apartment of a doctor called Strigan. While Breq's gender is (once again) left undetermined, the pronoun referring to Seivarden is switched to male for one of the few times in the novel:

> Through my eyelashes I saw a person in outdoor clothes. Just under two meters tall, thin under the bulk of the double coat, skin iron-gray. When she pushed back her hood I saw her hair was the same. [...]
>
> "I thought I knew what you were doing here. Now I'm not so sure." She glanced at Seivarden, to all appearances completely undisturbed by our talking. "I *think* I know who *he* is. But who are *you*? *What* are you?" [...]
>
> "I came here to buy something," I said, determined to keep from staring at the gun she held. "He's incidental." Since we weren't speaking Radchaai I had to take gender into account – Strigan's language required it. The society she lived in professed at the same time to believe gender was insignificant. Males and females dressed, spoke, acted indistinguishably. And yet no one I'd met had ever hesitated, or guessed wrong. And they had invariably been offended when I *did* hesitate or guess wrong. I hadn't learned the trick of it. I'd been in Strigan's own apartment, seen her belongings, and still wasn't sure what forms to use with her now. (*AJ* 74–76; emphases original.)

In the case of Strigan and Seivarden, the reader needs to adjust her mental image of the characters more than once and see them not only as described by Breq who refers to them solely with female pronouns, but also through the context of our world and culture. This way, *Ancillary Justice* is able to question our perceptions of female and male, and also map the features typically associated with men onto female pronouns – such as being almost two metres tall or using a gun.

At first, the reader of *Ancillary Justice* probably infers that there is something "strange" either about the first-person narrator the people she encounters – how is it possible not to distinguish somebody's gender? Leckie's novel has the potential of turning the conclusion upside down: is it not strange that we can (and want to) distinguish gender of the people we meet? This way, a process, which we have internalised so well that it has become automatic

or downright natural, becomes a source for a sense of wonder during the process of reading the novel. From the rhetorical viewpoint, this is a case of double exposure. It invites the user to "map an engagement with representations of *what is not* onto *what is*" (Nielsen et al. 2015, 68; emphases original). Therefore, the user is not estranged from the world she lives in, but learns to map a new relationship with it. A similar learning process can happen during the gameplay of *Human Revolution*, as well: is identity, for example, something "natural" or "innate" for us, or is it something that is constantly constructed and performed in the world we live in? Same questions can obviously be posed about gender, but works of fiction can further turn the attention of the user to the works and their workings.

6.3   The Rhetoric of the Double Context

Speculative fiction can concretise metaphors, but also literary conventions and devices. Here, I will investigate how speculative fiction can expand the knowledge of the ways fiction expands our knowledge – such as our understanding of the boundary between mind and body. Polvinen (2014b, 151), for example, has suggested that science fictional works, in particular, can be seen as "active interfaces" instead of things that either have meaning for the users or not. From this perspective, works can focus their users' awareness on how they make their imagination work. For example, the written fiction Polvinen has analysed experiments on spatial manipulations or literalises the convention of story time and discourse time. In what follows, I will concentrate on the rhetorical dimensions of this practice. One can argue that the most important feature in these concretisations is their potential to challenge some of our unspoken biases and structures of thought. Roberts borrowed the term "unmetaphor" from Jane Donawerth (1997, 107) and suggests that the process of unmetaphoring, "of unpacking and making explicit the metaphors by which stereotypes work, is exactly the strength of SF as a materialist mode of writing" (2000, 106). In the frame of worldbuilding, the rhetorical potential of speculative fiction lies in the process of turning the users' attention to the various strategies of meaning-making and interpretation.

I would like to summon up Noë's (2012, 1– 2) introductory example of how the user may perceive something she could not perceive a moment ago: how the user may open up an unfamiliar art work so that it becomes meaningful. His description of the phenomenon is almost mystical in tone: something *remarkable* occurs. Noë continues: "What is true of the experience of the work of art is true of human experience quite generally" (ibid.). One could conclude that Noë is suggesting that the ways we approach works of art are fundamentally similar to how we use to understand the world around us, in general. However, he emphasises the role of the skilful access: we need to know how to make contact with different phenomena, and when it comes to works of art, we need to acknowledge the artistic object at hand and "appreciate its structure". I have already made it clear over the course of this study that I subscribe to the idea that we do not treat works

of fiction the same way we treat the "real world", and I have emphasised the world-external perspective. Herman has labelled such an approach to fiction (and, especially, to fictional minds) as being "exceptionalist" (2011) and Brian McHale, in his response to Herman, as "conventionalist" (2012). In the following, I will be referring to exceptionality in the sense it has been extended to cover the modes of fiction that challenge our understanding of the real world (e.g. Mäkelä 2006; Richardson 2006), and use it to unlock new perspectives into speculative worldbuilding.

One of Herman's (2011, 13) counterarguments to exceptionality is based on the idea of folk psychology as a simulative ability. This "simulationist approach" supposes that by running a simulation of what one would do under certain circumstances, one can explain what another had done or will do in the same scenario. Obviously, Herman's approach concentrates on narrative understanding and prototypically emphasises the temporal aspects (such as sequences of events, causality, consequences, and change) and human-like acting agents. He, therefore, ignores various aspects intrinsic to simulations. In Chapter 3, it was noted that as resources for understanding various circumstances, simulations are based on a model of a real or an imagined system. While the model stands for the system itself, the simulation represents the development and progress of the system over time. In works of fiction such as *Ancillary Justice* and *Human Revolution*, the represented model is by design systemically different from the "systems" that are in place in our mundane world – a point which RPGs, for example, make explicit as they indeed are based on a model, a system of rules. Herman, too, has discussed science fiction in passing and suggests that in science fiction, the readers are prompted to "engage in strategies for worldmaking that are not fully continuous with those used to make sense of their everyday experience" (Herman 2009, 81–82). He asserts, however, that despite this rupture within the continuity, the readers will still assume that the reasons for characters' actions correspond to those of mundane life.[90]

At the end of Chapter 1, I discussed the character called Enoch Root, who apparently rises from the dead during the events of the novel *Cryptonomicon*. Briefly put, my argument was that over the course of the novel, Root becomes a representation (or representative) of a large and complex, but an extremely well-hidden system (or organisation) which is actually running the world through intelligence. In the novel's two timelines, Root can be read as not the same man, but the same character – both as a possibly existing person and a literary device. I would like to contrast this with Herman's argument that "dichotomous treatments of fictional and actual minds can be questioned via research suggesting that readers' knowledge of fictional minds is mediated by the same kinds of reasoning protocols that mediate encounters with everyday minds" (2011, 11). Although the principles of understanding characters such as Root in relation to their context reflect the reasoning protocols Herman mentions, the double context of fiction makes the situation different.

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90   Here, Herman refers to Marie-Laure Ryan's principle of minimal departure (1991), although he focusses on the workings of human mind and interaction.

When it comes to Root, for example, he does not function according to the same rules as our mundane world does. We cannot, therefore, make sense of his reasons for acting solely on the basis of real-world regularities. Instead, we have to recognise him as an element of an artistic object and take this into account when regarding his meaning in the novel as a whole.

It is therefore relevant to ask in which sense exactly do works of speculative fiction such as *Ancillary Justice* or *Human Revolution* engage us in strategies that are discontinuous, compared to works like Ernest Hemingway's short stories, which Herman uses as a point of comparison. Herman's analysis is somewhat similar to Lisa Zunshine's argumentation on "why robots go astray" and her idea of what happens when science fiction breaks our cognitive feedback loop, otherwise smoothly operating in categorising entities into people or artefacts. Zunshine studies the frequent plot twist in science fiction stories, the plot of a rebellious robot,[91] and suggests that this "can be traced back to our drive to restore the broken conceptual feedback loop and to fit an apparently counterontological entity within a comfortably familiar ontological entity" (2008, 79). While Zunshine suggests that "rebellious robots" or androids fall between categories and are therefore exceptional, I would like to state that they actually expose their typicality as elements in a work of fiction. McHale has argued that science fiction in general is the most "typical" genre in world literature in the sense coined by Viktor Shklovsky, because "it 'lays bare' the poetics of the novel, and so, in a way, shows us how *every* novel is made" (2010, 11; emphasis original). It is impossible for us to definitely place androids in either the category of an individual, *natural* "person", or an "artefact" *made* with a purpose in mind. Instead of forcing us to solve their counterontological status, characters like Breq/the *Justice of Toren* or Adam Jensen can prompt us to think about the boundaries between such categories and consequently, the reasoning behind them. How do we put beings into categories while engaging with a work of fiction, and why? Does a playthrough that resists activating Adam's augmentations result in the creation of a more human playable character, for example? Is Breq more human than the *Justice of Toren*, because she only has one, human-like body?

Zunshine's argumentation is an illuminating example of the shortcomings of the analysis, which stops short at the ontology of "possibly existing" people or artefacts. It disregards the fact that speculative fiction is essentially about ideas and their consequences – not only about working them through, but also challenging the readers, players and viewers to think of them. *Ancillary Justice*, for example, makes the discussion of the idea of person explicit, when Strigan disputes the notion that Breq's reasons for killing the emperor Anaander Miaanai could be personal: "You're not a person anymore. You've said as much to me. You're equipment. An appendage to a ship's AI." (*AJ* 135.) Breq's quest is not directed towards being "more human" but attempting to perform humanity in a way that would help her to reach her goal. The second part of Leckie's trilogy, *Ancillary Sword*

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91 With this plot twist, Zunshine is referring to stories where robots want to become more human, such as Andrew Martin in Isaac Asimov's short story "Bicentennial Man" (1975).

(2014) takes this performance to a more intimate level, when Breq needs to keep a whole system stable through interpersonal skills and diplomacy.

Throughout the novel, *Ancillary Justice* does not only discuss the idea of person, but the possibilities of a first person point of view: entities like the *Justice of Toren* have distributed their consciousness across multiple, even thousand, bodies. In the following flashback, the ship recounts how it perceived the planet Shis'urna from the orbit:

> Outside the doors of the Temple I also stood in the cyanophyte-stained plaza, watching people as they passed. [...] To the north, past a rectangular stretch of water called the Fore-Temple after the neighbourhood it had once been, Ors rose slightly where the city sat on actual ground during the dry season, an area still called, politely, the upper city. I patrolled there as well. When I walked the edge of the water I could see myself standing in the plaza.
>
> Boats poled slowly across the marshy lake, and up and down channels between groupings of slabs. [...] Away from the town, east and west, buoys marked prohibited stretches of water, and within their confines the iridescent wings of marshflies shimmered over the water weeds floating thick and tangled there. [...]
>
> The view to the south was similar except for the barest hints on the horizon of the actual sea, past the soggy spit that bounded the swamp. I saw all this, standing as I did at various points surrounding the temple, and walking the streets of the town itself. It was twenty-seven degrees C, and humid as always.
>
> This accounted for almost half of my twenty bodies. (*AJ* 13–14.)

The passage brings up the concept of narrative voice: the *Justice of Toren* is most easily understood in relation to the literary device of an omniscient narrator or the formal category of narrative instance. In addition to its ability to witness things happening in several places simultaneously, the *Justice of Toren* can even know (or accurately guess) the emotions and thoughts of its officers by means of various sensors and implants: "Lieutenant Awn's face heated, her distress and anger plain to me. I couldn't read her mind, but I could read every twitch of her every muscle, so her emotions were as transparent to me as glass." (*AJ* 17.) Leckie, herself, notes on the nature of the ship as a character: "It was a nifty short-circuit around one of the more obvious limits of a first-person narrator" (*AJ*, "Extras"). In this sense, the *Justice of Toren* can be seen as a concretisation of such a figure for narrative agency. Breq, on the other hand, is not represented as a character (we don't know for sure what she looks like, despite the occasional quips calling her "a tough little girl"), but obviously her voice can be considered in the mimetic sense to be the representation of her character.

As a result, Breq/the *Justice of Toren* is an example of being in two categories of identity-making at the same time. She has narrative agency, but cannot be conflated with a mimetic, human-like character. Her attempts to pass as a human being during her quest highlight the negotiable boundaries of humanity – or human-like behaviour, at least, as she uses all the gestures, tones of voice and body movements consciously: "I raised one eyebrow and

a shoulder, as if to say, *That's how she is*" (*AJ* 281; emphases original). Another twist is produced by the fact that Breq is neither definitely male nor female, and this opens up the ideological sense of the concept of voice which Walsh (2007, 98) has called interpellation. While narrative instance, any particular use of any medium for narrative purposes, is not innately gendered, it invites naturalisation in terms of a gendered subject position. Walsh (ibid. 101) notes that the ideological force of this move may or may not be apparent to the reader, but in Leckie's novel, this is made deliberately visible. When an abstract literary device such as omniscient narration is concretised in a naturalised character such as Breq/ the *Justice of Toren*, its ideological underpinnings are made visible as well.

While in literature such as *Ancillary Justice*, abstract concepts like personhood or identity are made concrete in order to open up new viewpoints to our dominant ways of construing the world (cf. Sargisson 1996, 168), in games like *Human Revolution*, these concretisations are also used to enable user activity, gameplay. Compared with legacy media like literature and film, meaning-making is connected with the way the player makes use of abstractions in the act of play. As Janet Murray (2011, 54) has argued, the process of "representing meaning" in digital medium should be thought of as a process of abstracting objects and behaviours as efficiently as possible. Chapter 4 mentioned notable examples of such abstractions in digital RPGs like the mechanics enabling the choices available in conversations. It is worth emphasising that this really is a process of abstracting, as thoroughly abstract ideas like the concept of personal growth are actually made very concrete in digital RPGs such as *Human Revolution*. In addition to such concepts, various generic and cultural conventions are concretised. As one of my aims in this study is to approach digital games as part of a larger cultural field of speculative fiction, I will bring up quest, one of the most well-known conventions in both fantasy and science fiction. Of course, not only games belonging to these genres include quests: in the *Grand Theft Auto* series (1997–, Rockstar Games), for example, action is structured in similar missions. However, the following summary by W.A. Senior illustrates why quest, viewed within the genre of speculative fiction, can offer a good starting point for the analysis of this particular convention in *Human Revolution*:

> The structuring characteristic of quest fantasy is the stepped journey: a series of adventures experiences by the hero and his or her companions that begins with the simplest confrontations and dangers and escalates through more threatening and perilous encounters. The narrative begins as a single thread but often becomes polysemous, as individuals or small groups pursue minor quests within the overall framework. [...] Choice is crucial in quest fantasy, so protagonists face several cruxes where their choices determine the fate of the many. (2012, 190.)

Senior (ibid. 199) concludes in his treatment of quest fantasy that it is far from a rigid formula. Instead, it is characterised by its protean quality, its ability to subsume and reflect the varied purposes and narratives "through the medium of Story". When it comes to digital games, though, such a "medium" must be conceptualised in a way that differs

from its prototypical literary origins. From the designer's point of view, a quest is a set of parameters in the game world that creates a challenge for the player, while for the player, a quest is a set of specific instructions for action. This relates to how, as Simon Egenfeldt-Nielsen, Jonas Heide Smith and Susana Pajares Tosca (2008, 183) note, quests incarnate causality on two levels. Firstly, quests explain how and why the player's actions are linked to each other and to the end of the game's story. Secondly, they include the cause and effect relationship between a plan of action and its results, or between the interaction of objects and events. From the viewpoint of the game engine, mechanism which Wardrip-Fruin (2009, 46) calls *quest flag*[92] allows it to track the player's progress throughout the game.

In *Human Revolution*, the main quest is to uncover the plan of the Illuminati, which eventually is revealed to be the attempt to use the new biochip to control the augmented humans. However, the quest is closely connected with Adam Jensen's growth and his search for identity in the new situation. This observation highlights important aspects in Senior's definition of quest as a form for digital RPGs. First of all, as Juul (2005, 95) notes, gameplay can be seen as a learning experience, during which the player acquires skills that enable her to beat the challenges in the game. Interestingly, from the constructivist point of view, learning must be regarded as a transformation of behaviour through experience, not as an accumulation of representations of reality (see Schmidt 1984, 257). Secondly, RPGs in particular are focussed on a playable character, and this is why one of the earliest definitions describes them as games of "character development, simulating the process of personal development commonly called life" (Perrin et al. 1980, 3). As a result, most games must solve the challenge of their main character developing simultaneously as a playable character. In *Human Revolution*, the solution is obviously the fact that Adam is just learning to live with his various new augmentations and use them. This way, the story of his development, which follows the quest structure, is allied with the player's learning experience: the game progresses from the simpler (easier, in other words) confrontations to more challenging encounters. During the progress, the skills that the player needs in order to beat the game evolve hand in hand with Adam's skills. These skills include the various skills needed to access the game world. In addition to this, the game is divided into various strands or smaller quest lines, which grant the player a more lasting illusion of freedom, and various choices that add into the feeling of the relevance of player action.

As I have noted above, the history of the game world and the narrative support for in-game tasks are more apparent in RPGs – making meaningful sense of the gameplay in these games requires an understanding of the wider game world (see Hitchens and Drachen 2009, 15). This means understanding of the game rules, and also the structure of

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92   Wardrip-Fruin (2009, 48) explains the mechanism as follows: "In short, this mechanism is the setting and checking of a collection of small pieces of data as the player progresses through the game world. [...] These data flags represent the state of the world as it relates to quests of varying scope. They are generally checked and set by relatively simple "scripts". [...] The state of quest flags is often explicitly presented to players in the form of a personal "journal" or "notebook" that the scripts update with helpful reminder texts about the current state of each quest at the same time that the flags are updated."

quest. The experience of worldness is, in a sense, the background motivator for the quests: it determines the meaning of quests and nudges the player towards certain kinds of action. It is not worthwhile (or possible, even) to separate a single quest in *Human Revolution* from its larger context. As the structuring principle of a single quest is a character's journey towards a goal, one can argue that quests *concretise* the desires, hopes and dreams of the characters living in the fictional world. In *Human Revolution*, this can be summarised in these questions: What kind of a person does Adam Jensen want to be? How does he see himself and his position in the world? What kind of a world does he want to build?

In the best case, quests are both about action and about searching and revealing meanings. The scale-model world of *Human Revolution* is centred upon exploring human advancement by concretising the theme in the mechanical augmentations and the consequences of their use for the humanity. At the end of the game, Adam reaches the facility called Panchaea where Hugh Darrow is broadcasting the signal which induces insanity in the augmented people worldwide. Adam (and the player) need to make the final choice in the game between the various options he can take: he can broadcast Darrow's confession, thus making sure that the augmentation technology is banned; he can lay the blame on the Humanity Front and ensure that augmentations are developed further; he can blame the event on the contaminated drugs, therefore guaranteeing a tight regulation on augmentations; or he can destroy the entire facility, killing everyone there and consequently letting humanity decide for itself. Various influential people Adam has met during the game – Hugh Darrow, David Sarif and William Taggart – act as kind of moral compasses for the decision and avatars of different ideologies and structures. This way, games like *Human Revolution* can allow the player to explore the various meanings and consequences of certain decisions within a designed system.

It should be noted that the two contexts – the experience of "being inside a world" and the more conscious or critical experience of and about the world – are in close connection to each other during an immersive engagement. Ian Bogost has suggested that the vividness of experience may come from abstraction. This is in line with his argument that meaning in digital games "is constructed not through a re-creation of the world, but through selectively modelling appropriate elements of that world" (2007, 46). Wardrip-Fruin has similarly argued that the models "that expose the evolving state of the underlying system and the opportunities for audience action in connection with their fictions are creating exciting new roles for us" and that they are also "helping us develop new modes of understanding for fictional worlds" (2009, 19). In *Human Revolution*, two of the most explicitly modelled elements or systems are both centred on human advancement: the personal level and the society at large. Not only is Adam's personal development abstracted in the Praxis points and the mechanics of unlocking skills, but also the functioning of human society in the straightforward way, in which the final choice affects the humankind at large. However, the comparison between the context of a fictional world and the context of the here-and-now is only brought about by the recognition of the "underlying system", when the player

understands the way game elements derive their significance from the performance of gameplay (see Myers 2010).

I would say that the rhetorical potential of speculative fiction lies in the process of engaging the users in the familiar, learned ways of worldbuilding and then turning their attention to the strategies themselves. The sense in which the strategies are different (or "not fully continuous") from the experience of the mundane world is related to their function as part of a work of fiction, a construction. In this, science fiction is, indeed, the most "typical" genre in the world, showing us how works of fiction are made (see McHale 2010, 11). While McHale focusses on the ability of science fiction to generate world models, I would like to emphasise the way *Ancillary Justice* and *Human Revolution* actually reflect our ability to generate meanings in relation to a world model. In other words, they show us how every world is made by both conscious and unconscious actions. They have the potential to make us see how our understanding of reality leads us to represent in certain ways (see Byrne 2005) by seizing not only the readily mutable aspects of the reality as we understand it but also the very model we base our understanding on.

In this sense, people not only are who they are because of the world they live in, but they are also created and interpreted against and with it. In Leckie's novel, Breq links this idea to her view on the Radchaai religion which teaches that nothing can happen that is not already designed by God: "'I am', I said, 'as Anaander Miaanai made me. Anaander Miaanai is as she was made. We will both of us do the things we are made to do. The things that are before us to do.'" (*AJ* 138.) Here, Breq does is not referring to "being made" by Mianaai in the concrete sense, but in the sense that by her actions, Mianaai brought Breq's (or the *Justice of Toren*'s) revenge upon herself. In *Human Revolution*, Adam Jensen never asked for his augmentations, but during the events of the game, his identity is created and negotiated in a world which uses and debates them. All in all, if we view characters such as Breq/*Justice of Toren* or Adam Jensen only as believable people who can be subordinated to the real-world understandings, we ignore much of the rhetoric of speculative fiction with regard to the thematic questions it can address. We should also not see them as constructs, simply perceived as artificial. The fact that the user can interpret both of these characters in relation to the negotiated scale-model world can enable her to map a new relationship with the world that exists, or encourage her to see it as negotiable and constructed, not as something natural or self-evident in the first place.

CONCLUSION TO SECTION III

This section has focussed on the analysis of the immersive mode of engagement with works of fiction. Throughout the three chapters, I have argued that from the viewpoint of the user, the experience of worldness is tied to the double perspective, which is inherent to worldbuilding as a communicative practice. Worldness, therefore, emerges in the key of *both/and* instead of *either/or*: it includes both the experiences of *being-in-the-world* and the experience *of* and *about* the world (see Klastrup 2009, n.pag). This observation, which is crucial to the study of worldbuilding as a transmedial practice in speculative fiction, was initially brought up in the discussion on the genre of digital role-playing games (RPGs), where such a twofold experience is particularly pronounced. In order to make meaningful sense of the game, the user must be conscious of both the world-internal (gameworlds as imaginative models) and the world-external (game systems to be contemplated from the outside) perspectives. In other words, the player of RPGs needs to be able to move from the general principles of the system – such as how quests are structured – to smaller details – such as how they contribute to the development of the playable character. In this, RPGs concretise the immersive involvement as a form of active participation, where the users both imagine alternatives and possibilities by means of world models and are able to reflect on the tools with which they do this.

I further argued that it is precisely the twofold experience of worlds – experience of worldness in speculative fiction – that is used as a means to communicate something to the user. I therefore suggested that from the userly viewpoint, world should not be conceptualised as *either* an ontological *or* a cognitive construct. For the user, the former represents the imaginatively created model (world-as-construct) while the latter retains the user's skills of tracing the model and generating meanings in relation to and by means of such a model (world-as-process). Instead, the close interplay between these two was analysed. For example, the practice of working through a speculative premise makes worldbuilding a vehicle for drawing connections – in other words, *making things appear* in a context (see Gabriel 2013, n.pag). In speculative fiction, inviting us to approach something as a concrete and material representation of something possibly existing can be about making something abstract (such as our experience of encounters in the material world with beings and things whose identity is not defined by our reasoning protocols) appear in a way which is

communicable and shareable. I recognised this as an aspect of the aesthetics of speculative fiction that has been underrated by the mainstream literary critics, as it is usually seen only as a case of reading literally and, therefore, immersing into the possibly existing worlds as a form of escapist pleasure. I argued that the materiality of speculative fiction is connected with the concretisation of certain ideas and communicating them by means of "materialising" them in a context which is available to our interpretive engagements. The practice is both of art and explanation, where the worldness runs through the process, both in the sense of engaging the user in imagining fantastic innovations and ideas and making up a context where certain things appear.

The ways of encountering the unknown by means of immersive engagement, I argued, can be used to exemplify the ways of constructing – or transgressing – difference and, in this way, potentially change our awareness of the way we understand reality and the world around us. However, speculative fiction does not really "make knowable" anything new of our reality as such. In other words, it is not a way of predicting the future or doing scientific research. Instead, the immersive mode of engagement makes it possible for us to engage with the imaginings alternative to the received reality and also follow up and reflect the ways in which this is achieved. It is especially interesting that in speculative fiction, the ideas are often communicated and explored through character positions situated inside the world-model, where both the actions and identities of the characters need to conform to certain regularities and possibilities which can be quite divergent from the so-called real-life contexts. In this sense, the way speculative fiction can distance us from the practices which maintain our understanding of reality is definitely one of its main rhetorical devices.

In the next section, I will discuss speculative worldbuilding more decisively as a dominant within the contemporary media environment, which has been significantly influenced by digital media. As case studies, I will turn to franchises or "universes" that encompass much larger constellations than just a single work of fiction. While immersive engagement can be seen as a form of active participation or discussion, the interactive mode traces the ways the twofold understanding of worlds is used both in the hands of canonical authors and the users as fans, more concretely. In the last two chapters, such a form of engagement will be explored through a doubly transmedial discussion, in which constellations that integrate more than one medium are analysed in relation to worldbuilding as a practice of speculative fiction that transcends medial boundaries. Through "canonical", officially produced franchises and fan-made works, it is also possible to look at how shared and communal features of these phenomena affect the usage of worldbuilding as a rhetorical and communicative resource.

IV   INTERACTIVE ENGAGEMENT WITH WORLDS

> The Starship *Enterprise* is not a collection of motion picture sets or a model used in visual effects. It is a very real vehicle [...] You, the audience, furnish its propulsion. With a wondrous leap of imagination, you make it into a real spaceship that can take us into the far reaches of the galaxy and sometimes even the depths of the human soul. (Roddenberry 1991, v.)

The previous section focussed on the immersive mode of engagement with works of fiction and argued that the rhetorical potential of speculative fiction lies in both generating immersive world models and turning our attention to the way we, in turn, generate meanings in relation to such models. Here, I will expand my approach to such models (or the contexts in which things appear) from the context of a single work of fiction to much larger constellations, which have been described with terms like transmedial worlds or franchises, polymorphic fictions, distributed narratives, or archontic texts. While there are differences in the phenomena these concepts describe, a unifying trait found in these practices is their use of multiple works and media and, in most cases, the fact that they have not been created by a single author. I will, therefore, utilise the concept of transmediality to discuss such larger constellations – a phenomenon, which is more specific than speculative worldbuilding that transcends medial boundaries as a practice. My emphasis will be on the interactive mode of engagement, which has been, if not fully enabled, at least strongly bolstered by the affordances of digital media.

In short, I argue that the ways digital media has influenced our understanding and engagement with works of fiction can be fruitfully explored by means of worldbuilding, which can be seen as the new dominant in the modern media. The interactive mode pursues the logic of engagement, where the understanding of worlds as constructs (what there is) and processes (what there, as a result of what is, could or might be) is actively taken into the users' own hands. Furthermore, this enables the use of what there is (such as the Starship *Enterprise* in the quote above) in order to actively engage our imaginations with what there could or might be as a result (such as travelling to the far reaches of the galaxy), by means of new, concrete instalments. The double perspective included in the immersive engagement is, therefore, "dismantled" and then remade. One could argue that the interactive mode is enabled by the modes that the readers, viewers, and players make use of while making sense of and interpreting a work of fiction in general.

It has often been noted that "transmedia storytelling", in particular, has become the hallmark of the contemporary participatory culture, and for this reason, transmedia studies have been associated with everything labelled "new media storytelling". Krzysztof M. Maj (2015, 83) suggests that the link with new media may be one of the term's few disadvantages and argues that the third edition of Thomas More's *Utopia* (1516) could be seen transmedial, too, because it entails a fantastic story, concept art, metafictional augmentations and even a facsimile of an imaginary alphabet. Nonetheless, elements such as these could better be classified as a particular type of intermedial relationship instead of calling them transmedial. The use of transmedial phenomena, on the other hand, is "available and realisable *across* media borders" (Rajewsky 2005, 46n6; emphasis original). This does not imply that transmediality would be synonymous with new media storytelling, as speculative worldbuilding, for example, has existed as a transmedial phenomenon for much longer than the current new media. However, in its second sense, the concept of transmediality is employed to describe efforts that are more or less coordinated and are made to provide entertainment experiences, which combine more than one medium. This is a much more recent development and can be connected with the rise of digital media. The boom in the popularity of fanfiction can be linked with the modern network culture and the age of Internet – despite the fact that it is also a descendant of a larger, older genre of literature that Abigail Derecho (2006, 63) has called "derivative" or "appropriative". Still, looking for "new stories" in new media can be misleading, as there rarely is a straightforward contrast between the stories in old and new forms of technology (see Page 2012, 186). In relation to my case studies in this section – fanfiction, and transmedial works and worlds – it should be kept in mind that the ways of authoring and using them are "new" specifically in comparison with the prototypical assumptions developed on the basis of legacy media such as literature.

The reasons for the scholarship to emphasise the long history and contexts of these phenomena is not only the need to justify the importance of the research subject but, in fanfiction studies, also to do away with the stereotype of a fan as an isolated "weirdo". Instead, the previously castigated category of fans is defended and rearticulated, and the fans' role as active makers of meaning highlighted. Although I recognise the fact that transmediality and networked activity themselves are anything but new as phenomena, I do think that digital media has influenced both the modern media landscape and the userly approach to works of fiction in ways that are relevant to my study. In contemporary culture, the manifestations and the prevalence of transmedial worlds and fanfiction are closely related to the affordances of digital media, and this will be the focus in this section. It is no coincidence that the attention to play and worldbuilding have risen simultaneously, or that the interest and participation in the vast, transmedial world-constellations has grown hand in hand with Internet service platforms such as forums and wikis.

Furthermore, Henry Jenkins, who has famously coined the term *convergence* to describe contemporary media culture, has suggested that digitalisation allowed media to converge,

to come together in single technological entities like the computer or be owned by a single corporation due to the conglomeration of media owners. Through this corporate convergence media companies have learned "how to accelerate the flow of media content across delivery channels to expand revenue opportunities, broaden markets and reinforce viewer commitments" (Jenkins 2006, 18). At the same time, convergence relates to the roles of the producer and the consumer and accommodates a more active and migratory audience. Jenkins' approach mostly sees world-constellations as economically motivated, but there is plenty of worldbuilding (or world-exploring) activity that is not driven by the need to earn money. The fans expand and remake the universes, too, and today, their work is done on the Internet, which further enables an *intersubjective* approach to what there is in these worlds. This premise has been used to underline various aspects of the audience's freedom: for example, freedom to oppose certain interpretations deemed hegemonic and to break free of them, means to break down hierarchies between authors and audiences and, on the whole, the capacity to be an active player instead of being a passive receiver or consumer. All in all, Jenkins' insights on the contemporary media culture as economically motivated are valuable, but rather one-sided from the viewpoint of studying the engagements with works of art.

Therefore, as my interest in worldbuilding is that of literary researcher, I will concentrate especially on the artistic and the rhetorical practices in this section, instead of the cultural or the economic phenomena. When it comes to analysing fanfiction – or, for that matter, digital games or television shows belonging to transmedial world-constellations – as an artistic practice, we need to resist the idea of studying them simply as "literature". Derecho, for example, discusses fanfiction as "archontic *literature*" (2006), while the demands for recognising digital games as "works of digital literature" or seeing storytelling as synonymous with "art" are prevalent in game journalism (see e.g. Alderman 2015; Owen 2015). Furthermore, critically acclaimed television shows such as HBO's *The Wire* are similarly situated within the frame of literary medium in the critical consensus, as Jason Mittell has noted: "By asserting *The Wire* as a televised novel, [the show's creator] Simon and critics are attempting to legitimise and validate the demeaned television medium by linking it to the highbrow cultural sphere of literature" (2008, 430). Such claims are usually done with good intentions: in short, we need to recognise fanfiction, games and television shows as worthy of serious study. However, the logic is flawed, as studying fanfiction and games as *literature* imposes the literary criteria of aesthetics and artistic merit on them, and dismisses their unique features and affordances in the process. In fanfiction, for instance, the creative processes in which fanfiction writers and readers are engaged are eclipsed – and, I would like to add, so are the actual fan texts. It is important to recognise and consider the various contexts of the cultural artefacts and practices, but we certainly should not understand "literary" as a synonym for "artistic". This also has implications on studying worldbuilding in fanfiction, as in it, the artistic and creative qualities are connected with the aims of sharing and promoting communality.

I have divided my discussion into two chapters according to the way the works have been authored. In Chapter 7, the case study will be the reimagined version of space opera television show *Battlestar Galactica* (2003–2009), while Chapter 8 will focus on fanfiction written of *Firefly* (2002), an American space western television drama. In other words, the former has been authored "officially" by a corporation and the latter is fan-made. Despite the authorial differences, they both embody the pervasive, contemporary logic of using ready-made elements and pieces in order to engage us with imagining new instalments, evident in the prominence of the concept of *universe*. I could have, therefore, highlighted the strategies and processes shared by both of them – for example, the various ways the familiar elements (characters, locations, and such) are both recontextualised and remade, and the way the readers, viewers, and players need to both recognise the particulars and approach them as representations of something possibly existing. Furthermore, both the officially produced, "canonical" works, and the fan-made, "fanonical" works make use of world-as-construct in the form of the shared understanding of *what there is in a world*, and world-as-process as a shared strategy of imagining *what there could or might be in a world* as a result. Mittell has already suggested distinguishing between two larger tendencies of "transmedia storytelling". These are "what is" transmedia, which seeks to extend a fiction canonically and to expand the user's understanding of a world, and "what if" transmedia, which poses hypothetical possibilities rather than canonical certainties and invites users to imagine alternatives that are "distinctly not to be treated as potential canon" (2015, 314). While Mittell's approach certainly shares some features with mine, I do not wish to separate canonical from non-canonical when it comes to transmedial worldbuilding. However, the question of what is being expressed across multiple forms – or what is made communicable – is rather different in the canonical and fanonical works, and this is why I have decided to discuss them separately.

It is, therefore, not enough to simply point out the fact that certain elements are shared by many instalments and authors. We also need to look at the various principles of sharing and ask why they are shared. I will begin my enquiry into the theories and approached to fictions that are expressed across multiple forms by way of worldbuilding in Chapter 7. Television shows such as *Battlestar Galactica* make for an interesting case studies, because as episodic they highlight the importance of worldness (in the sense of a relevant and definite context) and the fact that "the ability to perceive connections between things is not necessarily narrativistic" (Dena 2010, 192). My emphasis is on the rhetorical analysis, and in this frame, I aim to illustrate how transmedial worldbuilding functions in relation to two different contexts, the larger or *global* one and the more particular or *local* one. These two are designed to explicate the varying contexts for making meaningful sense of the transmedial worlds and their elements. The global context is much more specific than just the genre of science fiction television. In the case of *Battlestar Galactica*, I will use it to refer to the franchise as a whole. The local context, on the other hand, entails the context of a certain instalment, such as a re-imagined show. Understanding the differences between

the contexts has to do with both the principles and the strategies of evoking a specific world and the purposes for which this is done.

When it comes to fanfiction, the principles and the strategies may be somewhat similar, but the purposes are different. In my analysis of *Firefly* fanfiction in Chapter 8, I will concentrate particularly on the features which promote communality and sharing. These are important for any fandom, but in the case of *Firefly*, they are especially pronounced: the show was cancelled after eleven of the fourteen episodes produced had been aired. Despite the fact that the building of its fictional world and characters had barely started, the threads that were left hanging have been actively taken up by the fandom. Ideally, the fan-written stories enable involvement between the author and the readers, but the more subversive practices of fanfiction should be taken into account, as well. I argue that fanfiction writing is not ultimately about going against the source material, but about making the fans' responses to the source visible and about discussing them. As a result, alternative, communally established readings are "fanonised" and used to highlight the hegemonic interpretations, which will otherwise often go unnoticed, but they are also used to share the fannish experiences. In fanfiction, therefore, the abstract experience of being a fan becomes concretised and communicated through the practices of fictional and transmedial worldbuilding.

7   WORLDS AS SITES OF WHAT IS AND WHAT COULD BE

Throughout my study, I have discussed worldbuilding as a distinct way of putting our imagination at work, and discussed the two senses of grasping a world – as a construct and as a process – with regard to works of fiction. This chapter turns to fictional constellations larger than just one work, "fictions that are expressed across multiple forms" (see Dena 2010, 185). The nature of such fictions is illuminated by the fact that they are the most popular sources for fanfiction writing, which has now been defined as "[s]tories written by fans on pre-existing texts or fictional *worlds*" (Page and Thomas 2012, 277; my emphasis). The pre-existing world is basically understood as a construct which is shared by the many instalments of the original fiction and also by the fan community as the users, while the stories written by fans are seen as examples of further world-processing. Outside fanfiction research, such fictions have been described in quite a few terms, including Jill Walker Rettberg's "distributed narrative" (2005), Henry Jenkins' "transmedia storytelling" (2004a, 2006) and Christy Dena's "polymorphic fictions" (2010). While there are differences in the phenomena described within these frameworks, their unifying trait is the use of multiple media and multiple works in engaging the users with a fictional whole. The tendency to consider such wholes to be worlds instead of texts is further illustrated by the term "transmedial world", coined by Lisbeth Klastrup and Susana Tosca in 2004.

Among the thorniest issues implied by these different frameworks concerns the question of what exactly is being expressed across the multiple forms and media: narrative, story, fiction, or world? Furthermore, most if not all of the approaches above conflate the various different strategies and aspects of the phenomenon into just one. It is not enough, in my opinion, to simply point out the fact that certain elements are shared by many instalments and authors. We also need to look at the various principles of sharing and ask why they are being shared. Following this, the aim of this chapter is to consider how my twofold approach on worlds might function as a tool for more a detailed rhetorical analysis of these fictions. As a starting point, I use the term *transmedial world*, despite the fact that I will not go into the particulars or affordances of different media. Rather, I have decided to focus here on the audio-visual instalments only, in order to better concentrate on the basic rhetorical principles of transmedial worldbuilding and on the analysis of what is shared, not simply as

entities, but as constructs and processes. Moreover, my approach allows me to distinguish between the two contexts relevant in transmedial worldbuilding, the larger or *global* one and the more particular or *local* one. These two are meant to remedy the problem that both Klastrup and Tosca's and Jenkins' approaches suffer from. As Jan-Noël Thon (2015b, 24) notes, they draw from a largely unexamined commitment to what one could call the model of a "single world", the assumption that transmedial constellations should ideally or do actually represent a single world. Such a model has, furthermore, contributed to the view that transmedial worldbuilding would simply mean redundant representations of the same elements over and over again. Crucially, however, in my approach the two contexts are meant to explicate the userly processes of meaning-making and interpretation, in order to answer the question of what is shared or made communicable by means of transmedial worldbuilding that could not be done using other ways.

The case study in this chapter, an American science fiction television show *Battlestar Galactica*, is typically considered both a fiction and a world that is expressed across multiple forms. The show aired on the SyFy cable channel (then called Sci-Fi Channel) from 2003 to 2009. It is a "reimagining", developed by Ronald D. Moore of a 1978 television show by the same name that was created by Glen A. Larson. The reimagined *Battlestar Galactica* includes a three-hour miniseries, four complete series of the show, three sets of two-to-five minute webisodes (or web shows) and two television films, *Battlestar Galactica: Razor* (2007) and *Battlestar Galactica: The Plan* (2009). The show is based on a simple premise: in a distant star system, a civilisation of humans live on a group of planets called the Twelve Colonies. Forty years ago, the Colonies waged a war with a cybernetic race, the Cylons, but the enemy has been gone ever since the war ended. Now, with the inadvertent help of a human scientist Gaius Baltar, the Cylons launch a sneak attack on the Colonies, destroying the planets and their populations. Following the nuclear annihilation of their home, 50,000 survivors flee in a ragtag fleet of ships, led by President Laura Roslin and Commander William Adama, and with the eponymous battlestar *Galactica* as its command ship. During the first two series, the show focusses on the chase: pursued by the Cylons, who are intent on the total extermination of the human race, the survivors travel into the unknown regions of space, searching for the mythical and long-lost thirteenth colony known in the ancient texts as "Earth". As the search progresses, the show gains more spiritual tones.

In the study of the reimagined *Battlestar Galactica*, the nature of the transmedial worldbuilding of the show and the different strategies used in engaging the user's imagination across multiple forms and media are discussed. I will argue that such engagements are not simply directed towards what there is in a world in the very redundant sense. Within the local context of the reimagined show, there are various examples of new viewpoints being opened up to the "familiar" elements and characters by transmedial means. The web shows and two films, for example, do just that. In the global context, the status of the show as a remake or a reimagination brings another twist to the discussion, as the elements and characters known from the original show have been *remade*. In other words, the analysis

illustrates how transmedial worldbuilding can call for the user to make meaningful sense of the particulars and their relation both in the local and the global contexts, and this is a crucial rhetorical affordance, too.

Even the larger one of the two contexts is much more specific than just the generic context of science fiction television – and, more specifically, space opera. The generic and cultural contexts are, nevertheless, relevant for the study of the reimagined *Battlestar Galactica*, as the producers were very conscious about their aim of creating a show of science fiction that would depart from its traditional background. The mission statement of the show begins with a bold sentence: "Our goal is nothing less than the reinvention of the science fiction television series" (Moore 2003, 1).[93] This concerns both the content of the show and its structure which differs particularly in its storytelling from the mostly episodic structure of the previous iconic science fiction television shows, such as the ones in the *Star Trek* franchise. Unlike most space opera shows (and the original show), the reimagined *Battlestar Galactica* presents, for example, no humanoid aliens, as the man-made Cylons are the antagonists, and most of them have adopted a humanoid form and exist in numerous identical copies of these forms. In what follows, I will analyse the rhetoric and the aesthetics of the transmedial worldbuilding in the show with regard to multiple contexts and ways in which the sense of a specific world is evoked.

7.1 Transmedial Worldbuilding in Local and Global Contexts

The shift from concepts like text and narrative to the concepts of fiction and world has, overall, been motivated by the fact that narrative studies have expanded from literature to other media. Yet, when one looks at the contemporary media landscape and the changes it has undergone, one cannot help but notice the prominence of the concept of *universe*. It is commonplace that works of fiction can form a *product family* or *franchise*, which then develops storylines, characters and other elements across various media, such as novels, comics, games, feature films and so forth. Both product family and franchise as terms illustrate the fact that the views highlighting the economical merit of this phenomenon have been predominant. In the spirit of such an economic understanding of a world, Henry Jenkins notes that "a world can support multiple characters and multiple stories across multiple media" (2006, 116–117). This ensures that intellectual property can repeatedly be exploited and distributed to diverse audiences with a lower risk-level, with the further benefit that "each truly interesting element can potentially yield its own production lines"

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93   This aim is most obviously tied to Moore's own experiences as the writer and producer of various *Star Trek* shows, and the difficulties their episodic structure posed to the writers. He directs the writers of the reimagined *Battlestar Galactica* to avoid "storylines which begin with, 'The *Galactica* discovers a strange space phenomenon which…'" and not to retread the various science fiction clichés, such as "evil twins, time travel, a planet whose culture is just like ours, Adama meets his dead wife on a planet and doesn't want to leave et cetera" (2003, 32).

(ibid.). However, the work of fandom such as fanfiction writing clearly demonstrates that larger constellations that can be likened to universes are not something created only for monetary profit – on the contrary, the goals can be quite the opposite ones. Sara Gwenllian Jones (2006, 162) has even noted that the figure of a "subversive fan" has become something of an orthodoxy for scholars who elevate fans to the status of modern-day Robin Hoods, busily snatching back "our" popular texts from the greedy global conglomerates who claim to own them.

Among the best-known examples of such universes are the "*Star Wars* expanded universe", which encompasses all of the officially licensed material of the *Star Wars* saga, and the "Marvel universe", which is the universe where most of the stories in the comic book titles and other media published by Marvel Entertainment take place. One could add numerous others to the list, from *Harry Potter* and *Star Trek* to *James Bond* and *Moomin*. A smaller, but quite an illustrative example of the logic of a franchised world expansion is downloadable content (DLC), additional content for digital games which is usually distributed through the Internet. There are several types of DLC, from smaller details such as different aesthetic outfits for the playable characters to a complete extensive storyline.[94] Fanfiction writers, for their part, can create expansions of their own. They can, for example, add new characters or write a prequel or a sequel. All in all, the development of vast universes seems to be a rather pervasive tendency in the modern media. Jason Mittell observes that "today it is more exceptional for a high-profile series not to employ a significant transmedia strategy" (2015, 293), while Mark J.P. Wolf has argued that "franchised entertainment, and entertainment in general, is moving more and more in the direction of subcreational world-building" (2012, 13). In my opinion, we need to draw clearer distinctions between the different dimensions of this phenomenon or cultural logic especially in order to understand its rhetorical affordances and not see it simply as an instance of a simple expansion. At the moment there is a danger of at least two dimensions margining into one another in a similar way that fiction and the world have been conflated.

Certain distinctions have already been made. In her recent article, Marie-Laure Ryan has distinguished three levels while discussing what she calls "an aesthetic of *proliferation* that implements the full range of possible relations among text, world, and story" (2015b, 12; my emphasis). She concentrates on two of the three forms of proliferation, the narrative and the ontological ones. Her (ibid. 21) example of narrative proliferation, "a world that includes many stories", is the novel (and film) *Cloud Atlas*, while the film *Run, Lola, Run* exemplifies ontological proliferation, "a story (or text) that includes many worlds". The third form Ryan mentions is the textual and medial proliferation, where many different texts target the same world, particularly texts of different media. Following Jenkins

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94   In addition to DLCs, fans, fellow gamers and such can create mods or modifications, which alter the content of a digital game in order to make it operate differently from its original release. Mods can be used for various purposes, such as to add new items, modded weapons, characters, enemies and storylines, to fix bugs and to create art. In her study on *The Sims*, Tanja Sihvonen has explored modding both as a cultural activity and from the viewpoint of its commercial potential (see 2009, 11).

(2006), Ryan has named this phenomenon *transmedia storytelling*. Ryan's approach does make intuitive sense if we view a world only as a collection of recurring elements, such as characters or locations – a world-as-construct, in other words – but its premise, based on the tripartite model, is problematic. In Ryan's approach, the worlds are treated as ready or static instead of viewing them open-ended or as works-in-progress, although the latter seems to be the fundamental approach to modern media universes. Klastrup and Tosca have called the tendency to approach "transmedial objects" as material entities or single texts instead of worlds as "textual fallacy" (2004, n.pag). Thus, the possibility of viewing a stand-alone work of fiction as something that includes many stories or many worlds is found in the ways the user approaches the work, not ultimately in the work itself. Of course, one can argue that there are numerous works which evoke such approaches or call for them as relevant responses. So rather than say that some works include many stories and some works many worlds, we should focus on the shift in the ways of approaching these works.

The concept which Ryan has borrowed from Jenkins – transmedia storytelling – can obviously be criticised for its emphasis on narrative and storytelling.[95] As game scholar Jesper Juul (2005, 121–122) has argued, fictional world in a game, for example, does not automatically connote a story. Most works of fiction call for narrative interpretation as a relevant response from their users. Within a more general frame of a world-as-construct, there are usually certain particulars (like characters, sequences of events, locations) which are easily (or naturally) understood in the narrative form in the world-as-process. In Chapter 4, I analysed how in digital role-playing games such a response is located in the user's performance of the character, while in legacy media like literature, film and television shows, the invitation to do so is rather different. Walker Rettberg, who has suggested the term "distributed narrative" for a phenomenon similar to transmedia storytelling, justifies the term with her wish to "emphasise the ways in which our basic knowledge of narrative structures allows us to see the connections between fragments that may have no explicit links" (2005, n.pag). However, as Dena (2010, 192) points out, this not only describes a phenomenon according to what is considered to be the primary way it is perceived, but also bundles up "the connections between fragments" with narrative knowledge.

Recently, various critics have seized the distinction between story and world with their argument for the priority that the world takes over the storyline. In his recent article on transmedial worldbuilding, Krzysztof M. Maj (2015, 87) quotes Umberto Eco's description of first drawing a portrayal of fictitious green stone-eaters and only then proceeding with the storytelling – thus the reference to a fictional world comes prior to a fictional storyline. A similar sequence has been suggested, among others, by China Miéville (2009, n.pag) who has argued, from the writer's point of view, for the shift from plot-centric writing to worldbuilding. The frame for my rhetorical approach in this chapter presents this dilemma in a more intricate form. When it comes to transmedial worldbuilding, it can be presumed

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95   Dena notes that Jenkins' use of "storytelling" (see 2004b, 40) could be a strategic move: "championing an aesthetically rather than economically motivated approach to his industry readers and highlighting a new focus on 'aesthetic implications' to academics" (2010, 192).

that a user approaching a single instalment already has an understanding of some kind of the world. As Colin B. Harvey has aptly remarked, memory is central to transmedial worlds: "Characters, plots, settings, mythologies and themes necessarily have to be remembered from transmedial element to element in order for the various elements to be considered as part of the same storyworld" (2015, 38). Hence, the world comes prior to a storyline, and the understanding of what *there is in this world* is shared. However, the interesting question here is the practice of successfully targeting or evoking that shared understanding, and this can be done in more ways than one. There is no clear-cut ontological sense in which the world can exist. Worlds are created by the process of imagining them, and the things or particulars never appear without their context. In this sense, the world "comes alive" by means of, for example, the processually interpreted storylines.

The question becomes especially interesting in the frame of speculative fiction, because what makes speculative fiction unique (or, at least, gives it a degree of difference from various other genres of fiction) is the way in which abstract and conceptual thought experiments adopt a material and particular form. Klastrup and Tosca describe the relationship between the abstract and the material in rather similar terms: they define a transmedial world as an "abstract content system from which a repertoire of fictional stories and characters can be actualized or derived" (2004, n.pag). Despite the fact that they criticise the theories conforming to textual fallacy, Klastrup and Tosca only focus on the understanding of worlds as constructs or containers. In part, this is due to their emphasis on the design of worlds. They paint a picture of a single transmedial world as a shortcut or a tool kit for the purposes of storytelling, for example. With television shows, a shared tool kit of this kind seems quite concrete as the episodes are rarely realised by the same authors – the thirteen episodes of the first series of the reimagined *Battlestar Galactica*, for example, credit eight writers and ten directors, including a member of the main cast of actors, Edward James Olmos.[96] Similarly, fanfiction writers could be seen using such a tool kit for their own purposes. At any rate, the tool kit cannot be understood only as content in the sense of particulars.

Another reason why it is hard to discuss worlds in some other sense than constructs is the fact that we never encounter the worlds of cultural artefacts in their abstract form but only as realisations. As a result, the term "*Battlestar Galactica* universe", for example, captures the intuitive sense of an overarching construct that includes particular elements. In this case, it would consist of characters (like Commander Adama, fighter pilot Starbuck, the Cylons), locations (like the battlestar, the Twelve Colonies, the fleet of ships), certain

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96   Furthermore, the producer Moore regularly highlighted the making of the reimagined *Battlestar Galactica* as a teamwork in his podcasts, which were broadcast during the show. In his commentary on the first series episode directed by Olmos, "Tigh Me Up, Tigh Me Down", he notes, for example, that a certain shot was suggested by the show's visual effects supervisor. He also reflects on the fact that the long storyline which includes the character Helo left behind on Cylon-occupied Caprica was planned only after the live audience of the miniseries had shown interest in Helo's destiny. The podcasts can be listened to and read on the Battlestar Wiki at http://en. battlestarwiki.org/wiki/List_of_Podcasts.

historical premises, and so forth. As I have argued earlier, we need the contexts in which things appear in order to perceive them as communicable. Elements such as a jedi or a lightsabre immediately bring up the context of the *Star Wars* universe, whereas elements like the Cylons or battlestars connect with the universe of *Battlestar Galactica*. Thon similarly seizes on the communicative aspects of transmedial worldbuilding, as he suggests that "transmedial universes can be understood as intersubjective communicative constructs with a normative component" (2015b, 32), where the audience's narrative meaning-making is oriented by the given transmedial universe's "intended structure" (ibid. 33).[97] All in all, Thon presents a valuable analysis to support the fact that transmedial worldbuilding is not simply a redundant or expansionist practice, but his discussion remains limited to "what it is, precisely that these franchises represent" (ibid. 24) instead of touching upon the most interesting questions: what exactly can be communicated by means of such intersubjective constructs, and to what purpose is it communicated?

Furthermore, the question of what it is that gets represented by means of transmedial worldbuilding can easily put us on the wrong track and presuppose something original "behind" the representations. In Chapter 4, I discussed the computer's procedurality, its ability to represent and execute conditional behaviours, and the problems this has posed to the more traditional understanding of authorship. Transmedial worldbuilding embodies a rather similar logic: in many cases, it is not possible to distinguish the "original" in the sense of an unconditional sequence of events or primary representation of a certain character, for example, and this affects our engagements with works of fiction. Interaction, therefore, should not be viewed simply as audience behaviour, but with regard to the reciprocity that digital media can provide. While the designers of digital role-playing games, for example, must author processes that enable the player's embodied agency (not the story or representation as such), in transmedial worldbuilding the processes that enable the usage of what there is in order to actively engage our imaginations of what there could or might be are utilised and recognised. The experience of transmedial worldness is therefore not evoked simply by representing something that can be called a transmedial world or universe, but through the way the users' imagination is engaged to work the premise through by means of world-as-process.

In this, the close union of the abstract and the material is crucial. The union was the crux of the analysis in Section III, where I looked at the ways in which encounters with difference are brought about in speculative fiction. Such encounters are crucial in the reimagined *Battlestar Galactica*, as well, especially in the dealings with the Cylons and

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97   Thon (2015b, 33) suggests that there are three different relations between individual works within a franchise: first, the relation of *redundancy*, when one is aiming to represent the same elements of a storyworld that the other represents; second, the relation of *expansion*, when one is aiming to represent the same storyworld that the other represents but adds previously unrepresented elements; and third, the relation of *modification*, when one is aiming to represent elements of the storyworld represented by the other but adds previously unrepresented elements that make it impossible to comprehend what is represented as part of a single, noncontradictory storyworld.

the border between human and nonhuman. In this study, I have followed Brian McHale's (2010, 21) description of worldbuilding as the trying out or trying on of an idea: it builds a scale-model world in which to develop some of the possible consequences of a certain idea. This contributes to the development of world-as-process, the understanding of what *there could be in a world*, and suggests that separate instalments in a speculative fiction franchise, for example, can also be connected by their underlying idea and not just the world-as-construct, consisting of particulars such as green stone-eaters. The interplay between the two aspects of the imagination – the creative and the prospective one – in worldbuilding is again highlighted. However, this chapter is particularly interested in the reimaginings of both the elements and the context, and this is why it is important to distinguish between worlds as constructs and processes.

Although the roots of science fiction television are in literature and film, it has become clear that it can support itself as independent from other mediums. Particularly the long form of *series television* has distanced science fiction television from the shorter narrative form of film (Telotte 2014, 11–12). Aino-Kaisa Koistinen (2015, 29) notes that the reimagined versions of shows like *Battlestar Galactica* highlight this, because they are reimaginations of previous television shows instead of being adaptations from literature or film. By and large, the remake phenomenon[98] is one of the recent shifts in contemporary science fiction television that the reimagined *Battlestar Galactica* exemplifies. This shift offers a relevant context for my treatment here, as well, as it is yet another manifestation of the cultural logic of transmedial worldbuilding. Remakes are sometimes considered to be a form of adaptation, but these two can be distinguished from each other on a generic basis. As Constantine Verevis (2006, 82) argues in her book on film remakes, remake "is generally a remake of another film", whereas adaptation theory is concerned with the movement between different media, such as literature and film. As my discussion does really much address such a movement but rather the rhetoric of worldbuilding as a practice, I have settled for the term transmedial world. Next, I will argue that in order to understand the aesthetics and rhetoric of the reimagined *Battlestar Galactica* we need to distinguish between the two contexts of transmedial worldbuilding.

In order to better understand what is being communicated by means of transmedial worldbuilding we should consider the contexts I call global and local. The former of the two, the global context, could also be called franchise in a more economic understanding of the phenomenon. In the case of *Battlestar Galactica*, the franchise began with the original show created by Glen A. Larson in 1978, which was followed by a short-lived sequel show *Galactica 1980*. In 2003, the reimagined show first aired as a two-part, three-hour miniseries developed by Moore and David Eick, and then continued as a weekly television show until 2009. The show included two films made for television within the same continuity, *Razor*

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98   *Star Trek: The Next Generation* (1987–1994) has been named as the originator of the new era in science fiction television, because it relied on the premise and elements of an earlier television show, the original *Star Trek* (1966–69). Nowadays, the remake phenomenon is quite extensive, and it includes both films and television shows.

(2007) and *The Plan* (2009), and three sets of webisodes, *The Resistance* (2006), *Razor Flashbacks* (2007) and *The Face of the Enemy* (2008). While *Razor* technically constitutes the first two episodes of the series four, and the webisodes were released between the series in order to provide an optional extra, *The Plan* retells the miniseries and the first two series of the show from the Cylon perspective. Later on, a short-run prequel, *Caprica*, aired in 2010. Furthermore, a two-hour pilot for a second spin-off, *Blood and Chrome*, aired in 2013, but no show followed. In addition to the television show, the films and the web show, a line of book adaptations, original novels, comic books, a board game, and digital games have been produced in the *Battlestar Galactica* franchise. As I already mentioned, in order to focus on the rhetoric, I have chosen to focus only on the audio-visual instalments.

Earlier in this study I have brought up the idea of cognitive frames – in short, that certain frames are seen to trigger certain kinds of images, associations, and interpretations. This is a relevant background for my distinction between the global and the more particular, local context of the transmedial worldbuilding. In short, the fundamental difference between the global and the local is the context which is evoked in order to enable the particulars to appear. Generally speaking, in order for an instalment to be interpreted as part of the transmedial world of *Battlestar Galactica*, neither the world-as-construct nor the world-as-process can be about anything: the frames it uses need to be "targeted" to trigger specific things. Targeting of this sort is apparent in fanfiction writing, where an evocation of a world, which is deemed "original" or canonical, is often pursued. Although the evocation of a certain context for certain particulars is definitely a rhetorical strategy, it is also an interpretative one. From the viewpoint of the user, certain particulars (like the character of Starbuck, to which I will return shortly) can appear differently depending on the chosen context in which they are seen.

The targeting and the importance of context is further concretised in the fan debates on whether a representation of a certain character, for example, should be considered "in character" or "out of character". Similar debates are recurrent in the discussions concerning the success of adaptations, which typically occur when a novel is being adapted into film.[99] However, the reimagined *Battlestar Galactica* is, just as its unofficial byname ("reimagined") tells us, definitely a remake instead of being an expansion or an adaptation of the original show. Although the core features of a transmedial world-as-construct, which Klastrup and Tosca (2004, n.pag) have named *topos* and *mythos*, seem similar to the 1970s show, they include certain significant differences or rewrites. According to Klastrup and Tosca, mythos is defined as the "central knowledge one needs to have in order to interact with

99   Linda Hutcheon suggests in the preface to the second edition of her book *A Theory of Adaptation* (2013, originally published in 2006) that although her emphasis is on adapting narrative, in transmedia or franchise storytelling "thematic and narrative persistence is not the name of the new adaptation game; world building is", and that "a way to deal with the range of extensions and expansions of story world" should be added to theorising adaptation (2013, xxiv). However, I would not categorise transmedial worldbuilding simply under the umbrella of adaptation, because, in my opinion, adaptation should be addressed as a distinct phenomenon or strategy.

or interpret events in the world successfully" (ibid.) (e.g., the established conflicts in the world), while knowing the topos is "knowing what is to be expected from the physics of and navigation in the world" (ibid.) (such as the setting of the world and a detailed geography). Thon (2015b, 35) argues for the fact that "transmedial entertainment franchises" are often not appropriately described as representing redundant adaptations or noncontradictory expansions. Instead, instalments such as the *Game of Thrones* television show can take certain elements from George R.R. Martin's *A Song of Ice and Fire* novel series and leave out others, changing and rearranging them to such an extent that it seems more appropriate to speak of a modification.

A comparison between the *Battlestar Galactica* and *Star Trek* franchises illuminates the discussion on the core features of the transmedial world-as-construct. The constituting elements of *Star Trek* – such as the Federation, Starfleet, fictional races like the Vulcans and the Klingons, the assortment of technological innovations of transporters and replicators – have been used and even recontextualised in various shows, but the same characters, for example, only travel from one show to another in exceptional cases. The various *Star Trek* shows are, therefore, best viewed as expansions which are designed to open up a wider view into the large world inside which the elements are, whereas the new *Star Trek* films by J.J. Abrams (*Star Trek* in 2009 and *Star Trek Into Darkness* in 2013) reimagine the premise of the original show and films and even re-enact certain "key scenes" in a slightly modified manner.[100] The two films still fit into the larger *Star Trek* universe quite comfortably, as they open up a new set of possibilities inside the universe by explicitly flagging themselves as an alternate timeline. When it comes to *Battlestar Galactica*, however, the biggest difference between the original show and the reimagined one lies in what Klastrup and Tosca call *ethos*, "the explicit and implicit ethics of the world and (moral) codex of behaviour which characters in the world are supposed to follow" (2004, n.pag). The changes are, in part, motivated by another contemporary trend in science fiction television, the "trend toward darker visions" (see Booker 2004, 124).

During the 1990s, rather dystopian shows like *Babylon 5* (1994–98) and *The X-Files* (1993–98) were made, and the originally quite a utopian Star Trek franchise turned slightly darker, as well with *Star Trek: Deep Space 9* (1993–99). *Babylon 5*, in particular, introduced more complex characters than the ones the viewers were used to seeing in science fiction television (Booker ibid. 130–33), despite the fact that stylistically the show is rather irregular during its five-series run, at times turning from slapstick humour to the depiction of extreme tragedy in the course of one single episode. The long-running story arcs and the efforts to incorporate various real world scenarios into a science fiction universe, nevertheless, connect the reimagined *Battlestar Galactica* with *Babylon 5*, and these two aspects are further linked together by the darker visions. The introduction to

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100   Among such "key scenes" is the death of Spock in *Star Trek: The Wrath of Khan* (1982), where Captain James Kirk watches Spock die from radiation poisoning in the engine room. This is reimagined in *Star Trek Into Darkness* with reversed character roles, with Kirk sacrificing himself, instead.

the show bible[101] written by Moore outlines this quite clearly: "There are no days for our characters, no safe havens, nothing approaching the quiet normal existence they once knew. They are on the run for their very lives." (2003, 1.) In the reimagined *Battlestar Galactica*, some of darkest moments include interrogation consisting of beatings, starvations, and gang rape; suicide bombing against totalitarian rule; a mechanised "farm" reducing women into machines of reproduction; a fleet-wide mutiny during which the whole civilian government, the Quorum of Twelve, is executed; and a disturbing depiction of one of the recurring character's suicide after it is discovered that the Earth the fleet has finally found is an uninhabitable radioactive pile of rubble. The less dark, albeit realistic issues include the discussion on legality of abortion, the dispute of the unfairness of diving labour in the fleet and the depictions of presidential election campaign.

In her treatment, as I mentioned above, Ryan (2015b) separates different forms of proliferation – the narrative, the ontological, and the textual and medial proliferation – from each other. In my view, such proliferation in the sense of new meanings and interpretations can be produced both in the global and local contexts of the transmedial worldbuilding. In the local context, an illustrative example of such practice is the reimagined *Battlestar Galactica* web show, while in the more global context, the most obvious example is the reimagination of the original show. The web show *The Resistance*, released through the Sci-Fi Channel's website between the second and third series of the reimagined show, portrays the activities of the resistance against Cylon occupation on the New Caprica, where the fleet makes its temporary home before continuing the search for Earth. As such, *The Resistance* provides rationale for the actions of the character Tucker "Duck" Clellan, who becomes a suicide bomber during the first episodes of the third series of the reimagined show. When it comes to the proliferation of the transmedial world in the sense of producing new meanings and viewpoints, the local context concentrates on the world-as-process, in what there could be in a world. The global context, however, focusses on the world-as-construct, of what there is in a world: the basic elements shared within the franchise are remade, subverted or otherwise changed. Of course, changing the construct also affects the process – and vice versa – but there is a profound difference in the means of achieving the evocation of new kinds of interpretations and meanings.

In the local context, the questions on whether a depiction of a certain character is "in character" or "out of character" can be valid and interesting. One could ask, for example, whether the development of Kara Thrace, known by her call sign Starbuck, is credible or what sort of interpretations her development evokes. During the show, she undergoes a change from a hot-headed pilot who does not really value her own life into an almost mythical character (dubbed as the "Harbinger of Death"), who finally sacrifices herself for

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101   A show bible is a guidebook written by the creator(s) of a television show in order to ensure that all writers are familiar with the outline of the show. It includes the backstories of the characters and describes other significant events in the mythos of the world, plus a plot outline for the future of the show. In the reimagined *Battlestar Galactica*, Moore wrote the show bible after the miniseries had been broadcast. It was openly published in 2009, and can be found at: http://leethomson.myzen.co.uk/Battlestar_Galactica.

others. However, in the global context, Starbuck is a reimagination of the character by the same name with whom she shares some parallels but also differs from significantly – most obviously in gender and the overall outward appearance. With a reimagination, it is not relevant to discuss whether the "original" and "reimagined" Starbuck are the same character or whether the reimagined one is "in character", but rather to consider the ways the character is recontextualised and thus used for rhetorical purposes. The evocation of a similar effect has been attempted, for example, in the Marvel universe with the introduction of a female Thor. All in all, if we conflate the two contexts into just one or see the transmedial worldbuilding ideally or actually representing a single world, we can potentially miss the possibility of better understanding the aesthetics – and, in particular, the rhetoric – of reimaginations or remakes. This is fundamentally the reason why I want to distinguish between the local and the global contexts. In what follows, I will view the two different strategies of remaking I mentioned above: recontextualising the process and remaking the construct.

7.2   Recontextualising the Process

Above, I argued that we need to distinguish between the two contexts of transmedial worldbuilding, the local and the global one. This is especially important for the analysis of rhetoric, as the two contexts entail different ways of engaging the imagination and this, furthermore, affects the strategies of meaning-making. This subchapter concentrates on the local context of the reimagined *Battlestar Galactica* and consider how the world-as-process is advanced or reworked by means of the transmedial environment and affordances. We need to remember here, once again, that the foundations of worldbuilding, in general, are neither merely narrativistic nor solitary activities. I suggest that we should consider strategies that are, among others, episodic, serial, and procedural. In this, case studies such as television shows and wikis, co-created by multiuser communities, can open up new viewpoints to recontextualising the process of imagining what there could or might be in a world.

Television shows such as *Battlestar Galactica* make for an interesting case study, because they highlight the fact that in understanding and making sense of the particulars in relation to their context the ability to draw connections between things is not simply based on narrative understanding. As Dena notes, while "the ability to infer causal relations is essential to narrative understanding [...] the reverse is not" (Dena 2010, 192). The same claim has repeatedly been made by Galen Strawson (e.g., 2004) who, in particular, has criticised the narrativist views on self. Chapter 3 already considered Hannu Rajaniemi's novel *The Causal Angel* with regard to the way it presents a view on identity as something we continuously make and remake through experience and in relation to the changing contexts and situations. I am not suggesting that we should dismiss narrative: rather, I am interested in the co-existence of multiple strategies and looking at the various kinds

of ways that we make connections, try to see the whole picture, jump to conclusions, and find forms. Here, I will connect this aim with the idea of relevant context being much larger than just concentrated on narrative content and the affordances of digital media. Furthermore, I will continue to challenge the understanding of narratives as monolithic structures, as knowledge indeed comes best in bits and pieces.

Recognising that television shows like the reimagined *Battlestar Galactica* are, indeed, *serial* basically means including narrative and narrativity in their analysis, despite the fact that an ambition to tell an extensive story has been seen to fall under the form of a novel, at least within the culturally legitimate formats (see Mittell 2008). Traditionally, "long narrative" has been the preserve of "high" myth-based literature and epic poetry, but as Tanya Krzywinska (2008, 386) notes, it has firmly established itself in the domain of the popular, beginning with the serialised fiction in newspapers in the nineteenth century. A television serial has, by definition, a continuing plot that unfolds in a sequential episode-by-episode fashion, while the more traditional, episodic television shows typically consist of individual narratives produced under a single name, each relating to the others in some understandable way. Episodic television shows may, in other words, present the same characters, for example, in various episodes, but there are no significant fragments or pieces that could be pieced together narratively into a larger arc. In other worlds, one might say that most episodic television shows share the same world-as-construct.

While situation comedies are the archetype of episodic television, soap opera has been named as the mother of all serials. "Serialised storytelling" is, however, common in other dramas, as well. Lincoln Geraghty, for example, discusses serial narratives in his treatment of science fiction film and television and suggests that this way, "television allows a story to be created, developed and concluded (sometimes left open)" (2009, 125–126). Compared to stand-alone novels or films, for example, seriality allows the characters to develop over time – weeks, months, and even years – and this enables the viewers to form long-running emotional bonds with the characters they are familiar with. In addition to characters, we should recognise how large, sweeping topics can be addressed in the long form of television shows. Among others, Koistinen (2015, 29) has argued that the form of series television has affected how shows have been able to address cultural issues and react to them over time. In other words, the development of a world-as-process is important in series television in a way it is not in episodic television. Series television may, therefore, be defined by what Mittell (2015, 296) calls "cumulative persistence": facets like events and characters are treated as cumulative and consistent.

During the late 1990s and the early 2000s, many television shows developed the long form of series television in innovative ways towards what Mittell names complex television, employing "a range of serial techniques, with the underlying assumption that a series is a cumulative narrative that builds over time, rather than resetting back to a steady-state equilibrium at the end of every episode" (ibid. 18). The television shows that exemplified this development include *The X-Files*, *Buffy the Vampire Slayer*, *West Wing*, *Alias*, *24*, and

HBO's renowned productions *OZ*, *The Sopranos* and *Six Feet Under*. The ambitions behind the reimagined *Battlestar Galactica* employ a logic where episodes function as parts of larger storytelling arcs. Producer Moore (2003, 30–31) outlines this logic as a "three-tiered structure", which breaks down into show arcs, multi-episode arcs and episodic arcs. The first of these run through the life of the show, while the second allows the writers to spend two to four episodes dealing with a specific crisis. The third, in turn, provides a close-end narrative for each episode and gives a viewer a chance to watch any episode as a stand-alone.

In addition to the shift towards series (or complex) television, the enormous influence of digital media must be considered here, when it comes to the various kinds of ways we as users make connections and perceive the context in which things appear. Maj (2015, 92) suggests that we should relate both transmediality and worldbuilding to a cognitive attitude that, in Tim Ingold's words, values wayfaring over trail-following. In Maj's interpretation, "the narrative strategy of wayfaring" would correspond with the desire of the readers to "imaginatively [...] inhabit a world" (see Herman 2002, 570), while trail-following is deterministic, destination-oriented, and teleologically restrained, reminiscent of a traveller traversing unknown frontiers along a pre-designed route of their earlier choice. In my view, Maj's phrasing is rather poetic and the argument becomes clouded: how does the cognitive attitude of wayfaring translate into a narrative strategy? Nevertheless, the ideas of wayfaring and trail-following are useful, especially when connected with the user functions outlined by Espen Aarseth (e.g., 1997). As such, they bring up the idea of text as something that can be navigated using multiple routes and explored at will – which further contributes to the understanding of fictions as worlds. They also emphasise spatiality and simultaneity in our meaning-making processes, both in the sense of progressing through the work in its materiality and in the more abstract sense of virtual events and such that never come to pass. Importantly, they initiate a move away from the simple ontological understanding of a world and suggest that the impulse towards worldbuilding is crucially situated in user attitudes or functions towards works of fiction.

In their treatment of transmedial worlds, Klastrup and Tosca refer to these as transmedial "objects" or "entities", and continue: "A transmedial world is an abstract idea of a world generated on the grounds of the first actualisation of the world and the core elements this world contained, but not in any way restricted by this" (2004, n.pag). I have already argued in this study that my view of world-as-process is a constant work-in-progress, where – when it comes to works of fiction – artificiality is acknowledged and used as a resource. Here, I will connect my approach with the profound effects of the digital medium's participatory nature on legacy media. It is not a far-fetched idea to say that the digital medium with its ability to represent multisequential objects has affected the way we create, approach and interpret "transmedial objects" today. As Frans Mäyrä and Petri Lankoski have observed, one of Jenkins' overall contributions in his view on convergent media is that "the participatory media culture is a general, built-in expectation of *interactive engagement* with a world that largely consists of media contents, contributing to the development of a wider

'convergence culture'" (2009, 8). Such built-in expectations have definite implications, not only for the study of fiction but also for the understanding of the resources used in creating and making meaningful sense of works of fiction in general. The approach on worlds as works-in-progress, the resulting apprehension of stories as fragments or content that can be used for different purposes instead of seeing them as monolithic structures, and the doubled stance of *both/and* are all crucial features of interactive engagement with works of fiction.

The understanding of transmedial worlds that Klastrup and Tosca (2004, n.pag) outline presents them as reference systems for subsequent storytelling. Following this, one can suggest that the experience of worldness is not something that can be acquired by merely following a plot in the sense of a trail – it requires cross-referencing research, gathering data, exploration, and other strategies that are usually disregarded in story-centred approaches to works of fiction (cf. Maj 2015, 86). In my view, such understanding of worldbuilding embodies the idea of worlds as multisequential, and as I argued above, it is, therefore, not possible to distinguish the "original" in the sense of an unconditional sequence of events or primary representation of a certain character. Instead, they are virtual constructions with multiple different instantiations. The potential of viewing characters in this way, for example, has always been there in the abstract sense (see e.g., Iser's concept of virtual work in 1983), but digital media has strongly added to this potential, because it has made the concretisation of multiple instantiations possible in a new way. Furthermore, the concretisation is not possible only in the sense that it is easier to produce multiple instalments (such as web shows) and, therefore, realise the same character by means of different actors, but also because it is easier for the users to make sense of multisequentiality and not simply follow a trail across the world but "walk into" it by means of research, exploration and data gathering. Spatial or more abstract modes of organisation tend to be more challenging to grasp, compared with the causal or sequential ones: it is harder to gain a sense of what there is in the world. Luckily, the digital medium and the Internet have brought about new resources for managing structures of this kind and for archiving and exploring different materials or content. The larger understanding of works of fiction as consisting of various contents further illustrates both the economically motivated view of worlds and the more participatory aspects brought up in Chapter 4: the content appears to us as a something to be cut, pasted, reassembled, and distributed with ease (cf. Murray 2011).

Among the most popular resources for gaining a sense of what there is in a world for readers, viewers and players are content management systems such as wiki software. The essence of the wiki concept is not only in the fact that the content is created, modified and deleted in collaboration, without any defined owner or leader, but also in that it promotes meaningful topic associations between different pages and allows structure to emerge according to the needs of the users. Therefore, a wiki can be effectively used to illustrate complex relations between various characters or to list certain kinds of locations,

for example. For the *Battlestar Galactica* franchise, there is a "Battlestar Wiki"[102] which has over 4,700 pages in English (and nine sister wikis in other languages). Next, I will study the wiki page on Commander William Adama, one of the major characters in the show, in more detail to illustrate the recontextualising of a world-as-process with regard to the digital medium. Do characters like Adama appear as multisequential objects in the same sense that, for example, role-playing characters, do?

The page on William Adama lists information on his history, family and important life events in a manner that is similar to Wikipedia pages presenting real people. The biggest difference is, of course, that all carefully recorded notes refer to works of fiction – the numerous episodes of the television show, for example. In general, the wiki page can be viewed as an interesting display of the functioning of the double perspective, as imaginatively existing attributes of William Adama and the means used in the creation of them intertwine. As a further example of this, the page includes side by side information on the introduction of the character ("Miniseries") and on the character's family ties. The former piece of information concerns the means used in creating the character, while the latter covers facts fictionally existing in the transmedial world of *Battlestar Galactica*. However, they both contribute to the character of Adama in perfect harmony. The way users *deliberately* use this double perspective has been noted especially in fanfiction research. Bronwen Thomas (2011, 9), for instance, describes fanfiction as double-layered because the writers and readers need to keep "one toe in the realm of the 'real world'" while they are, at the same time, "being immersed in the fictional world". In the frame of gaming, Mäyrä and Lankoski analyse the so-called mixed reality gaming: "rather than explicitly promoting the gameplay and mundane world as something separate, mixed reality gamers experience a complex mixture of realities they are engaged with as a unified whole" (2009, 9). In my opinion, the effect that the wiki page on William Adama creates is closer to the mixture of realities that Mäyrä and Lankoski describe than the views according to which we need to engage in a "doubled act of pretense" (see Turk 2011, 99–100) in order to deem explicitly double-layered fiction relevant. I have already discussed this with regard to the double perspective, but in interactive engagements the way realities mix into a unified whole in the user experience is even more pronounced.

When it comes to the reimagined *Battlestar Galactica*, the mixture is partly the result of the open-endedness of the transmedial world and the fact that the various episodes, films and shows are explicitly separate instalments. Although it is, in some sense, possible to point out the beginning of the television show in the same way that the wiki page can mention when the character of William Adama was first introduced, it is not as easy to say where it all ends, as new instalments can be made indefinitely. Dena attempts to define the work as a whole by referring to the act of the creator: her approach draws its inspiration from the theory of multimodality by Gunther Kress and Theo van Leeuwen, who argue that different modes have effectively become the same level of representation. Thus, they

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102   The wiki can be found at http://en.battlestarwiki.org/wiki/Main_Page.

can be operated by one multi-skilled person who can ask, at every point: "Shall I express this with sound or music?" or "Shall I say this visually or verbally?" (Kress and van Leeuwen 2001, 2.) Dena then pictures a polymorphic fiction creator, who asks: "Shall I express this part of my fictional world with a novel, computer game, painting, or film?" (Dena 2010, 187). Obviously, this is hard to picture when it comes to the transmedial worldbuilding of *Battlestar Galactica*.

The character of William Adama appears in various instalments of the reimagined *Battlestar Galactica*, and he is portrayed by four different actors, the most iconic being the commander (later admiral), "the old man" portrayed by Edward James Olmos. In the *Razor Flashbacks*, a web show or a set of "featurettes" that provides the story of the young Adama who witnesses a Cylon experiment during the first Cylon war,[103] he is portrayed by Nico Cortez. The seven-part web show was aired in 2007, between the third and fourth series of the reimagined show. In the global context, the web show creates a sense of history with references to the original 1978 show. In the second episode, Adama walks past a man who is wearing the beige tunic of a warrior uniform from the original show, while the third episode makes use of CG models that are based on the designs for a Cylon craft similarly used in the original *Battlestar Galactica*. Furthermore, in the fourth episode Adama fights a Cylon Centurion, whose model is a visual replica of the same model in the 1970s show, and the classic sound effect of the Centurion's eye-scanner is reused, as well.

According to the views promoting pretense, the viewer of the various instalments of *Battlestar Galactica* is supposed to forget the fictionality of characters like William Adama in order to become emotionally attached to them. Both the idea of belief (or the willing suspension of disbelief) and the assumption of being in the world as pretense pay little attention to the consequences of the fact that the viewer needs to recognise that the instalments are invented artefacts. In this, the possibility of viewing Adama as a possibly existing person is closely intertwined with the awareness of him as an element of the artefacts and probably serving some purposes as such. In Chapter 4, I discussed role-playing characters and suggested that they should be seen as variables that can have multiple instantiations, not as predetermined entities. When a role-playing character is created, it is not created as a single version of an object (or a person) but as many possible versions with many variations (cf. Murray 2011, 53). Something similar seems to be going on particularly in the local context of transmedial worlds with regard to their characters. The development of characters is processual and fragmentary – pieces of content are cut, pasted, and sometimes even reassembled. The most significant difference in such processuality between transmedial and other fictions is perhaps the scale of explicitness from the user's point of view. The various instalments of the reimagined *Battlestar Galactica* explicitly add new "pieces" to Adama's character. The web show *Razor Flashbacks*, for example, casts new light on Adama's past dealings with the Cylons and his role in the last days of the first Cylon war.

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103   Originally, the flashbacks were cut out of the *Razor* television film due to time constraints, but most of them were reintegrated in the DVD release of the film.

The fragments and the larger wholes they contribute to are recognised simultaneously. The wiki page on Adama both makes use of and duplicates this process, exposes it.

In the local context of the reimagined *Battlestar Galactica*, the 2007 television film, *Razor*, calls for the viewers to consider some characters and events that they already have familiarised themselves with in a new context. The film depicts events on another battlestar, *Pegasus*, which managed to escape the Cylon attack, and it uses flashbacks to provide more information on the commanding officer of the ship, Rear Admiral Helena Cain, about her personality and the reasons for her (mostly reprehensive) actions that had already been featured in the reimagined show during the two episodes of the second series, "Pegasus" and "Resurrection Ship". It is revealed, for example, that the sadistic torture inflicted on the Cylon prisoner Gina was influenced by the fact that before Gina helped the Cylon centurions to board *Pegasus* and was revealed to be a Cylon, she had had a romantic relationship with the admiral. Cain's personality is explored in the film by means of introducing a new character to the show, a young officer Kendra Shaw, who becomes a disciple of sorts to Cain. In one of the key scenes in the film, Cain tells Shaw to become a razor in order to survive the war, referring to her pocket knife, which will later come into Kendra's possession. This way, the television film provides a new context for the character of Cain, who has been shown as iron-fisted, even sadistic earlier in the show – in "Pegasus", Cain's executive officer recalls an incident in which Cain shot the original XO in front of the crew for refusing to follow up on her order to attack a heavily-defended Cylon relay station. *Razor*, in other words, provides a context which may help the viewers to understand, if not approve of, the rationale behind Cain's actions through her history with the Cylons. The character is not rewritten or reworked, but *recontextualised*. As a result, the character *appears* different, in the new context.

The latter of the two television films, *The Plan*, is an interesting case of *revisiting*, another form of recontextualising. This is realised rather concretely, as the film consists not only of newly filmed material, but also of compilation of footage from both the miniseries and the television show. In short, all the significant events in the miniseries and the first two series are retold from the Cylon perspective, therefore shedding more light on their plan to wipe out the human race. The course of events in the film is effectively incomprehensible for someone who has not seen the miniseries and the show and, therefore, it is best viewed as a final goodbye to the characters and locations that the viewers had grown familiar with during the run of the show. *The Plan* concentrates on the two versions of a Cylon known as Cavil, and the story unfolds in flashbacks. The "Final Five" Cylons are also featured: it is revealed, for example, how the three of them who were not aboard Galactica survived the attack on the Colonies. The starting point for the film's flashback narrative is the second series two-part finale "Lay Down Your Burdens", where the two versions of Cavil debate on whether the attack on the Colonies, along with the pursuit of the fleet, was an error. In short, *The Plan* provides the rationale for both the attack and the Cylon's change of heart and, therefore, recontextualises their actions and characteristics.

All in all, the various instalments of the reimagined *Battlestar Galactica* do not really remake or reassemble the construct but recontextualise its elements, which are already familiar to the viewers. This advances or furthers the world-as-process, especially with regard to the character stories, but also to the larger frame of the show when it comes to *The Plan*. In addition to recontextualisations, they might be called expansions, designed to tell us more of certain characters, events or aspects in the show (see Thon 2015b, 33), but such expansions can *modify* our views on the characters, as well. How could Admiral Cain justify the horrors inflicted on the Cylon Gina and the small civilian fleet, which was stripped for parts and personnel and then abandoned in space? Why did the Cylons suddenly give up the pursuit of the fleet, and what did their oft-mentioned plan really involve? What sort of a character was Adama in the past? Furthermore, as a practice, recontextualisation is rhetorical: the depiction of events behind Admiral Cain, for example, argues for a more humane view of the character and speculates on the idea of how individuals (especially those in high places) might react in extreme situations. It also reminds us not to jump to conclusions about somebody without the knowledge of the context behind her or his actions. Next, I will look at the practice of remaking the "basic elements" of the construct with the example of a comparison between the reimagined *Battlestar Galactica* and the original show.

7.3   Remaking the Construct

The last part of this chapter views the rhetorical affordances of reimaginations in the global context. If we, following Klastrup and Tosca (2004, n.pag), outline the transmedial world basically as an abstract content system from which a repertoire of characters, for example, can be actualised, then it must include, by the same token, the elements and their relations in the non-actualised or potential sense. As I have noted above, these particular elements would include specific characters and, to some extent, their characteristics (like Starbuck), certain premises or sequences of events (like the Cylon attack on the Colonies) and certain locations (like the eponymous battlestar, *Galactica*). In this, the world can be likened to multisequential objects that the digital medium is able to engage us with. However, compared to such objects, the different ways in which objects of a transmedial world are realised contributes to the proliferation of new meanings and interpretations in the global context.

One of the most obvious (and, according to many viewers, infuriating) difference between the realisations in the 1970s show and the reimagined one was the producers' decision to rewrite the characters of Starbuck and Boomer as women. The decision was viewed by some as an outrage and a betrayal of the spirit of the show. I already mentioned this in relation to the distinction between the two contexts and the concept of *ethos* (Klastrup and Tosca 2004, n.pag), which includes the sense of what behaviour can be deemed "in character" or rejected as "out of character" in a specific context. This way, the

core features of a world can also be likened to the concept of canon, which is important for the writers and readers of fanfiction. As Sheenagh Pugh puts it: "[O]ne thing all fanfiction has in common is the idea of 'canon', the source material accepted as authentic and, within the fandom, known by all readers" (2005, 26). Chapter 8 will return to this topic, but here I would like to highlight the fundamental difference between canon and the kind of abstract content system that Klastrup and Tosca discuss. The idea of canon is maintained and negotiated communally within the fandom, but the formation of the canon in the first place is based on the fact that some works of fiction lend themselves to the construction of abstract content systems quite readily. The works of speculative fiction are prominent among such works because of their ability to develop some of the possible consequences of a certain idea, by means of concretising such abstract systems into what McHale calls "scale-model worlds" and, therefore, facilitating the understanding of *what there could or might be in a world* more easily. In what follows, I will consider the concretised systems of the reimagined *Battlestar Galactica* against the original show and attempt to tease out the rhetoric in the global context.

The relationship of the reimagined show with the original is well summarised in the character of Starbuck. Before the reimagined show, Starbuck was generally seen as a simple stock figure: a cocky, insubordinate, card-playing womanizer who, nevertheless, is the best fighter pilot in the whole fleet. In the reimagined show, these stereotypical origins were retained in the new, female version of Starbuck. However, the character fast outgrew the stereotypes and Starbuck became one of the show's most popular as well as the most complex characters. Correspondingly, the actor Katee Sackhoff was praised for creating one of the most fabulous female characters on television (see e.g., McNamara 2009). Carla Kungl (2008) has connected the success of the character with the female masculine, a female actor playing a "male role". With regards to the two contexts I have discussed, the rewriting of Starbuck's gender is perhaps initially the most striking feature of the character compared to the original, but one does not need to make this comparison in order to appreciate the rhetoric of envisioning a society that has given birth to a female character such as her. In other words, different contexts – global and local – provide different viewpoints to the character: while the global context focusses on the relationship between the old and the new Starbuck, the local highlights features from the reimagined show. Furthermore, it is interesting to compare this observation to the claim that when it comes to contradictory differences – such as being represented by different actors – in an audio-visual representation of a character in a transmedial environment, these differences tend to be "charitably ignored" (Thon 2015b, 30) or "misremembered, forgotten and even non-remembered" (Harvey 2015, 200) instead of being actively used as part of meaning-making.

A similar change from the stock figures and settings towards more intricate ones can be noticed in the ideas the reimagined show is working out. The premise is basically shared by both versions. Despite their futuristic elements and setting, the events of the shows are

take place in the pre-historic past of our world, illustrated by the opening narration of the original show: "There are those who believe that life here began out there, with tribes of humans who may have been the forefathers of the Egyptians, or the Toltecs, or the Mayans". However, certain significant rewrites in the reimagined show turn the premise into a starting point of rather a different idea, attempting to create a direct double exposure between reality and fiction at the end of the show. The last scenes of the show in the two-part finale "Daybreak", for example, strongly imply that the process of creating artificial intelligence that can become self-aware is already underway in our mundane world, achieving this through footage of different robots, such as the one that imitates human form and appearance. The mantra-like sentence recurring in the show is rephrased: "All of this has happened before – but the question remains: does all of this have to happen again?" The larger question concerns, in other words, the human nature in general – are we destined to repeat the same mistakes over and over again? The rewrites that enable the working out of such an idea are connected with the different view on the role of technology. Furthermore, both the view and the rewrites are linked with the trend towards darker visions and the reimagined show's status as a post 9/11 fiction.

The first one of the larger ideas behind the rewrites is suggested by Vincent Tomasso, who argues (2015, n.pag) that while science fiction franchises such as *Star Trek* praise the cognitive hermeneutic over the mythic one, the reimagined *Battlestar Galactica* does the reverse. Tomasso borrows the terms "mythic" and "cognitive" from Darko Suvin's definition of the science fiction genre's approach to the universe: "The myth is diametrically opposed to the cognitive approach since it conceives human relations as fixed and supernaturally determined. [...] Conversely, SF [...] focuses on the variable and future-bearing element from the empirical environment." (Suvin 1979, 7.) The origin of the Cylons is a significant rewrite decision. In the original show (and the short-lived *1980*), an advanced reptilian race called the Cylons created the robot Cylons in order to aggressively expand their empire. In the reimagined show, science is responsible for many problematic developments, such as the creation of the Cylons and the near-complete destruction of humanity. Tomasso, thus, argues that "the mythic approach is an integral part of the reimagined series' teleology", as in the show's vision of history, "the route to humanity's salvation is the mythic one, not technological progress" (ibid.).

The second important rewrite in the reimagined show is the fact that the Cylons have made a conscious decision to model themselves after the twelve human forms, each of them exhibiting certain aspects of the human body and personality. Together, the two rewrite decisions make all the difference in the way the Cylons are employed in the world of the show and how they appear. Because they are constructed by the humans, they tie into the larger struggle between the mythic or spiritual and the cognitive or rational, and because they strive to mould themselves into a likeness of their creators, they function as a powerful tool for addressing some deeply humanistic themes, like the one stated in the show bible: "How can a Cylon truly know what love is? [...] How can any of us know?" (Moore 2003,

10.) Another significant change caused by the rewrite of the Cylons as indistinguishable from humans by appearance is that the reimagined *Battlestar Galactica* does not present a threat that is simply coming from the outside. From the viewpoint of the fleet, the Cylons "in our midst" is a constant threat, similarly to the ones "out there". This effectively creates tension because *anyone* could be a Cylon, and the show's characters experience fear and paranoia as a result of this. The board game based on the reimagined show, *Battlestar Galactica: The Board Game* (2008, Fantasy Flight Games) is designed to inflict similar feelings on the players. In the game, one or more of the players secretly side with the Cylons (the status is determined by loyalty cards) and each turn brings a "Crisis Card" involving various tasks that the players must overcome. In the show, the way people react to the threat among them is used as a principal means to address questions typical of the post 9/11 or "post Patriot Act" fictions: how far will they go to ferret out the "traitors" among them? As Mervi Miettinen (2012, 290) has suggested in her analysis of post-9/11 American superhero comics, the darker contexts in the 21st century superhero comics "clearly imply that America is threatened, but both the enemy and the way to respond to it are constantly being *rewritten*" (2012, 290; emphasis original).

I noted above that numerous approaches draw from a largely unexamined commitment to what one could call the model of a "single world", the assumption that transmedial constellations should ideally or do actually represent a single world (see Thon 2015b, 24). Such a model has, furthermore, contributed to the view that transmedial worldbuilding involves redundant representations of the same elements over and over again. In this, a world is understood simply in the form of a static setting or as a collection of elements which then can be arranged or expanded in different ways. However, when we consider the scale-model within which an idea is worked through, the relationship between the particulars and the general context is much more dynamic and intricate. This very much concerns transmedial fiction and its rhetoric, too, and can easily be illustrated in a compact form with an example of a more episodic television show, such as *Star Trek: The Next Generation*. While there are plenty of episodes in *The Next Generation* which basically use the predefined elements (such as specific characters and locations) in order to tell an entertaining story, some of the episodes make use of the rhetorical resources made available by transmedial worldbuilding. In the episode "The Measure of a Man", for example, the android officer Lieutenant Commander Data has to stand up for his right for self-determination in order to avoid being declared the property of Starfleet and disassembled in the name of science, as he is the only android in existence.

One of the reasons why "The Measure of a Man" is such a powerful episode rhetorically is because it manages to address a particular problem concerning particular characters in a much larger or general frame. During the hearing in the courtroom, Captain Picard pleads for Data's right to choose and argues that if Data is, some day, successfully replicated, the decision made in the courtroom will reach far beyond one android: "It could significantly redefine the boundaries of personal liberty and freedom, expanding them for some, savagely

curtailing them for others. Are you prepared to condemn him and all who come after him to servitude and slavery?" This way, Picard (and the episode itself) is able to address not only the larger question that the humanity faces every day – how we treat beings who are different from us and what this reveals about us as a people – but also the meaning and consequences of the decision within the *Star Trek* universe. "Your Honour, Starfleet was founded to seek out new life," Picard declares, and gestures at Data: "Well, there it sits." In short, the episode uses what there is in the world of *Star Trek* in order to work through an idea and engage us in imagining its possible consequences.

Similarly, though in the much wider, global context, the reimagined *Battlestar Galactica* takes up the particulars of the franchise and uses them for new purposes, therefore reworking and even questioning the larger original frame. It is not only about using the abstract content system – or the global context – in order to create new storylines, but also about making use of them in order to address the role of technology in the human society and our relationship with it. Are we doomed to live out the cycle of destruction, which results from our flawed understanding of ourselves as rational beings and our ambitions to "play God" despite the fact that we are not ready to do so? Or can we find meaning and fulfilment in a more spiritual or mythical way and, through this process, grow as human beings in a more "organic" way? The possible answer that the reimagined *Battlestar Galactica* gives is perhaps puzzling in the context of science fiction: in the show's finale, when the Colonials finally begin their life on new Earth, they destroy all their technology by sending it into the sun and offer the native humans only their language skills.

Moore anticipates the ending in the show bible while noting that although the Colonials have occupied their worlds for several thousands of years, their technology is not much more advanced than the technology in our mundane world. This presents the possible backstory where the "twelve tribes evidently abandoned whatever advanced technology they had (which is possibly a recurrent theme)" (Moore 2003, 4). Tomasso sees the show as suggesting that to break out of the destructive cycle, the "humanity must embrace a mythic hermeneutic and hybridise its traditions, as well as reject the technology that leads to arrogance and decadence" (2015, n.pag). The show's finale can thus be viewed against the show's ambition to reinvent science fiction television: it uses the general frame and elements of science fiction, but reworks them in more ways than one. The conclusion of the show falls closer to the category of mystical or magical – fantastic, in other words – although it follows the conventions of traditional science fiction for most of its run.

All in all, the aesthetics and rhetoric of both recontextualising and remaking in the transmedial fiction are more and more prominent in the media culture of today. In this chapter, I have connected them, not only with transmedial worldbuilding, but also with the larger interactive engagements brought about the digital medium which transcends medial boundaries. It is crucial to note that interactive engagement does not simply entail using ready-made elements and pieces in order to create rearrangements of them. Instead, the rhetorical potential of worldbuilding can be put to a good use in the transmedial

environment, as well. Still, in many discussions, the huge franchises or transmedial worlds are viewed as concretisations of the contemporary economic logic where characters and stories can repeatedly be exploited, while elements such as memorable characters can support their own production lines.[104] The assumption that transmedial worldbuilding would ideally involve multiple instalments (more or less successfully) representing "a single world" is related to this – but, in my opinion, it cannot be undone by simply stating that franchises afford "occasionally rather complex storyworld compounds that one could, for lack of a better term, call transmedial universes" (Thon 2015b, 40). Rather, we need to ask for what purposes – other than economic or aiming at representing an "original", canonical world of some kind – transmedial worldbuilding is used, and this is why I have explored the rhetorical potential of transmedial worldbuilding throughout this chapter.

Furthermore, I suggested that the genre of speculative fiction is prominent among works that lend themselves to the construction of abstract content systems quite readily, because of their ability to develop some of the possible consequences of a certain idea by means of concretising such abstract systems into scale-model worlds. Speculative worldbuilding both facilitates the user's understanding of a world in the sense of a model and makes the ways that are used in working it through visible. In fictional worldbuilding, the double perspective concerns both the understanding of *what there is in a world* and of *what there could be in a world*. As an imaginative and immersive practice, speculative fiction does not only engage us in imagining world-models, but also communicates ideas in relation and by means of such models: they function as contexts which make ideas communicable. Transmedial worldbuilding makes use of a context larger than just one instalment, and as I have argued in this chapter, the scope of the context can vary and affect the process of meaning-making.

In addition to canonical franchises, fanfiction and other fan-based creations are quite an interesting example of analysing the practices of recontextualising and remaking in a larger cultural context, especially because fan-made works of fiction are becoming harder and harder to distinguish from the ones produced by corporations. A recent example of how close the fan made works have come to the canonical ones is the fact that the producers of the latest fan made *Star Trek* feature film in planning, *Star Trek: Axanar*, were filed for copyright infringement in federal court by CBS and Paramount Pictures in December 2015. In the next chapter, I will discuss the various practices and contexts of fanfiction writing and return to the topic of whether the stories and other instalments are just redundant versions of the prior ones. I argue that "fanonical" works similarly make use of the world-as-construct in the form of the shared understanding of what there is in a world, and the world-as-process as a shared strategy of imagining what there could or might be in

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104   One could argue that the producers of the reimagined *Battlestar Galactica* followed such a principle with the latest instalment in the franchise, *Blood and Chrome* (2013), which chronicles the early adventures of young William Adama. It was aired as a web show and became a pilot for a possible show, but the show was not picked up despite the fact that Adama could be seen as a character interesting enough for a "production line" of his own.

a world. However, the question of what is made communicable by means of worldbuilding is rather different in the canonical and fanonical works.

8 WORLDS AS SITES OF COMMUNALITY AND SHARING

The previous chapter outlined the practices of recontextualising and remaking in the frame of transmedial worldbuilding, while here I will widen my scope to an even larger cultural context and fan-made works of fiction. Fanfiction is often seen as a democratic or liberating genre (see Pugh 2005), and the notion of a textual poacher famously coined by Henry Jenkins presents fans as opposers or transgressors. In *Textual Poachers* (1992), a seminal text in fan studies, Jenkins argues that media fans are "readers who appropriate popular texts and *reread* them in a fashion that serves *different interests*, as spectators who *transform* the experience of watching television into a rich and complex participatory culture" (ibid. 23; my emphases). As Jenkins' choices of words clearly indicate, fanfiction writing, for example, can be seen as subverting the source material through the act of taking. However, as a larger modern cultural practice, the act where previously established characters are "taken" from one work to another and put into use is not subversive in itself. As fan studies have expanded their scope, it has become increasingly recognised that the models of resistance are not the only way to understand the work of fandom.[105] Matt Hills, in particular, has suggested that using the concept of a textual poacher has been strategic, "a rhetorical tailoring of fandom in order to act upon particular academic institutional spaces and agendas" (2002, 11).

The tailoring of this kind can have problematic repercussions, especially for the analysis of fanfiction within a larger cultural context. Juli J. Parrish notes in her recent article (2013, 4.10) that with fan metaphors such as "poachers" what often gets highlighted is fans as people and, to some degree, the actions they take as fans. Unfortunately, the creative processes in which those people engage are eclipsed – and, as I would like to add, so are the actual fan texts. Parrish herself does not look at a single fic, a work of fanfiction, in her article. Bronwen Thomas, however, argues that "close textual analysis is often denigrated

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105   In short, fandom (consisting of 'fan' plus the suffix -dom, as in 'kingdom') is a term used to refer to an active and participating subculture composed of fans. Fandom encompasses all kinds of fannish practices, which are usually born as part of a social network. It might sound like a new phenomenon, but Merriam-Webster dictionary, for example, dates the word's first known use to as early as in 1903 (see http://merriam-webster.com/dictionary/fandom).

on the basis that the identities and practices of fans cannot be abstracted from the sorts of texts they write, but must be analysed as socially situated practices and activities" (Thomas 2011, 2). This chapter explores how the transmedial practices of speculative worldbuilding, especially in a digital environment, are put to use in fanfiction writing, since the ways in which digital media has influenced our understanding of works of fiction and contributed to the interactive mode of engagement are clearly visible in fanfiction. The approach on worlds as works-in-progress, the resulting apprehension of stories as fragments or content that can be used for different purposes instead of seeing them as monolithic structures, and the doubled stance of *both/and* are all crucial features of fanfiction. In addition to this, they are connected with the aim of sharing and promoting communality by means of transmedial worldbuilding. In this frame, a work of fanfiction can be used for subversive purposes when, for example, alternative, communally established readings are canonised and used to highlight hegemonic interpretation, which often goes unnoticed. However, a subversive action such as this is not only done to fulfil some political or social purpose but also to concretise the abstract experience of being a fan and sharing it with others.

As the case study in this chapter, I have the fandom of *Firefly*, an American space western drama television show created by writer and director Joss Whedon, which debuted on the FOX network in September 2002. The show is set in the year 2517, after the arrival of humans in a new star system. In short, it explores the adventures of a renegade nine-person crew aboard a "Firefly class" star ship Serenity,[106] captained by gun-for-hire Malcolm "Mal" Reynolds. The conscious references to the Western genre are apparent not only in the depiction on harsh planetary environments, costumes and equipment but also in the character roles and their social setting as part of a pioneer culture, existing on the fringes of the star system. The two surviving superpowers, the United States and China, have fused in order to form the central federal government, called the Alliance. Although the show received a good critical response and a positive reaction especially from the Whedon fans,[107] *Firefly* was cancelled after ten of the thirteen produced episodes plus the two-hour pilot ("Serenity") had aired. Despite its short life of television, *Firefly* has enjoyed exceptional success after its airing. It has a large fan base which is still growing and is self-styled as "The Browncoats" after the independence fighters in the show. The *Firefly* franchise has expanded from the original show to other media such as a feature film written and directed by Whedon (*Serenity*, 2005) and comics.[108]

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106   Although the names of ships are usually italicised, for the sake of clarity I will use the italicised form (*Serenity*) to refer to the film and the non-italicised form to refer to the ship.

107   At the time *Firefly* made its debut, Whedon was already well-known for creating *Buffy the Vampire Slayer*, a highly regarded television show which aired from 1997 until 2003.

108   As of March 2016, eight comic book stories have been released under the *Serenity* title: one six-issue series, two three-issue miniseries, two one-shot comics and three short stories. In addition to the comics, a novelisation of the film *Serenity* was published in 2006, and the *Serenity* tabletop role-playing game was released in 2005. In the viral marketing of the film, a series of five short videos known as the "R. Tam sessions" were released anonymously by Whedon through various websites and message boards.

In addition to the devoted fan base, *Firefly* is especially interesting due to the fact that the building of its fictional world and characters had barely got started when the show was cancelled. The threads that were left hanging loose have actively been picked up by the fandom. In what follows, instead of using solely people-centred metaphors such as poachers or nomads, I will attend to the processes involved in producing and disseminating fan-made *Firefly* stories. In addition to such processes, my focus will be on the texts, both on fics written by fans and the so-called source text, while considering why sources such as *Firefly* seem to offer such a fertile ground for fanfiction writers. Throughout my discussion, I will connect this to the larger frame of speculative fiction and the understanding of a world both as a construct and as a process. In my point of view, fanfiction writing "doubles" the strategies of speculative fiction: the what-if moment is applied in the context of the world of the source text; dislocation or alienation is achieved in relation to the "original" world of fiction; and the double perspective on worlds is employed. Furthermore, this is closely tied with the idea of science fiction as "less a genre than an ongoing discussion" and the fact that science fiction is often "written by those active in criticism and can be generated from the same fan base which supports the market" (Mendlesohn 2003, 1). I will argue that through this analysis, it is possible to address the question of whether the stories and other fan-made instalments are just simple versions or rearrangements. Is it really possible to open up new viewpoints, discuss science fiction and create new interpretations by means of fanfiction? Or, conversely, does fanfiction even have to do so?

8.1   The What-if Moment in Fanfiction

Fanfiction has attracted increased academic interest only during the last two decades, despite its relatively long history, which some date as far back as to the ancient Greek and Roman literature, such as Homer's poems, as Abigail Derecho (2006, 62) notes. However, I find such a definition too broad and subscribe to the narrower definition, which maintains that fanfiction stories "originate in a self-identified fan culture, implying that the only fanfic is that body of work that explicitly labels itself 'fanfic'" (ibid.). In other words, it has to have been written by a fan to other fans. The narrower definition, therefore, dates the origin of fanfiction to the birth of fan societies around the works of Jane Austen and Arthur Conan Doyle in the 1920s, and media fandom to the *Star Trek* fandom in the 1960s. Today, fanfiction is mostly published on the Internet either on forums born around a specific fandom or forums specialising in fanfiction in general, such as fanfiction.net, the largest online archive for fanfiction, which hosts millions of stories. These are the most common channels for *Firefly* fics, as well – fanfiction.net, for example, currently lists approximately 7,300 stories under the category of *Firefly*. In addition, there are various sites that bring out the communal and collaborative aspects that are intrinsic to fanfiction writing and reading. Among others, there are sites for "reccing" (recommending) the best *Firefly* fics for

interested readers (such as recs in TV Tropes) and usually blog based communities for both beta reading[109] and reccing (such as "Firefly lovers" in Livejournal.com).

In short, fanfiction has been defined as new fictive texts written by fans "on pre-existing texts or fictional worlds" (Page and Thomas 2012, 277). As Sanna Lehtonen points out, fanfiction writers "do not aspire to produce completely new stories; they enjoy creatively experimenting with the existing story-world and characters that they love (or, sometimes, hate)" (2015, 8). Structurally, fics are sequels, prequels or stories where the source material is expanded with the writer's own storylines or characters. Perhaps for this reason, many of the biggest fandoms are related to serial narratives that trade on the idea of the plot as an "infinitely extended middle" (see Fiske 1987, 180), as opposed to clear beginnings and endings. The *Star Wars* franchise is an archetypal example of such logic, as it begun its life *in medias res* with episode number four, implying that there would be prequels and sequels to come.[110] Furthermore, the stories fans write can be likened to reimaginations and adaptations, as not only new plotlines, settings, events, characters, or relationships between characters may be introduced, but also style and genre can be changed and crossovers created.

I have already acknowledged that fanfiction can be seen as a modern embodiment of fairly old strategies and genres of writing. This observation has led researchers such as Abigail Derecho to consider fanfiction to be an artistic practice instead of viewing it only as a social phenomenon. Derecho (2006, 63) herself compares fanfiction with the genre of writing that has been called "derivative" or "appropriative", and argues that in order to better describe what fanfiction is and how it operates, these terms should be replaced with the term *archontic*. She further explains the reasons behind her choice of term:

> A literature that is archontic is a literature composed of texts that are archival in nature and that are impelled by the same archontic principle: that tendency toward enlargement and accretion that all archives possess. Archontic texts are not delimited properties with definite borders that can be transgressed. (Ibid. 64.)

Derecho's insistence that the archontic texts are not properties with boundaries but allow, or even invite, writers to enter them and deposit the newly made "work back into the source text's archive" (ibid. 65) provides an interesting point of comparison with the ruling views on fanfiction. Among others, Jenkins (1992, 156) has stated that while writing fics, fans are able to "stretch the boundaries of the text". This is particularly true of expansion, where fanfiction writers can seize upon a single line or a similar detail to launch a book-length storyline. The boundaries – as well as fanfiction on the whole – are intertwined with the

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109   Beta readers are often the most important evaluators of fics. The inner hierarchy of fan communities is, therefore, reflected on the fic evaluation, as beta readers act within the community as publishing editors of sorts.

110   The first film was originally intended to be a stand-alone story. However, quite soon after it had proved successful, George Lucas decided to use it as the basis of a serial: as a result, the title was switched from *Star Wars* to *Star Wars IV: A New Hope*.

concept of canon, the source material accepted as authentic and, within the fandom, known by all readers (see Pugh 2005, 26).

In this study, I have announced my stance to be that of *both/and*, and this holds up with fanfiction as well. I find it interesting that the boundaries *both* exist *and* do not exist – or, that the boundaries exist but they are not definite, but rather negotiable and relative. This is reflected in Derecho's treatment of fanfiction: she goes on to argue that archontic writing is intrinsically against "cultures of the dominant". Therefore, archontic literature "works" by repeating with difference, turning virtualities and potentialities into reality, and being characterized by relation. (2006, 72–74.) However, if borders or boundaries that can be transgressed do not exist in any meaningful sense, how is such resistance, a practice of writing "against" something, achieved? Even Derecho herself notes that there is a "specific relation between new versions and the original versions of texts, the fact that works enter the archive of other works by quoting them consciously" (ibid. 65). One could say that such quoting is a way of writing resistance inside and with relation to malleable borders.

Derecho's aim of analysing fanfiction as an artistic practice (or, as "literature") and attending to the interplay between texts is relevant, but her treatment lacks something crucial, the fact that the archive and the understanding of it are communally created and negotiated. It is significant that many approaches to transmediality, based on the concept of storyworld, similarly miss something important, as Colin B. Harvey argues: "[Storyworlds] account only for relationships *within* the transmedia network, rather than also accounting for the storyworld's interactions with the wider web of relations, in other words the social and cultural context" (2015, 23; emphasis original). The archontic principle, the tendency toward enlargement and accretion, is becoming something of a norm in the modern media landscape and can be noticed in the prominence of the concept of *universe*. In other words, I do not see the principle as a feature of certain kind of literature, but as a principle which increasingly guides and influences the creation and approach to the works of fiction today. It is motivated by both the influence of digital media and the economic logic where "each truly interesting element can potentially yield its own production lines" (Jenkins 2006, 117). Therefore, in the frame of my approach, I view fanfiction as a part of this larger cultural phenomena in terms of strategies of writing and imagining, but consider it unique in terms of the way these are used for the purposes of sharing and communality.

In general, transmedial worlds (or "transmedia storytelling") have become the hallmark of the contemporary participatory culture. In the previous chapter, I suggested that the core features of a transmedial world (defined by Klastrup and Tosca as an abstract content system) can be likened to the concept of canon. This brings me to the question of why the genres of fantasy and science fiction are so prominent among transmedial fiction and the source material of fanfiction. Both speculative fiction and fanfiction thrive on the understanding of a fictional entity like the *Firefly* franchise as twofold: there is the (transmedial) world-as-construct, the shared understanding of what there is in a world, but it can be actualised and processed in innumerable ways. In the analysis of the reimagined

Battlestar Galactica, I made use of this observation when discussing the various strategies of proliferation in the two contexts, the global and the local. Fanfiction is another interesting case study of such phenomenon, as it openly displays the strategies the readers and viewers use through the practice of *reusing* them in their own writing – such as the what-if moment, which prompts the development of some of the possible consequences of a certain idea by means of concretising abstract systems into "scale-model worlds" (see McHale 2010, 21). The sequels and expansions are the most obvious example of such fannish proliferation or processing, and this is true also of *Firefly* fanfiction.

Despite the fact that the film Serenity seemingly addresses all major plot points introduced in *Firefly* and closes them, the ending of the film does not so much establish a set of definite boundaries as offer a particularly fertile ground for sequels: simply, what if *this* happened next? What would follow, and why? The outset of numerous fics is presented briefly as "post-BDM" (the film is generally called "Big Damn Movie" by the fans) or as "post-Miranda", which refers to the revelatory events on the planet Miranda in the film. For example, the currently nine-chapter series "Forward" published on fanfiction. net by the author Peptuck, introduces its starting point simply: "Following the Miranda broadwave, there's only one direction for Malcolm Reynolds and his crew to go." Among the most important story arcs addressed in *Serenity* is the past of River Tam, a young girl who has been mentally and physically conditioned by the Alliance scientists against her will. Rescued by her brother Simon, the two find refuge aboard Serenity. During *Firefly*, it is established that the Alliance desperately wants River killed and that she has exceptional abilities which are undoubtedly caused by her conditioning, while the film explains that she has been subjected to a government experiment to create the perfect assassin. In *Serenity*, River's lethal skills are triggered, but in the end, there is a sense that she has found her place as Serenity lifts off with her as Mal's co-pilot. What goes on inside her head is not, however, elaborated on, and a good deal of *Firefly* fanfiction takes this as its point of departure, as fans imagine what her new life might be like after she has faced her demons.

As a how, *Firefly* is very character-driven. The way Whedon pitched the show illustrates well the centrality of the characters: "It's about nine people looking into the blackness of space and seeing nine different things" (qtd. in Brioux 2004). It is not surprising, then, that most of the *Firefly* fanfiction is centred around character stories, such as River's unexplained past ("What did the scientists do to her?") and similarly mysterious Shepherd Book ("How can a clergyman be familiar with firearms, hand-to-hand combat and criminal activity?").[111] Still, it is hardly fitting to say that the fans would be, like Robin Hood, snatching the characters back from the creators (see Jones 2006, 162). For one, most writers use slogans such as "Joss is boss!" as a disclaimer in the introductory sections of their fics to denote that they do not "own" the characters and to show their respect for the creator. Parrish (2013, 5.3) notes that although "the act of taking" is in some ways the

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111   However, the need to "flesh out" Book's past in fanfiction is not so urgent any more, as his mysterious backstory was the topic of the graphic novel *Serenity: The Shepherd's Tale* (2010), written by Joss and Zack Whedon.

very heart of fanfiction writing, we are just beginning the larger enquiry into the creative invention that is happening in addition to the borrowing of source material. She suggests using metaphors that focus not on the acts of borrowing, stealing, or recombining but "on some other actions, perhaps appearing as random strategies and gestures" (ibid. 5.4). While I agree with most of Parrish's critique on the dominant position of metaphors focussed on the taking, I do not approve of her choice to use a notion such as Brownian motion which concentrates on chaotic or random processes. The processes of writing fanfiction are, in my opinion, far from chaotic and random, and they can be better explored if both fan texts and socially situated fannish practices and activities are taken into account. Therefore, for the researchers of fanfiction, it is crucial to consider what are those elements or meanings that fanfiction "goes against" or to which it offers alternatives.

In addition to creating sequels, other starting points for "post-BDM" fanfiction are the deaths of two major *Firefly* characters, Book and the ship's pilot Hoban "Wash" Washburne. On the one hand, fanfiction writers explore the remaining crew's feelings over their deaths in fics with introductions such as in the ficlet[112] "Dinner Time", published on fanfiction.net by the author Jaime L. Hatheway: "It has now been a year since their battle with the Reavers and the Operative, and life continues as usual; but the colours of the crew are gone". On the other hand, numerous writers have decided to explicitly write against the canon, and some of them explain this decision rather elaborately, as Peptuck does in the author's notes of "Forward":

> As you can tell, Book and Wash are both alive and apparently survived the Big Damn Movie. I did this partially because when I originally wrote this prologue (and some of the subsequent chapters) it was missing "something". It wasn't until I included Wash and Book that things started to feel "right" again, and since they're as much a part of Firefly as any of the BDM survivors. I wanted to include them. Plus, Wash and Book rock *hard*. [...] How they survived and what they did for the rest of the movie's events may be eleaborated [sic] upon later.

The different reactions to the deaths of Book and Wash illustrate the fans' complex and often ambivalent relationship with the source material they draw from. A fannish what-if moment is born, as fanfiction takes something that the source has offered as being inevitable and unmakes it, thereby opening up a different set of possibilities. So, simply, what if Book and Wash had not died? Another frequently posed what-if moment in *Firefly* fanfiction is the romance between River and Jayne Cobb, a physically imposing, brutish mercenary who in the show is contemptuous of Simon and River and even sells them out to the Alliance in one of the episodes. In fact, the River/Jayne pairing or "ship" is so recurrent in *Firefly* fandom that it is referred to with the abbreviation "Rayne" in the same way that probably the most famous fanfiction pairing, *Star Trek*'s Kirk/Spock, is sometimes known as "Spirk". Notions of interpreting "*against* the narrative grain of the plot" (Bacon-

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112   Ficlet is a name for short, one-chapter fanfiction stories.

Smith 1992, 232; my emphasis) or understanding fanfiction as an "actualization of *latent* textual elements" (Jones 2002, 82; my emphasis) are often connected with the study of so-called slash fiction, a genre of fanfiction focusing on the interpersonal attraction and sexual relationships between (fictional) characters, against the source material. The legacy of *Star Trek* fandom is particularly visible in slash fiction, as it is commonly noted that current slash originated with the above-mentioned "Kirk/Spock" stories, generally authored by female fans of *Star Trek: The Original Series* (see Woledge 2005). When the role of fanfiction as a transgressive force is emphasised, writing slash fiction can be viewed as "going further" with the implications of the source material. This way, it is seen to offer a voice for marginalised groups and reveal the subversive potential of seemingly safe or familiar fictional worlds (Thomas 2011, 7). Slash fiction is, therefore, also an illustrative example of the fans' ambivalent relationship with the source material, as the subversive potential directed towards social evils goes hand in hand with a huge emotional charge carried by the text and fans alike.

The theories on audience responses in the classical rhetorical narratology might bring up a new viewpoint on the fanfiction writers' strategies of opening up the what-if moments. The model of audience developed by Peter J. Rabinowitz (1987) and modified by James Phelan identifies four main audiences and assumes that the flesh-and-blood reader (or viewer) seeks to "enter" the position of the authorial audience, the author's "ideal reader" (or viewer). According to Phelan (2007, 4), this is what we as members of the audience do in response to a narrative text. As a result, this means that the concept of authorial audience allows us to "consider the ways in which readers can share the experience of reading narrative" (ibid. 5). Although fandoms such as the one born around the *Firefly* franchise can take the laws of interpretation and meaning-making into their own hands and in this way break down the conventional boundaries between authors and audiences, they can also be seen to form their own shared interpretations, evaluations and, consequently, their own cultural canon (cf. Jenkins 1992, 18). The practice, Derecho notes, the "fact that works enter the archive of other works by quoting them consciously" (2006, 65), can be seen as consciously "quoting" or targeting such a shared cultural canon. In doing so, writers attempt to activate or trigger the fannish position, which is communally created and can be adopted while being engaged with the source material. When it comes to resistance and adopting a stance that is conscious of the design and elements of a work of fiction, the principle is not so different from the idea presented in the early feminist approaches to literature. As Judith Fetterley argued, "the first act of the feminist critic must be to become a resisting rather than an assenting reader and, by this refusal to assent [...] accurately name the reality [the literary works] do reflect" (1978, xxii). However, fanfiction does not so much aim at naming the social reality but experiencing certain works of fiction.

In the larger context of the study of fiction, therefore, it can be suggested that fanfiction writing is a form of creating a shareable experience of "we as viewers" in viewing television shows such as *Firefly*. This is an interesting observation compared with the special

relationship between the abstract and the concrete in science fiction: creating something that should be read as a concrete representation of something possibly existing can be about making something abstract appear in a way which is communicable and shareable. Works of fanfiction are, in other words, a way of communicating and sharing the experience of the source material as a fan. This experience can be determined to be resisting or opposed to the experiences of viewing the show outside of the fandom – or contrasted with other shared experiences within a particular fandom, as many fandoms are known for their internal strife.[113] In the frame of the audience response theory, responses of this kind might be termed *social*, and I view them as part of interactive engagements. An integral part of the social nature of these responses is the special form of communication between the fan writer and the fan reader, which does not open up to someone completely ignorant of the source material, its conventions, and elements that are deemed especially interesting within the fandom. Next, I will further consider the ways this sort of communication is put into the service of communality, and the way this affects the familiar maxim of tellability.

8.2   Tellability and Dislocation from the Familiar

Recognising responses such as "*we* as readers or viewers" as being part of larger social practices makes it possible to consider the role and the consequences of the shared nature of such responses. In the previous chapter, I addressed one of the thorniest issues among the frameworks concerning transmedial fiction, the question of what exactly is being expressed across the multiple forms and media: narrative, story, fiction, or world? Within a fandom, by means of fanfiction writing, it is the understanding of the source material, its elements and conventions that is shared. This is especially interesting in the frame of the abstract and the concrete: works of fanfiction can be considered to be a way of communicating and sharing the experience of the source material as a fan. Metaphors and other notions that emphasise the liberating or revolutionary characteristics of fanfiction sometimes overlook this, along with the fact that not only the most popular sources easily form their own fictional canons but also the fics themselves do so. As Kristina Busse and Karen Hellekson (2006, 9) suggest, the factor most important for the treatment of fan texts beside canon is *fanon*, the events, elements and ideas created by the fan community of a particular fandom and repeated throughout the fan texts. In terms of my twofold approach on worldbuilding, I argue that fanon is born from the attempts to canonise or "normalise" certain ways of approaching the world-as-construct – or, even change the construct by the way it is processed.

Fanon often creates particular details or character readings even though the canon does not fully support them – or, at times, outright contradicts them. Above, I already mentioned

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113   An illustrative example of such strife is the rather recent outrage among *Harry Potter* fans when the author J.K. Rowling made a surprise admission that she should not have paired Hermione with Ron. Her fans were quick to react, with "wailing and gnashing of teeth from the camp who support the series' ending [...] and rejoicing from the readers who always wanted Hermione to end up with Harry" (Flood 2014, n.pag).

the way the pairing of River and Jayne has become such a recurrent development in the *Firefly* fanfiction that stories imagining various ways they might end up together are, as a matter of routine, categorised as "Rayne". Their romantic relationship is a widely accepted part of the fanon despite the fact that the canonical Jayne treats River with a mixture of fear and contempt and has a lingering crush on another female character aboard Serenity, the ship's mechanic Kaylee. In spite of the contradictions, from the viewpoint of fandom canon and fanon are not opposed, but parallel meaning-making strategies that feed on each other. An interpretation deemed canonical (such as "River and Jayne are not lovers") is often actualised only against the fanonical interpretation ("River and Jayne are lovers"). This is an example of the fanfiction's subversive practice in action: it is not so much about going against the source material as about making our largely unconscious responses to the source visible. The alternative ways of world-processing on the basis of familiar characters and elements illustrate the unquestioned power of the automatic. However, the fact that the most popular story types in fanfiction involve various types of romantic pairings and that most fanfiction readers and writers are girls and young women (see Lehtonen 2015, 8; Busse and Hellekson 2006, 16), has often led to the dismissal of the subversive potential of fanfiction, especially in the case of reimagining heterosexual romance.[114] As a result, fanfiction has typically been bluntly dismissed as adolescent trash.

Whatever the general attitude to the romance content and pairings may be, it should not stop us from attending to the aesthetics and rhetoric of the subversive fannish practice, which is, in principle, becoming more and more prevalent in the modern culture. Rhetorically, the practice is not that different from the one employed in Ann Leckie's *Ancillary Justice* – the use of the female pronoun as the default in the Radch society – that was addressed in Chapter 6. Another, more widely known point of comparison might be George R.R. Martin's *A Song of Ice and Fire* series, which takes one conventional element of formulaic fantasy fiction after another and subverts them by playing with the reader's conventional expectations. Martin's series relies on a similar form of social communication between the writer and the reader as fanfiction does: in this sense, the novels present a form of in-jokes that are humorous only to those who are aware of the genre and its conventions. Obviously, such communication does not have to concentrate simply on humour. One could suggest that it is especially common in transmedial environment, such as the latest canonical instalment in the *Star Wars* franchise, the film *The Force Awakens* (2015), where many of the classic conventions from the previous films are either faithfully followed (e.g.,

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114   Lehtonen (2015, 16) discusses in her recent article the ways in which self-insertion fanfiction can illustrate how gendered representations, discourses and norms become internalised not only by passively absorbing information but through actively producing speculative life writing. In this, heterosexual romance fiction consists of a variety of gendered discourses, and writing and reading romance as activities have a long history of being associated with both moral conservatism and dubious immorality and subversiveness by researchers and general audiences alike. Romance as a genre is, therefore, irresolvably both "conservative" and "progressive" (see ibid. 9; Fletcher 2008, 2).

the feisty droid) or slightly subverted (e.g., the family relations between the agents of light and dark).

Krzystztof M. Maj suggests that the movement of the content in transmedial worlds can be described as a "bottom-up storyworld co-created by the multi-user community, rather than as a top-down storyworld narrated from the authorial front of the omnipotent world-builder" (2015, 86). In my opinion, this also describes the basis for the subversive potential of fanfiction writing, where the process is "bottom-up" in the sense that the majority of fics keep to the principle where a *small* twist is added to a certain canonical formula or convention and, thereby, the perspective is *slightly* shifted. I would like to emphasise, though, that fanfiction typically keeps to the level of world-as-process as the writers attempt to keep the premise as familiar as possible. Obviously, new characters and such may be introduced, but the writing needs to target the familiar world-as-construct, the shared understanding of what there is. As Thomas (2011, 13) points out, what keeps fans coming back to certain texts has to do with familiarity: it is the process of fleshing out the backstories behind familiar characters, situations, and events, or the practice of shifting the perspective from which the familiar is to be enjoyed. Derecho (2006, 72) addresses this same feature when she suggests that archontic literature works by repeating with difference. In relation to the rhetoric of speculative worldbuilding, dislocation or alienation is achieved in relation to the "original" world of fiction, or in relation to the dominant ways of responding to the world and interpreting it.

The communal features of fanfiction – which the various Internet platforms and forums enable today – make such a subversive potential possible. The issue at stake in such a process and fanfiction in general is the structure of the so-called *network culture*. This is a term originally coined by Jay David Bolter in 1991 to describe the electronic writing culture. His description of the "electronic museum", organised as a network, rather than a hierarchy, as space through which the visitor moves at will (1991, 231), fits sites such as fanfiction.net, well. Furthermore, Thomas (2011, 9) notes that the message boards on fanfiction sites suggest that the readers' engagement with the narrative entails much more than merely processing the words on a page (or, on the screen). I already suggested in the previous chapter that the experience of worldness is not something that can be acquired by merely following a plot in the sense of a trail. Instead, it requires cross-referencing research, gathering data, exploration, and other strategies that are usually disregarded in story-centred approaches to works of fiction. Indeed, the fans may be said to participate in a form of "collective intelligence" (see Jenkins 2006), as they work through the elements of fics. The collective intelligence resembles the use of wikis as a resource for managing spatial, sprawling structures and for archiving and exploring various materials or content, something that I brought up in the previous chapter. However, as a creative enterprise, fanfiction also adds the sense of what *there could be* in a world instead of only exploring and mapping what there is in a world.

Once again, this very concretely brings up the understanding of works of fiction as much larger entities than only a single piece of work – or, in the case of *Firefly*, larger than thirteen episodes of a television show. The understanding serves both as a prerequisite for fanfiction writing and gets concretised in the stories. Derecho (2006, 65) argues that "an archontic text's archive is not identical to the text but is a virtual construct surrounding the text, including it and all texts related to it". The concept of "virtual work", introduced by Wolfgang Iser (1983), brings out a rather similar idea: although a literary text, for example, is linear, the understanding of the work constructed during the reading process is a virtual construction held in the reader's memory. In Chapter 6, I discussed the "technology" of unconditional texts such as literature, film and television shows, and put forward my view of world-process as a work-in-progress which is not an explanatory outcome but a way of mentally navigating a work of fiction. By and large, fanfiction writing can be seen as a way of concretely exploring these navigational entities and the various virtualities and potentialities they contain, but within fandom, both the comprehension and negotiation of the "archive" are shared enterprises.

In her study on the narrative dimension of tellability in social media, Ruth Page (2012, 200) suggests that such contexts promote connection with others. The familiar narrative maxim[115] for narrators to make their narratives tellable incorporates two dimensions: to tell stories in such a way as to enable face-enhancing involvement between narrator and audience, and to avoid telling stories which damage the face of the narrative participants. In the community of fanfiction writers, the face is that of a fan, and the involvement is intertwined with the practices of concretising the fannish experience of "we as viewers". Therefore, creating too big of a twist or shifting the perspective more than slightly might be damaging to the fanfiction writers as the moves may breach the expected norms on tellability and create a socially divisive act (cf. Page ibid. 201). As Lehtonen aptly notes, there are limitations to the speculative play: "fanfiction forums are normative spaces where the popularity of a story is dependent on readers who appreciate its textual and narrative elements" (2015, 15). In other words, the alternatives fanfiction provides are not based on transgressing all boundaries, and they certainly are not the result of engaging in random or chaotic processes despite the fact that they "playfully posit a range of hypothetical narrative possibilities" (Mittell 2015, 316). When it comes to *Firefly* fanfiction, there are two prominent strategies of repeating and slightly subverting the familiar. The first one of these is based on the shared knowledge of the source material's elements that are open to innumerable interpretations and variations, while the second is based on the shared strategies of processing certain elements.

In addition to simply observing that certain elements and situations get repeated in the fanon, some of the source material's elements need to form shareable points of reference. With *Firefly*, questions such as "What exactly did the Alliance scientists do to River?" or, as

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115   With the "familiar narrative maxim" Page is referring to the pioneering work by William Labov (1972), who recognised that narrative structures have two components: "what happened and why it is worth telling?"

an example of a canonical romantic entanglement in the show, "Why is it so hard for Mal and Inara to acknowledge their feelings for each other?" cannot be answered definitely. Inara Serra is a Companion, a high-society courtesan who leases one of Serenity's shuttles for transportation and living space. The unresolved attraction between Captain Mal and Inara can, in Hill's words, be called "endlessly deferred narrative". Hills identifies such narrative as one of the family resemblances of cult texts and, by contrasting it with the decentred narrative non-resolution of soap operas, argues: "The cult form [...] typically focuses its endlessly deferred narrative around a singular question or related set of questions" (2002, 134).

The most typical feature in the Mal/Inara stories is the repetition of the same elements which in *Firefly* establish the endlessly deferred nature of their romance. In "Sunshine and Rain", written by virtualJBgirl and published on fanfiction.net, the tension between Mal and Inara is brought about in novelistic ways closely reproducing the audio-visual means used in the television show. This is clearly evident in the fic when Mal discovers that Inara has been mistreated by someone:

> She saw the shadow of wrath in his eyes.
> His eyelids quivering.
> His jaw stiffening.
> She could feel his fingers slightly clenching her arm.
> She closed her eyes.
> Reacting on absolute instinct was his best way to show her his attachment to her. Once more, his silence, the depth of his glance and the touch of his hand let his weakness slip through instead of his words, so rare and evasive.

Despite the faithful reproduction of the visual character traits and mannerisms (such as "jaw stiffening", "she closed her eyes"), virtualJBgirl's fic also shows why fans want to respond by "writing it all down" instead of only creating their own fan edits on YouTube, for example. The narrative framing accompanying the actions of Mal and Inara encourages us to engage with the characters' emotions and thoughts beyond the level of what they actually do, in order to consider what they actually might mean, and what they may be thinking (Thomas 2010, 152). Furthermore, the fannish adaptation of an audio-visual television show into written fiction presents a way of providing "new" information on the characters' motives, actions and such by means of representing their minds. As such, the purpose of fanfiction such as the Mal/Inara stories is not subversion in the sense of resistance. Rather, the stories are a communal way of providing answers or explanations to the open questions about their relationship and speculating on it – and simply creating more content in doing so. In the process of fleshing out a backstory behind the familiar actions and situations, new ways of approaching the recognised elements are adopted.

One can suggest that with the Mal/Inara, true resistance in relation to the source material would be achieved by ending the deferral. Catherine Tosenberger concludes in her article on the incestuous slash fiction based on the television show *Supernatural* and its pair

of brothers that the "most resistant, subversive element of [this fic] is not its depiction of homoerotic incest, but its resistance on giving Sam and Dean the happiness and fulfilment that the show eternally defers" (2008, 5.12). In *Firefly* fanfiction, however, such resistance might breach the expected norms. Even the fics resolving the tension between Mal and Inara with a sex act, the familiar, endless deferring of their happiness is quickly resumed. "Firefly Untitled", published on fanfiction.net by the author angiehodgins, begins with the description of how Mal and Inara end up having sex in Serenity's mess, but already in the first chapter Inara leaves the ship. Ending the deferral by means of an explicit closure would also put an end to further writing: the resistance turns into refusal to accept the end of the story. By and large, the same goes for *Firefly* as a show. Through all kinds of fannish practices, including fanfiction writing, Serenity is still flying despite the fact that the canonical show was cancelled more than ten years ago. Compared to Peter Brooks' statement (drawing from psychodynamics articulated by Sigmund Freud) that the desire of reading is ultimately "desire *for* the end" (1984, 52; emphasis original), the endless deferral insinuates a very different desire: desire for the prolonged pleasure of reading, forever denying the closure which would be the end of enjoyment.

The "Rayne stories", on the other hand, offer an illustrative example of the shared strategies used in processing certain familiar elements. The relationship between River and Jayne adheres to certain communally recognised conventions in the source material, but fics add their own twists and perspectives to these. The practice is most visible in the repeated use of certain storylines, situations and elements which are reworked in an appropriate way. One of the recurring building blocks in the "Rayne stories" is the incident in *Firefly* episode "Ariel", where River suddenly slashes Jayne in the chest with a kitchen carving knife and Jayne responds by backhanding her. In Rayne fanfiction, the incident is typically contrasted with their feelings in a particular moment to create (violently) romantic tension. In "Sealed with a Kiss", a collection of ficlets "where River kisses Jayne" published on fanfiction.net by the author Jaycie Victory, the canonical incident comes up more than once:

> He was so distracted by this observation, he didn't notice how close River was getting until she was standing right in front of him. He shifted from foot to foot nervily; last time River was this close, knives had been involved. (Chapter 2: "From This Slumber She Shall Wake".)

> Jayne's eyes were at war. Emotions flickering back and forth, vying for dominance. River could sympathise. She had gone through the same tumultuous process the first time he had taken her in his arms. Mistrustful of what he offered; wary since Ariel; contrite since the knife. (Chapter 9: "Kiss Me".)

> "Gorramit, girl, you talkin' 'bout when you damn near split me open with that butcher's knife? You wasn't helpin' – and I didn't kiss you! I knocked you on your ass as you ruttin' well deserved!" (Chapter 11: "A Kiss with a Fist".)

As Jaycie Victory's ficlets are basically different variations of the same premise, it makes them especially easy for her readers to comment on and come up with numerous ideas to elaborate on in future fics. In the reviews of "Sealed with a Kiss", for example, Beawolf's Pen (31 July 2013) prompts an idea: "River gets captured and the crew comes to rescue her. Jayne gets to her first and the [sic] share a moment before Mal comes in a [sic] interrupts." Irishbrneyes (7 July 2013) suggests: "how about one where Jayne teaches River how to kiss, and how to do it right?!" Jaycie Victory shows a genuine willingness to respond to her readers' comments. The next ficlet in the series, based on Irishbrneyes' idea, is called "Educating River", and the author's notes say: "This one is for Irishbrneyes. Hope you enjoy :)". Irishbrneyes reacts quickly and happily comments (July 9 2013): "Squee! No way! A chapter just for me? You're so AWESOME!" The way fics are reviewed and evaluated in the comments highlights the way recurring textual elements of fanfiction and larger social practices are intertwined.

As an example of the evaluation standards, the characters in fics can be deemed either "out of character" (OOC) or "in character" (IC) by the reviewers – a practice I already mentioned in Chapter 7. These are the terms which are used to demonstrate whether a fanfiction writer's version of certain characters in fics is successful (IC) or not (OOC). The term IC is especially interesting as it entails the view that someone else than the creator of the source material can offer a "right interpretation" of a character. Many readers of the ficlets comment on "how realistic" Jaycie Victory's characters are. For example, deanandjoforever1 (July 6, 2013) comments "poor mal and simon their reactions were spot on hehe" and aumontalc (July 7, 2013) approves: "the fact that Jayne only wants to kiss someone who means something to him like his Ma told him." In *Firefly*, Jayne's affection for his mother is made clear in the episode "The Message" when he proudly sports an orange and yellow knit cap with earflaps, simply because his mother made it for him to "keep him warm". The cap, which humorously clashes with Jayne's brutish image, is one of the recurring elements in the Rayne stories. In one of the Jaycie Victory's ficlets (Chapter 7: "Quid Pro Quo"), for example, River steals it and announces "the girl will give the topper [...] in exchange for a kiss. On the mouth." Jayne's knit cap, therefore, serves as a source of "knowing humour" or in-jokes typical for fanfiction writing, which promotes the connection with other fans in a significant way – and which I mentioned above as a form of social communication between the writer and the reader.

Instead of being an unrestrained sandbox for speculative play, fanfiction seems to provide a communal environment for concretising various different worlds-as-process on the basis of familiar elements, of what is in a world. Fannish practices, in other words, encompass certain strategies which in turn enable the writing of certain kinds of "transgressive" slash fiction, for example. In order to promote a connection to other fans, the strategies used in fanfiction writing seldom deviate from the conventions, formulas and other pervasively repeated fanonical elements: there are certain communally recognised elements (such as the incident with the knife or reproduction of character traits and mannerisms) and

narrative strategies (building up a romance between River and Jayne or continuing the endless deferral of Mal and Inara's romance). To sum up, fandom and fannish practices provide their own canon – alternative perhaps, but a canon nevertheless. This is not fundamentally a "counter-liberating" feature, as fanon can also be seen as an attempt to canonise or "normalise" certain ways of approaching the world-as-construct – or, even change the construct by the way it is processed.

All in all, I bring these up because I want to emphasise the idea that analysing stories defined as fanfiction without taking the larger fannish practices and the cultural context into account is rarely fruitful. As it has often been pointed out, fans seek out texts that give them pleasure of familiarity and that fulfil rather than challenge their expectations (see Thomas 2011, 14). A single fic does not change anything, as new, subversive interpretations are made possible by the unashamed and recognisable repetition of structures, techniques, conventions, and details.[116] This repetition is the basis of fanon. Still, fanfiction proves that new meanings and features can be produced, but at the same time, the strategies used in their production need to be socially shared and original attributions should not stray too far. In the final part of this chapter, however, I will look at a category of fanfiction writing that is "all kinds of too far" but popular all the same.

8.3   Doubled Worlds: Can't Take the Fun from Me

It is still often proposed that fan texts receive their (narrative) value in relation to the source material. Even so, works of fanfiction should not be viewed as textual "parasites" – if anything, they live in a symbiosis with their source, as they can affect the readings of the source or open up new viewpoints to it. I already suggested this above when I discussed the potentially subversive practice which brings out the unquestioned power of the automatic: it is not so much about going against the source material as about making our largely unconscious responses to the source visible. On this basis, Thomas (2011, 5) argues that the analysts might concentrate on exploring how a practice such as fanfiction writing can provide different perspectives on a fictional world familiar to fans or allow fans to happily move in and out of various fictional worlds – and also between the fictional world and the mundane world.

So, to restate what I have brought up above, the strategy which enables the writing of fanfiction can be called subversive in the sense that the reader or viewer using it consciously

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116   It should be noted, however, that there are instances where the resistance of both fandoms and fanfiction can be quite forceful. Typically, the resistance is not related to cultural radicalism or an ambition to change hegemonic stereotypes, but a severe disappointment in the way the source material or its elements have been handled by their creators. Some *Harry Potter* fans, for example, refuse to write Dumbledore's death in their fics – a reaction similar to the way "Book and Wash are both alive" in various post-BDM *Firefly* fics. More notable example of fan resistance is the digital RPG *Mass Effect 3* which was one of my case studies in Chapter 4. Its ending was considered a huge disappointment to the trilogy as a whole, and fans who were particularly outraged launched a campaign to get it changed – and, to some extent, succeeded.

resists adopting the position readily mapped out for her inside a fictional world and, therefore, seeks out opportunities for making her own contribution. In Chapter 4, I discussed positioning in digital role-playing games as the means to provide a *unifying frame* that makes the game, its workings, and its goals much easier to understand, and suggested that the functions traditionally linked with the narrator (or the implied author) are based on the processes that enable the player's positioning in the character role. Fanfiction writers step outside of the position provided, but make use of the processes that enable taking up another one. Immersive mode, in the sense of the emotional responses that make the fans want to continue being in ever deeper contact with the worlds, is therefore not abandoned: as writers they can attempt to imagine the fictional events of a certain world from another point of view, for instance. This is yet another example of the use of the double perspective that I have discussed throughout this study: the elements of the source material are approached both as "possibly existing" and regarded as artificial constructions that can be rearranged and reimagined according to various strategies and ways. Such resistance in fanfiction is best illustrated by stories which work in the global context rather than keeping to the local. in these stories, the whole composition of the source material is utilised as the context.

The stories working on the global level typically fall into the category of Alternative Universe stories (AU) – or, in the terms of *Firefly* fanfiction, "Alternate 'Verse" stories. Although almost all fanfiction stories can arguably be considered realisations of alternative continuity, labelling something as an "AU fic" has a different implication, where pivotal changes to canonical elements are made or a fundamental aspect of the source material is completely overhauled from its point of origin. Interestingly, Alternative Universe fanfiction stories have attracted wide attention. An illustrative example is artificial intelligence researcher Eliezer Yudkowsky's fic "Harry Potter and the Methods of Rationality", which modifies the original story in order to explain Harry's wizardry through the scientific method. Furthermore, E.L. James' immensely popular erotic romance novel *Fifty Shades of Gray* (2011), which was developed from a *Twilight* fanfic, can be regarded as an example of recasting the characters of Edward Cullen and Bella Swan.

More often than not, however, humour or "wackiness" is an important feature in AU stories. The story "Firefly High" with its twenty-four chapters by Ultrawoman, also on fanfiction.net, turns the crew of Serenity into present-day high school kids and recasts other characters as well: Inara, for example, is recast as the school guidance counsellor, whereas Adelai Niska, canonically one of the most dangerous enemies of Mal Reynolds, plays the part of the school's principal. As can be expected, most of the story events are centred around the familiar romantic entanglements, the main pairings being "Rayne", an 18-year-old high school senior Mal who is "close to ten years" younger than his love interest Inara, Simon and Kaylee, and Zoe and Wash. What is the point of writing such stories as "Firefly High" and how come they do not breach the expected norms I mentioned above?

AU stories as a strategy for writing are not unique to fanfiction. The *Star Trek* franchise, for example, includes various episodes where the familiar characters are recast into new characters and environments.[117] These episodes are often simply entertaining and humorous, but sometimes the alienating effect they create is used for rhetorical purposes such as in the *Deep Space Nine* episode "Far beyond the Stars". In the episode, the mysterious visions by Captain Benjamin Sisko show him as a character called Benny Russell, an African-American science fiction writer working for the magazine *Incredible Tales* on Earth in the 1950s New York City. The city is populated by various versions of the characters from the show, which means that almost the full cast of *Deep Space Nine* is portraying human characters. Despite offering the fans an opportunity to spot the familiar *Deep Space Nine* actors without their alien costumes, the episode uses the premise to deal with racial issues, as the main character in Benny's story (a certain Captain Sisko on a fictional space station) is African-American and this is not tolerated in the 1950s society. In the end, a preacher tells Benny/Sisko that he is "both the dreamer and the dream" – a highly metafictional comment about the way *Deep Space Nine* displays both the social progress and the changes in science fiction genre in its casting.

Tisha Turk has argued that it is metalepsis,[118] a transgression of the boundaries between the world of the telling and the world of the told, that so greatly contributes to the pleasure to be derived from fanfiction. She notes that for readers of fanfiction, "immersion in the fan text requires not only engaging in the pretense that the fictional world of the source text is real [...] but also engaging in the pretense that the fictional world of the fan work is part of the fictional world of the source text" (2011, 99–100). It further seems that the realms of the "real" and the fictional overlap as fans "enjoy flaunting the artificiality and surreality of their stories while also contributing to be engaged and immersed in the fictional worlds they help to flesh out and concretise" (Thomas 2011, 9). However, the realm of the real should not be taken to mean points of comparison with the mundane world, for example. Rather, I am referring to the real-world actions that fans take while being engaged with works of fiction, the here-and-now of interaction. Therefore, immersion takes place perhaps less in the source itself than in a (communal) way of approaching a work, of reading and viewing it. Overall, the experience has much in common with the experience of roleplay which I brought up in Chapter 4: in digital RPGs, recognising structures and shapes is important because the player needs to be able to move from the general principles of the system – such as how quests are structured – to smaller details – such as how they will contribute to

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117   The most typical instances of such recasting are realised by means of the holodeck or holosuite: in *The Next Generation*, Captain Picard often plays out the role of private detective Dixon Hill, while in *Deep Space Nine*, in the episode "Our Man Bashir", a transporter accident causes several crew members to appear as characters in Doctor Bashir's holosuite programme styled after the 1960s secret agent films. The biggest difference to AU stories is that these episodes do not leave the frame of their "own" universe but work within it. However, the strategy of recasting in order to create new situations and stories is similar.

118   Metalepsis was initially identified by Gérard Genette as a narratological concept meaning "any intrusion by the extradiegetic narrator or narratee into the diegetic universe (or by diegetic characters into a metadiegetic universe, etc.) or the inverse" (1980, 234–35).

the development of the playable character. It also ties in with the idea of science fiction as being "less a genre than an ongoing discussion" (Mendlesohn 2003, 1). Within a fandom, the writers and readers share both the structures, shapes, principals, and details and the understanding of the possibly existing worlds they contribute to.

In "Firefly High", a two-part chapter titled "Dance with You" remakes the events of the *Firefly* episode "Shindig" as the formal society dance is turned into a homecoming dance, a traditional occasion of welcoming back the alumni of a school. The fans of the show can easily recognise the situation and might, for example, eagerly look forward to the moment when Mal ends up in a fight over Inara with Atheron Wing, recast as Inara's "creep of a fiancé" in the fic. Moreover, there are numerous other events and details in the story for the fans to pick up, such as this dialogue between Kaylee and Wash:

> Kaylee looked around at all the happy couples filing on into the school and sighed.
> "Everybody's got someone" she lamented. "Wash, tell me I'm pretty" she urged him, and though his eyes remained on Zoe, he answered directly.
> "Were I not attached, I would take you in a manly fashion" he assured her.
> "Because I'm pretty?" she checked with a smile.
> "Because you're pretty" he confirmed even as he tried to lip read what Zoe and Mal were talking about across the way.

Originally, this exchange appears almost word for word in the *Firefly* episode "Heart of Gold" where Kaylee is observing others at a brothel. The reviewers are happy that it appears in the story – bookwormdaisy (3 June 2010), for example, comments: "Yes! You worked the 'I would take you in a manly fashion!' Brilliant!" As Thomas notes, it is important to recognise that, while reading fanfiction, "what might otherwise appear as clumsy gaffes and anachronisms are in fact deliberate" (2011, 18). Above, I already noted that "knowing humour" significantly promotes the connection to other fans, but this is especially the case in otherwise "wacky" AU stories such as "Firefly High". Again, this is a not a feature typical only of fanfiction: in the *Mass Effect Trilogy*, for example, "Mass Effect 3: Citadel" is a downloadable content (DLC) pack for the last game in the series, which has been criticised for being pure "fan service, material in a series which is intentionally added to please the audience" (Kaszor 2013, n.pag). Among other things, DLC is chock full of in-jokes and sources of humour known to the players of the trilogy, such as making fun of the playable character Shepard's painfully familiar phrase to end conversations, "I should go".

Despite being blatantly humorous and thus seeming to militate against emotional involvement, fanfiction such as "Firefly High" allows its readers to approach it as "something more" than an artificial construction following certain logic like the conventions of the source material. A way of reading such as this is often simplified as forgetting the synthetic nature of a work and accepting the world, its characters and events as "true" or possibly existing – an assertion, which I brought up in Chapter 5, for example. In the process, the reader takes up a position inside a fictional world while visualising it, as Basched (4 June 2010) does while commenting on the events in the Homecoming Dance: "Ooooh

the tension between Mal and Saffron what [sic] just unbearable! I love how you describe their expressions, I can totally see them!" Canonical Saffron, a crafty and amoral con artist known to seduce her marks, is introduced in the *Firefly* episode "Our Mrs. Reynolds", in which Mal finds himself being married to her in an obscure native ceremony, as she pretends to be a compliant girl trained to be a subservient wife in order to get hold of their ship.

In "Firefly High", Saffron is recast as a sophomore, who initially seems like "a sweet little girl" but soon shows her true colours. She discovers that Mal and Inara are having "an unseemly affair" and blackmails Mal into taking her as his date to the Homecoming Dance: "The woman that tamed the wild Malcolm Reynolds would have status, might even make Homecoming Queen." At the dance, their exchanges successfully follow the conventions of the relationship between the canonical Mal and Saffron and contribute to a wholly different world-as-process at the same time:

> "We both know why we're here, and it ain't 'cause neither of us is fallin' in love with the other" he insisted, helping himself to a cup of spiked punch and handing her one too with a definitely over-the-top bow for the benefit of any audience they might have.
> "Stop being so obvious, sweetheart" she said through gritted teeth,
> "Just playing my part like you asked, darlin'" he replied with an overdone smile as they both drank.

"Firefly High" manages to create an alternative story with a humorous relationship with the canonical *Firefly* while commenting on the fictional representations of American college culture. Furthermore, it draws from some of the readers' shared experiences of such occasions in real-life colleges. The global context obviously draws from *Firefly*, but also makes use of the hybrid genre, placing speculative fiction and so-called new adult fiction[119] side by side.

From my point of view, what is interesting about fantasy and science fiction vis-à-vis fanfiction writing is that especially stories falling into the category of Alternative Universe and making use of the global context *already* rely on the overlapping strategies or attitudes. As I have suggested over the course of this study, these strategies or perspectives are shared by the users of all cultural artefacts, but they are perhaps not so easily recognisable in most of the other genres. The practice of building worlds-as-constructs that can be perceived as self-contained entities compared to "our reality" is another expression of the repetition that I have mentioned above. The elaborate, multidimensional and rich worlds that paradoxically are created by the means of works that are mostly cursory, flat and linear, inevitably bear certain interpretative attitudes or strategies which contribute to the fact that speculative fiction is such a fertile ground for fanfiction writers.

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119   New adult fiction is a label that has been created for books in which the main characters transform from teenagers into adults and try to navigate the difficulties of post-adolescent life: first love, starting university, getting a job, and so on (see Chappell 2012). Another generic label for the genre used in "Firefly High" might be "college romance".

Hills (2002, 137) names hyperdiegesis, the creation of a vast and detailed narrative space, as an attribute shared by the cult texts – as he calls them – and the genres of fantasy and science fiction. He goes on to argue that in addition to rewarding re-reading due to its richness and depth, the role of hyperdiegesis is "also one of stimulating creative speculation and providing a trusted environment for affective play" (ibid. 138). In other words, hyperdiegesis describes a logic of a world that seems to open inwards, the logic which encourages the users to walk *into* the worlds instead of walking *through* or *across* them (see Maj 2015, 93). Terms such as hyperdiegesis alongside with the analyses of the ways the users respond to works of fiction, can help us understand the double perspective in fiction in general. As I have argued throughout this study, the speculative worlds of fantasy and science fiction can be perceived *both* as possibly existing and experienced from the inside, as if the events were happening to you *and* recognised as obviously "made" according to certain strategies and perhaps even from familiar building blocks. Fanfiction writing which self-consciously and openly uses repeated storylines and other such elements but, at the same time, aims at inviting the readers into a fictional world they love, makes this very visible. Turk talks of the "ongoing erotics of continuing the story" which enable a fan to immerse herself "not only in the original show but in some subset of fan works engaging it" (2011, 99). This is well highlighted in the comments left for Ultrawoman on "Firefly High": BeckettFan (25 September 2009) urges the writer to continue, as she would "love to see how they all end up friends or whatever" and dlsf (1 October 2009) comments "i love this! the idea is shiny! please write more!" In the light of the interactions on the message boards and comment sections on fanfiction sites, narratives can be processual, and these is no reason why endings would be more important that the act of deferring.

As an expression of network culture, fanfiction sites and forums are less hierarchical than some more "traditional" modes of writing, as there are almost no borders between authors and readers. However, the canonical (or, to be more precise, fanonical) nature of the actual fan texts hints that the meaning-making practices and writing strategies are far from random, despite the "continuous play" taking place through them and the fact that they can often be selected and read through in a random rather than a directed fashion. It is in the very nature of fanfiction writing to aim to share one's enthusiasm, frustrations and creative aspirations reflected on certain source material in a responsive environment. It has already been noted that this nature is reflected on aspects of the interface, the design and navigation of fanfiction sites (see Thomas 2011, 20), but it is very much present in the stories that are being told, as well. Ideally, the stories enable involvement between the author and the members of the audience, and in this chapter I have analysed this using various examples. Furthermore, I have argued for a more fine-grained understanding of the subversive practices in fanfiction: they are not ultimately about going against the source material, but about making our responses to the source visible and discussing these. As a result, alternative, communally established readings are "fanonised" and used to highlight hegemonic interpretation which often goes unnoticed – but also to share the experience

of being a fan. Fanfiction is therefore neither only about creating simple rearrangements of the familiar elements nor simply a subversive force harnessed by the modern-day Robin Hoods.

In the larger cultural context, fanfiction is an expression of the culture of repetition: the repetition of the familiar particulars, such as characters, events, and locations, but also the repetition of more general principles, such as worlds-as-constructions, story arcs and even certain ways of approaching works of fiction. In a modern digitalised environment, worlds and stories are increasingly conceptualised as *content*, ownership of which is not attributed to anyone in particular. The understanding of works of fiction as monolithic structures with clear beginnings and endings, as well as the authorial fronts, are gone. In such an environment, an act where previously established characters and other elements are "taken" from one work to another and put into use is not necessarily subversive in itself. When it comes to networking and participatory culture, perhaps the fact that the originally transgressive impulse of treating works of fiction as open-ended is being effectively mainstreamed is the most subversive contribution of them all.

CONCLUSION TO SECTION IV

This final section in my study addressed the interactive mode of engagement with fiction in order to analyse the aesthetics and rhetoric of speculative worldbuilding in the contemporary culture influenced by digital media. The openly twofold nature of worldbuilding, which has been discussed throughout this study, has been suggested to be the reason for the prominence of speculative fiction in multiple different media and transmedial worldbuilding. Role-play and fannish writing, for example, are modern examples of the interactive modes of engagement, where the double perspective of external/internal entailed in immersive engagement is, therefore, "dismantled" and then remade. I discussed the interactive mode in relation to the changes brought about by digital media, and worldbuilding, in general, was argued to be the new dominant in those media. This manifests itself not only in the economic logic of the proliferation of worlds (see Jenkins 2006) but also in the more artistic aims and emotional and critical engagements with works of fiction.

In my analysis of transmedial worlds and fanfiction, I noted that both of them embody the pervasive, contemporary logic of using ready-made elements and pieces in order to create new instalments, evident in the prominence of the concept of *universe*. The logic is explicitly playful. Both officially produced, "canonical" works, and fan-made, "fanonical" works, therefore, make use of a world-as-construct in the form of the shared understanding of *what there is in a world*, and a world-as-process as a shared strategy of imagining *what there could or might be in a world* as a result. However, the question of what is being expressed across multiple forms – or what is made communicable – was found to be rather different in the canonical and fanonical works: in fanfiction writing, the stories ideally promote involvement between the writer and the audience, while canonical franchises communicate ideas by means of speculative worldbuilding. The contexts in which things appear are just larger and more variable than in the case of only one instalment.

The discussion in this section further pointed towards the fact that when it comes to bringing new ideas and topics into the discussion by means of worldbuilding, the time of viewing the practice as an author-led performance that unfolds within a single event from beginning to end is over. Contemporary speculative worldbuilding is, therefore, a conversation rather than an example of one-to-one communication – not even a dialogue,

for there are many participants – where both the meanings evoked by works of fiction and the ways of making such meanings are communally explored. The works of fanfiction, for example, can be employed for subversive purposes when alternative, communally established readings are canonised as well as being used to highlight hegemonic interpretations which often go unnoticed. Even so, the subversive action such as this is not only done to fulfil some political or social purposes but also to concretise the abstract experience of being a fan and to share that experience with others, to participate in a conversation about something relevant to many. Next, I will present the main findings of this study and anticipate the future applications of the rhetoric of worldbuilding in speculative fiction.

V CONCLUSIONS AND NEW OPENINGS

This study has argued for a view of worldbuilding as a practice for communicating ideas and bringing relevant topics into the discussion in works of fiction across media. Fictional worldbuilding is not – even when it comes to speculative fiction dealing with distant realms or faraway galaxies – about evoking an ontologically separate construct which is primarily understood as a model of a physical space, but about engaging with and making meaningful sense of ideas. It is a rhetorical practice which takes a particular form in speculative fiction. In fact, speculative worldbuilding can be seen as a transmedially available and realisable part of the aesthetics of the genre and, therefore, one of its generic markers. Speculative worldbuilding brings the abstract and remote to the domain of the concrete and possible, both in the sense of a work in its materiality and the particular way a general idea is worked through. In this way, the omnitemporal theory of quantum mechanics can be harnessed to form the principles for specific societies, or the boundaries between human and non-human be captured in the actual performance of ambivalent characters. Furthermore, as a rhetorical practice, worldbuilding makes it possible to discuss both our ways of negotiating a relationship with the world around us and our ways of engaging with works of fiction. It, therefore, not only engages the users with mere sense-making but invites them to invest considerable effort into the encounters with the unfamiliar and strange worlds. These observations have multiple repercussions for both speculative fiction research and narrative studies.

I present the following findings of my study, which point the way towards further investigation on worldbuilding in contemporary media:

1. Worldbuilding is a distinct practice of communicating ideas and bringing various topics into discussion by way of representational artefacts in multiple media. It might, therefore, be interesting to look more closely at the boundaries and conditions of speculation and consider the interplay between the abstract and the general in worldbuilding also outside the genre of speculative fiction.

2. Speculative worldbuilding not only engages us with imaginings of what is not, but also with discussions of the ways we maintain our understanding of what is, by seizing both the readily mutable aspects of reality and the very model we base our understanding on. This was prominent especially in the analysis of the embodied

agency and positioning in relation to world-models. The observation opens up a fruitful ground for studying such a relationship with regard to other rhetorical practices used both in speculative fiction and in works of fiction by and large.

3. Digital media has significantly changed the ways the audience engages with works of fiction. Furthermore, it was argued that worldbuilding, in general, is the new dominant in the contemporary transmedial environment, which is based on conversation, not one-to-one communication. It is, therefore, possible to use the practice of worldbuilding as a starting point for delving deeper into the aesthetics and rhetoric of contemporary digital culture.

My emphasis on prototype-conscious narratology instead of supporting the proliferation of various medium-specific ones proved useful in my aim consistent with the spirit of descriptive poetics. This way, it was possible to observe genre of speculative fiction in the form of multiple case studies to expose and challenge the prototypes implied in narrative theory built on the basis of literary mainstream. The convergence of various theoretical approaches in the spirit of a prototype-conscious analysis could, thus, point the way forward towards a transmedial theory, where the diverse activities and experiences of audiences and fans can be allied with the poetics of the designed constellations. This would be an important contribution to the field, since transmediality, digitality and the strong emphasis on "sharing" one's experiences and witnessing the experiences of others have not only influenced the ways in which audiences find works of fiction relevant, but also the ways these works are being designed, marketed and published in the first place.

In the end, the question remains: why are works of speculative fiction relevant to us, and what do they do? This study has approached the question through the practice of worldbuilding, which offers the possibility of working the abstract and remote into the concrete and possible, and suggested that the experiences of worldness or imagined places are in the heart of speculative fiction. In this way, speculative fiction not only makes it possible to entertain various ideas and to get our minds around something intangible, but also to share experiences of our encounters with the strange and inexplicable. It does not simply carry us away from reality, but allows us to discuss and wonder about it as it is. Speculative fiction may, therefore, affect our understanding of what is, but this is only one side of the coin. On the other side, lies that which we cannot understand, and speculative fiction is constantly reminding us that the other side is actually much larger than the fraction of reality we know.

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