Creative Destruction: The Financial Crisis and Cultural Production

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to my love, Aliza for everything, to my parents, Sabine & Tuomas in gratitude & to the family for all your love and support

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Abstract

The Global Financial Crisis (2007ff) brought economic phenomena to the center of public attention. The following political shifts and shocks show that unleashed forces of creative destruction (Schumpeter) do more than annihilate economic values, but reach far into all areas of human action, valuation and sense making. In tandem with conflicting scholarly explications and policy suggestions, a wealth of artistic work emerged in reaction to an unraveled, uneven and contradictory global economic reality.

This dissertation charts how a transnational body of art grappled with this larger crisis of economic globalization over the ensuing decade. It begins with a critical and historical consideration of the concept of crisis, discussing how dominant economic narratives and theories, and their underlying values and promises, have come into question and failed to articulate any convincing alternative. I argue that the absence of scholarly consensus, and the larger sense of disorientation the Global Financial Crisis instilled in experts and laypeople alike, reveals a fundamental epistemological crisis and highlights the need for theoretical renewal in examining critical economic phenomena.

I develop an interdisciplinary approach, departing from Cultural Political Economy to explore the relationship of the aesthetic-cultural production of German and Englishlanguage novels, transnational film, and video games to cultural, political, and economic processes of confronting the crisis. Centralizing in-depth analyses of cultural artifacts, I identify aesthetic-cultural production as a privileged site to study the epistemological dimension of the crisis. Accounting for the unique semantic properties of decisively fictional discourses, I define three functions of cultural production. The communicative function explores how cultural production, and its narratives and tropes, can become part of dominant discourses. The critical function examines how different artistic media and their unique formal strategies can develop ambitions to intervene in the process of working through a crisis. Finally, the utopian function investigates how cultural production can serve as a laboratory for a renewal of social imagination, a place to work past an untenable status quo.

Introduction

Amid new aggravations of older geo-political, ideological and religious conflicts, perhaps no global event in recent history has had a more fundamental and further reaching impact than the Global Financial Crisis and its aftermath since 2007/2008. On its face, the fallout of the crisis concerns finance and economy, tremendous job losses, negative growth rates, plummeting stocks, and the astounding cost for the public around the world, which has been estimated to rise as high as any of the two world wars (Wolf, *The Shifts and the Shocks*). Yet, this crisis also makes clear that the destructive power of large economic crises is not contained in an independent or detached economic sphere. The paradoxical forces that destroy the old and make possible the new, also deeply trouble the cultural, social, and political systems of value and belief on which economic systems of reproduction rest.

While initial policy reactions to the cataclysmic events on the markets effectively strengthened the dominant neo-liberal order, the motor of an ever-expanding economic globalization has started to stutter. The common sense of economic disciplines and conventional political efforts have come into question as economists and politicians have struggled to integrate this systemic crisis in the established and older regimes of knowledge and policy. As discontent grows, there is a persistent, notable absence of meaningful change, or convincing alternatives. When a populist insurgence arrived in the heart of the free world in 2016—with the Brexit vote in Great Britain and election of Donald Trump as President of the United States—the fact that times are changing became impossible to deny.

However, even with the resurgence of nationalistic economic policies, tariff and trade wars, the promised changes, supposed lessons, and proposed remedies for the crisis have been in conflict from the beginning. Calls for even more liberalism, or more regulation, or a return to Keynesianism, etc. sounded as soon as Lehman Brothers collapsed. Adding to a sense of widespread disorientation, economic and otherwise, diagnoses for the crisis have been many; consensus has remained elusive since 2007/2008 (see e.g. Lo; Culp). The conflicting political and scientific explications and policy suggestions, and differing ways the crisis has been narrated, dismissed and instrumentalized, are merely the symptoms of a larger crisis.

I posit that the so-called Global Financial Crisis is more than an isolated crisis in finance, more than crisis of neo-classical economics, and more than a political and cultural crisis of neo-liberal globalization. Rather, the crisis designates a more fundamental epistemological crisis concerning how we relate to, make sense of, justify, understand and take part in economic processes. Confronting this crisis of knowledge requires an approach outside of conventional ways of thinking and disciplinary boundaries, and necessitates reexamination of our intellectual tools and imaginative capacities in considering economic phenomena within their larger cultural and political contexts. As a point of departure, I propose to look at the wealth of artistic reactions to the crisis that have emerged visa-vis the impasse faced by conventional economic wisdom, and the apparent lack of political and economic alternatives. Theatrical plays, comic books, novels, films, art installations and even video games contain unexpected, utopian and dystopian visions, commentaries and critiques of the unraveled economic

realities. This cultural production reaches far beyond narrow economic issues, political commentary, or a simple retelling of recent history.

My dissertation charts how a transnational body of art grappled with this crisis at large over the ensuing decade. I explore the relationship of the aesthetic-cultural production of German and English-language novels, films and video games to cultural, political and economic processes of working through the crisis, and ask the following questions: What are the unique properties of crisis as a term and as an event? What are the conflicting meanings, uses, or instrumentalizations of crisis and how do these differences play out with regard to the Global Financial Crisis? What role does fiction, imagination and aesthetic production play in representing, critiquing and working through the crisis? What are the media-specific and unique formal potentials of literature, film and video games in affirming or rejecting crisis narratives? Finally, how does artistic imagination allow for the creation of and participation in alternatives to an untenable status quo?

As an interdisciplinary investigation the dissertation provides readers from the humanities and the social sciences with what I hope is a unique and enriching theoretical perspective on the Global Financial Crisis. My work also contributes case studies from a larger German perspective for understanding trans-national artistic responses to the early 21st century crisis of runaway neo-liberalism. In these studies, I explore struggles and innovations by writers, filmmakers and video game designers in adapting their media and forms to the critical experience of the opaque and seemingly unrepresentable events of the financial markets.

In 2008, the supposed immateriality and unreality of finance became dramatically material and real when the Global Financial Crisis not only annihilated the virtual profits of many investors on paper, but also when these seemingly unforeseeable and unprecedented events plunged the world into a larger crisis. The empire of finance and its court of financial economists was, for a brief but terrifying a moment, without clothes. The crisis provoked a widely recognized destabilization of established knowledge and speaks to the "systemic failure of academic economics" (Colander et al. 2) and to the disorienting effect the crisis had had on experts, policy makers, and the general public alike. Richard Dale, one of the few economists that anticipated the Global Financial Crisis, described the situation in November 2008 in an essay titled "The Financial Meltdown is an Academic Crisis Too," as follows:

What we have witnessed in recent months is not only the fracturing of the world's financial system but the discrediting of an academic discipline. There are some 4000 university finance professors worldwide, thousands of finance research papers are published each year, and yet there have been few if any warnings from the academic community of the incendiary potential of global financial markets. Is it too harsh to conclude that despite the considerable academic resources that go into finance research our understanding of the behavior of financial markets is no greater than it was in 1929/33 or indeed 1720? (117)

However, beyond questioning economic expertise, the economic models themselves were enlisted as possible culprits for the crash; models which were relied on in international finance to calculate risk leading up to the crisis, (see e.g. Wolf, *The Shifts and the Shocks* 3–4; "Why They Crashed Too"). Blind spots in economic theory became

visible as economists were unable to predict and struggled to make sense of the unfolding Global Financial Crisis. The far-reaching consequences of these blind spots indicate the vital need for a theoretical renewal in socio-economic theories of crisis.

When reviewing the publications in the crisis year, to date, the criticism of neoclassical orthodoxy has allowed for a tentative reintroduction of plurality in economic theory and methodology (e.g. strengthening of behavioralist economics). Nobel laureates George Akerlof and Robert Shiller's widely-acclaimed book Animal Spirits (2009), which focuses on non-rational forces driving an economy, marks the beginning of a sea change in economic common sense. Similarly, the international success of French economist Thomas Pikkety's Capital in the 21st Century (first published in French in 2013), is indicative of a changing intellectual climate. The 700-page study not only contradicts the previous neo-liberal narrative of raising living standards as a result and raison d'être of liberalization but has led to a new academic interest in economics of inequality. Finally, resistance is growing from below in economics departments. In response to the crisis of their discipline, a new generation of students founded the International Student Initiative for Pluralism in Economics (ISIPE). The international collective of over 65 associations of economics students from more than 30 different countries issued an open letter in 2014, intending to bring attention to the lack of pluralism in academic economics:

It is not only the world economy that is in crisis. The teaching of economics is in crisis too, and this crisis has consequences far beyond the university walls. What is taught shapes the minds of the next generation of policymakers, and therefore shapes the societies we live in (ISIPE).

Coming to terms with the crisis at large necessitates further opening the departmental and disciplinary borders of economics. Indeed, the sudden prominence of the supposed intangibility of finance and the ungovernable complexity of financial markets conveyed an opportunity for alternative perspectives on the subject. Czech economist Tomáš Sedláček's international bestseller *Economics of Good and Evil* presents an instructive case regarding the former rigid conventionality of academic economics, in the book's content and in its creation. Aimed at a general audience, the book was first translated into English in 2011, and won the prize for best economic title in its German translation in 2013. Sedláček forcefully questions contemporary economics' self-description as a supposedly rational, fully mathematizable science. Rather, he insists on an understanding of economics as a predominantly cultural phenomenon closely tied with religion, myth, philosophy, anthropology and the arts. Tellingly, this sweeping blow at a certain conception of economics as value-free is based on Sedláček's 2009 PhD thesis, which was rejected by the Faculty of Social Sciences of the Charles University in Prague due to its supposedly questionable scientific value (see e.g. Kennedy 7).

While Sedláček's critique was not well-received inside his own department, the book had its finger on the pulse of the times. More recent scholarly publications from outside economics and finance departments (typically in political science) voiced a similar assessment of the state of economics and its role in the Global Financial Crisis. Central voices in this critical discourse include Irene Finel-Honigman's 2009 book tracing a *Cultural History of Finance*, or Robert Aitken's work on demystifying finance as a set of everyday practices ("Performing the Limits of Finance"; "Everyday Debt Relationalities"). This scholarship is part of a multi-disciplinary critique attempting to unveil finance's

embeddings in historical processes and larger cultural, social and political contexts. Notable scholarship that predates the Global Financial Crisis include Marianne de Goede's seminal *Virtue, Fortune and Faith: A Genealogy of Finance* (2005) and Donald Mackenzie's *An Engine, Not a Camera: How Financial Models Shape Markets* (2008).

Critiques of economics and finance in wake of the crisis also came from sometimes surprising sources outside of the social sciences. Noteworthy perspectives include German literary scholar Joseph Vogl's *Specter of Capital*, first published in German in 2010, which outlines a critical cultural and intellectual history of economic paradigms. In addition, fellow German literary scholar Jochen Hörisch's 2015 book offers a *Theology of Financial Markets*. Similar to Vogl, Hörisch compares the Global Financial Crisis to the earthquake of 1755 in Lisbon and likens the current crisis of economics to a theodicy. Another unique take on the economy and economics is offered by Sedláček in a second book, written with Austrian journalist Oliver Tanzer. Published in English in 2015 as *Lilith* or the *Daemons of Capital: a Psychopathology of the Economy*. The book considers the economic discipline and the economic system from the vantage point of psychoanalysis, presenting an explorative approach to the issue of theoretical limitation in economics.

If the above examples of critical literature offer a refreshing variety of approaches, they habitually remain limited to an appropriate critique of the mono-culture of neoclassical mainstream and its consequences for the global economy. The critical voices from disciplines like political science, cultural history, theology, and psychoanalysis often close with a call for a repolitization of Finance (Finel-Honigman) or for more pluralism in economic thought (VogI) without offering tangible alternatives. In view of diverse critical perspectives on economics and the economic system, literary and cultural studies concerned with the relationship of art and economy (and finance and crisis) seem to have struggled with the absence of a unifying, or at least systematic, perspective and methodology. As German economist and philologist Michael Horwath attests in a recent article on literature and economics, while other interdisciplinary perspectives such as "literature and law" can rely on well-developed research traditions and programs in both disciplines, "the relationship of literature and economics cannot claim this in the least: an original economic interpretive approach to literary text remains missing until today."¹ The renewed interest in economic subjects in literary departments would not only benefit from more genuinely interdisciplinary work as Horvath suggests, but also from fresh theoretical impulses.

As a result, literary and cultural scholars that have more recently and directly engaged with the present and historical convergence of the aesthetic and the economic, make obvious a larger methodological insecurity and exhibit a tendency for undertheorization of the subject (see e.g. Künzel and Hempel; Balint and Zilles). This uncertainty is owed to a more general destabilization of economic knowledge, but also hints at a lack of systematic theoretical treatment of economic phenomena in literary and cultural studies since the heyday of Marxist criticism, lineages that most of the more recent scholarship seems to have shied away from.

¹ Transl. by Kaipainen "Während hinter dem Begriffspaar "Literatur und Recht" ein anerkanntes und vielfach ausbuchstabiertes Forschungsprogramm steht (…), das interdisziplinär in beiden Fakultäten bestens verankert ist, lässt sich Vergleichbares für das Verhältnis von Literatur und Ökonomie nicht im Mindesten behaupten: Ein originär ökonomischer Interpretationsansatz literarischer Texte fehlt bis heute." (Horvath).

The task of making political economy (and Marxism) productive for literary and cultural studies has been carried out continuously by scholars of critical theory. Yet, critical theory, has itself been an evolving set of discourses rather than a rigid theoretical system. As a "metaphor," it may be even less organized than David Rasmussen suggests in the *Handbook of Critical Theory*:

Critical theory is a metaphor for a certain kind of theoretical orientation which owes its origin to Kant, Hegel and Marx, its systematization to Horkheimer and his associates at the Institute for Social Research in Frankfurt, and its development to successors, particularly to a group led by Jürgen Habermas, who have sustained it under various renditions to the present day. (11)

The transformations have been ongoing to the point that the more recent revival of critical theory, with regard to the Global Financial Crisis, invoked a return to more fundamental debates of the Frankfurt days in an effort to move beyond postmodern interpretations of the lineage (see e.g. Feldner and Vighi). Also post 2008, a small number of scholars have tried to once more relate the continuing concerns of critical theory to literary studies (Clover; Nealon). Similar to the more general debate, one author accounts for shifts in contemporary capitalism, and urges centralization of Marx's theory of value to make sense of the "system crisis" in economics, and crisis of the raison d'être of the humanities, in their understanding of "literarity" (Clover 108, 109).

My research is certainly in intellectual kinship with critical theory and sympathetic to the premise set by the Frankfurt School, which James Bohman aptly described in the Stanford Encyclopedia of Philosophy as "explanatory, practical, and normative" ("Critical Theory"). However, I would suggest that the crisis at hand necessitates preserving the critical momentum of the methodology, while moving past more rigid and persistent Marxist categories (i.e. class dichotomies embedded in the theory of value) rather than promoting their return. A critical distance from these categories, their ideological history and baggage is appropriate for the particular interest of this dissertation, and necessary to move past the ever-returning debates surrounding critical economic phenomena, between neo-liberal, Keynesian and Marxist positions. Concerning the destabilization of economic knowledge and the persistent lack of scholarly consensus on the Global Financial Crisis, critical theory's renewed focus on the Frankurt School and Marx is indicative of a hardening of preexisting schisms an all sides of a debate which is often more reflexive than analytical. As I argue later (Chapter I), these ritualized debates and pre-established patterns of explanation serve to cover up the epistemological dimension of the crisis, stifling needed radical (re)imagination and new ways forward. Outside of critical theory, systematic attempts to consider literature and economy have been few. On the more productive end, in current anthologies and articles (see e.g. Erlin; Balint and Zilles; Guillory; Künzel and Hempel), a frequent call for revitalization has been issued for the project of New Economic Criticism. As John Guillory puts it, this project often only "implicitly"-but necessarily-positions itself in relation to the "old economic criticism, formerly known as 'Marxist' (223).

In his foreword to a 2010 issue of *New Literary History* entitled "Everywhere and Nowhere: The Sociology of Literature after 'The Sociology of Literature,'" James E. English regards economic criticism as a sub-field of an older notion of sociology of literature that concerns itself "with literary value" (ix). More specifically, economic criticism is an interdisciplinary endeavor between economic and literary disciplines, theories and histories. Developed as a literary or philological approach to economics by the economist Deirdre McCloskey in the 1980s, a *New Economic Criticism* in literature was influentially considered by Mark Osteen and Martha Woodmansee, in their collection of essays from 1999.

Osteen and Woodmansee establish "two waves" of economic criticism: a first wave in the late 70s and early 80s and a second from the 90s onwards (4). If the former was mainly concerned with the "rift between discourses and disciplines" (i.e. economy and literature, resulting in "economism"), the latter and more recent work sought to demonstrate "how the two spheres profoundly conditioned each other" (5). Rather than following a simple reductionism or application of economy theory to the aesthetic, the earlier, more sophisticated works traced "philosophical parallels between economic and linguistic systems" (14). Accordingly, the pioneering work of economic criticism exploring the literacy of economics and economics of literature, by authors like comparatist Marc Schell (The Economy of Literature; Money, Language, and Thought) and philosopher Jean-Joseph Goux (Symbolic Economies; The Coiners of Language) in the 1980s, provided the groundwork for later scholarship in literary departments that explored concrete historical periods of overlap between the aesthetic and the economic (see e.g. Celikkol; Zimmerman; Helm). Outside the predominance of literary scholarship of economic criticism, John Xiros Cooper's Modernism and the Culture of Market Society (2004) and Elisabeth Gagnier's The Insatiability of Human Wants (2000) are two examples of wider reciprocal considerations of economic and cultural phenomena.

More recent relevant publications that align themselves with the theoretical achievements of New Economic Criticism include Nicole Kennedy's *Narratives of*

Inequality: Postcolonial Literary Economics (2017), focusing on the effect of dominant economic narratives in post-colonial countries. There is ongoing exploration of the productive overlaps of economic thought and aesthetic discourse. However, with few exceptions (e.g. Kennedy), the scholarship has mostly engaged with specific national histories (mostly in the English-speaking world), and focused on the 19th and early 20th century while privileging literary discourse.

Given this overview on the socio-economic, cultural and literary scholarship, and its strengths and limitations, it becomes apparent that the subject itself—a transnational economic system in crisis underwritten by a destabilized but still dominant neo-classical system of belief—calls for a broader, new kind of critical interdisciplinary scholarship. The plurality of critical voices, absent a new dominant discourse, or scientific consensus, is at the same time a blessing and a curse; the sign of a healthy reconsideration of economics and a profound and ongoing epistemological destabilization in wake of the crisis.

My own approach in tackling the need for theoretical renewal and more holistic consideration of economic phenomena in times of a larger unsettling is one of comparison. Most centrally, I compare that what social sciences offer with the potential of artistic production, but I also offer productive comparisons of different academic discourses on crisis as well as different artistic genres, modes and media, from different cultures (e.g. the transnational cinema of Hollywood with German fiction). But why compare?

"Why Not Compare?" theorist and literary scholar Susan Stanford Friedman asks in an essay, probing and defending one of the most basic intellectual (and aesthetic) operations that nevertheless is seldom scrutinized (753). Friedman considers the arguments *not* to compare. For one, comparison can be understood to produce epistemological hierarchies that instrumentalize or value one side of the comparison over the other and run the risk of ethnocentrism. One's own state of knowledge or one's culture becomes the point of reference against which everything else is compared and measured. In addition, a comparison could strip that which is compared from its unique geographical, social, historical, or cultural context. This decontextualization exerts a kind of "violence," damaging "the requirements of a richly textured understanding of any phenomenon in its particularity" (755).

Against these epistemological and ethical problematizations of comparison Friedman pits three imperatives *to compare*; these are cognitive, social and epistemological-political. The first two describe how comparison is at the same time an indispensable mode of human cognition and a prerequisite for forming individual and collective identities. With the third, Friedman insists that there is an epistemological and political cost of *not* comparing, writing that "for all problems of comparison, in the end it is worse not to compare" (756). That is, the refusal to compare makes any meaningful abstraction and theocratization impossible. After all, higher categories like fruit or the quality of fruitiness are dependent on the comparison of the idiomatic apples and oranges. Further, a perspective that refuses to compare is necessarily static, romanticizes one's own perspective, and isolates one's own culture or state of knowledge in infinite particularity and an inability to learn from that which is other by comparison (S. S. Friedman 756).

Thus, if Friedman endorses comparison, rather than suggesting binary yes/no comparison, she offers what she calls "a comparative practice." Friedman envisions an

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approach that minimizes the dangers of hierarchy, decontextualization and stasis, and that "invites a comparative methodology that is juxtapositional, contrapuntal, and reciprocal, thus opening the possibility for a progressive politics of comparison" (758). The modes of juxtapositional comparison Friedman discusses can be those of "collision" (a pointing out of differences without establishing similarities), of "reciprocal defamiliarization" (acknowledging and strengthening differences), and finally of "collage." Collage as a juxtapositional mode of comparison "maintains the particularity of each, refuses hierarchy and instrumentalism, and fosters identification of new generalities based on what texts share and make possible" (759). Collage is the mode that allows one to escape stasis of particularity and allows for the compared to learn from each other.

With Friedman's deliberations in mind, the productiveness of comparison for coming to terms with the global financial crisis becomes evident. To begin, we should ask what is the "crisis-ness" that emerges by juxtaposing the different uses of the term crisis by laymen, historians, economists or artists? Further, what can be learned in comparing socio-economic discourse to works of art and entertainment? Does an author of fiction articulate crisis differently in a novel than a policy maker in political speech? Is the result a mutual estrangement or enlightenment? Are those indeed apples and oranges? And is there something fruitful in between? Like Friedman's insistence on juxtaposition and avoiding hierarchies, I propose that only in taking both sides of a comparison seriously can they become mutually enlightening. This requires neither presupposing that a novel as a work of art has no business in engaging with economic phenomena, nor that policy must somehow unidirectionally learn and take advice from fiction.

The comparative method I follow in my dissertation insists on an interdisciplinary approach, where neither discipline or side of a comparison is merely instrumental, nor an object of unidirectional valuation or hierarchy. The idea of comparative equality also designates the central insight of New Economic Criticism, as proposed by Woodmansee and Osteen. In insisting on the economy of literature and the literacy of economics, it becomes possible to show how the supposedly separate spheres of culture and economy "profoundly condition each other" (5). Moreover, a juxtapositional comparison of aesthetic-cultural production and socio-economic discourse can not only lead to a mutual enlightening but allows for escape of stasis and for theoretical renewal.

When probing the economic crisis and crisis of economics, it becomes immediately evident why a practice of comparison is imperative. The cost of not (or no longer) comparing has become apparent, through the overriding dominance of neo-liberalism as a system of economics, and a system of belief without alternatives, and in the separation of the larger public from macro-economic thought. At the same time, the modern economic theory underwriting neo-liberal globalization exhibits the violence that comparison can exert. Neo-liberalism insists in a radical decontextualization by rendering things material and living; cultures and people become comparable units so that everything can be captured in relation to markets and assigned a numerical value. As a result, an understanding of the Global Financial Crisis as a crisis of neo-liberal globalization, is also an expression of politically enforced, excessive comparability occurring at a global scale. A juxtapositional practice of comparison is needed to remedy a worldview so dominant that it no longer compares anything with itself. Inversely, a more weighted, less hierarchical and more pluralistic collage approach of juxtaposing comparison is as productive as it is necessary. To put neo-classical theory alongside alternative and competing economic theories allows reconsideration of the supposed naturalness or lawfulness of the fundamental neo-classical assumptions. This practice of comparison allows for productively preserving differences not only across different schools or methodologies of economics, but across different cultures and economies. Finally, we ought to return to a more holistic view of economics, whose need for comparison preserves different spheres and layers of reality—such as politics and culture, which are neither radically other to economics nor simply another area of disinhibited economistic colonialization. Recontextualization and recognition of that and those expelled from economic discourse should begin with renegotiation of the relationship of culture to our economic systems of belief and reproduction.

In line with these preliminary considerations, and as I further develop in the four chapters of this dissertation, my approach is one of trans-disciplinary, trans-cultural and trans-medial comparison. Centralizing culture, my theoretical framework takes its point of departure from Cultural Political Economy (CPE). I position CPE as mode of critique and analysis, and compare and illuminate the role explicitly fictional, creative and artistic forms of culture take in working through the crisis.

Chapter I engages with theoretical considerations and the conceptual problem of crisis as both a word and an event. I investigate the particularities of the term in its broader meaning as a historical-philosophical concept, compared to the narrower socio-economic dimension of crisis, to then arrive at my own theoretical framework for analyzing aestheticcultural production in times of crisis. To this end, I problematize standard definitions of crisis and draw on the scholarship of Reinhard Koselleck and Lin Chalozin-Dovrat. I discuss how the problematic of crisis is inseparably linked with a broader diachronic and conceptual history of the term. Second, by way of examining the lingering semantic overlap of medical and economic discourse I entertain a discussion on the use of metaphors in recent accounts of the economic crisis. Third, I consider a brief intellectual history of the narrowing of economic sciences, their increasing disassociation of cultural and political questions, by engaging with socio-economic theories of crisis starting in the 19th century. Fourth, considering the crisis of economics, I make the case for a Cultural Political Economy (CPE) of crisis. Finally, in discussing the centrality of culture in coming to terms with the crisis, I reflect on the functions of artistic production in the competition of crisis narratives and policies. In doing so, I prepare a CPE understanding of what I call aesthetic-cultural production that informs the analyses of literature, film and video games in subsequent chapters.

In Chapter II, I discuss how the interventions of aesthetic-cultural production take place on an evident communicative level, in showing how a cultural artifact participates in and takes up the discourses of crisis, recovery and finance. In reconstructing a dominant imagined recovery, I identify an imaginary of blame that puts deviant behavior of banks and bankers at the heart of the crisis narrative. The communicative function of cultural production then refers to how literary, filmic and ludic images, narratives and tropes (e.g. of corrupt bankers) contribute to the construction, the making plausible and discursive selection, of the dominant imagined recovery. From a CPE perspective I discuss this imaginary of blame, arguing that it creates what I call a moral legibility of the crisis that appeases the initial epistemological and systemic shock, to offer a more familiar and manageable narrative. However, in identifying art as part of this strategy of complexity reduction, I do not simply suggest a mono-directional complicity of cultural production. Instead, in analyzing the properties of decisively aesthetic and fictional examples of cultural production, I point to the critical potential of the aesthetic form to come to terms with the discourse at large.

In Chapter III, I confront the complimentary or parallel problematic of financial abstraction to the complexity reduction of an imaginary of blame. In discussing finance's having become immaterial, self-referential, and fully reliant mathematical describability, I identify a financial imaginary which, in its abstraction and excess complexity, overwhelms and disenfranchises the individual. Further, if such an imaginary depends on its continuous reconstruction, in cultural, political and economic discourses and practices, I posit a critical function of cultural production in interrupting this process of naturalization. Focusing on the specific formal possibilities of the aesthetic and fictional, I analyze literary texts, a film, and a video game to show how a large economic crisis can not only provide "space for proliferation (variation) in crisis interpretations" (Jessop 7) but lead to formal and discursive innovations.

Last, in Chapter IV, I posit that intervention in crisis discourse fundamentally concerns the laboratory or imaginative function of artistic and fictional discourses, and the potential to go above and beyond the representative, critical, analytic and didactic potential of cultural production. While Chapter II and III address developments that displace the epistemological shock or systemic nature of the crisis, in favor of blaming a few actors or constructing a radical unaccountability of finance and markets, Chapter IV returns to the crisis at large, as a crisis of capitalism and a "crisis of imagination" (Haiven).

Departing from a discussion of the concurrence of a vital need and an impracticability of utopia, the possibility and impossibility of radical change in the 21st century, and in light of shortcomings of the neo-liberal utopia, I develop a CPE concept of how social imagination in cultural production plays a constitutive role in enabling change, which I call creative destruction. By insisting on the interdependence of the economic with everything else, I identify imaginative practices of creative destruction in cultural production, which not only exceed a narrow understanding of art or fiction as isolated objects but delineate the condition of the possibility of change.

Chapter I

Crisis or the (Im)possibility of Change

Before a newly elected Italian Government sparked new fears in the Eurozone by raising its national debt in 2018, before the concern over what the Brexit vote might spell for the European Economy in 2016 and before the Greek Debt Crisis resurged in 2015, a study from early 2014 showed that Germans demonstrated little optimism regarding the Euro-Crisis: 53.6 percent believed that the crisis would drag on for a long time, 34.6 percent believed that the crisis would escalate further and only 5.7 percent believed that the crisis was "mostly over" (Böcking). Yet, what was meant by the term "crisis" for both the researchers and participants was (and perhaps has remained) unclear. What was the nature of this crisis that a minority of study participants believed to be over? Was it the same crisis that the other participants perceived as ongoing or worsening? What were the fears and hopes placed in this crisis whose length and gravity continues to be disputed today? Was or is it a purely economic crisis, a political crisis, or even a cultural crisis of the European Union? Did the participants think the crisis continued despite, or because of, political interventions during the Global Financial Crisis? Were they solely concerned with economic perils? Did the interviewees welcome the larger political fallout as it promised more national sovereignty, or did they dread the (by now apparent) return or strengthening of nationalistic voices?

As ongoing public and academic interest in the subject of crisis in general have revealed, "crisis" is a broad, ambiguous term that needs clarification. Even though the phenomenon is widely discussed and researched, and discourse on crisis exists in a variety of academic disciplines, the everyday use of the term shows an ambiguity and there is a lack of an overarching, systematic treatment of crisis as such in academia. The simultaneous popularity and vagueness of the term is perhaps testified to in its conspicuous absence from philosophical dictionaries² and suspicious prevalence in titles of recent publications.³ The use of the noun "crisis," with different levels of abstraction, or the overuse of the term to designate anything from a family visit on Thanksgiving, to a philosophical debate on the nature of human existence, to a global financial meltdown, conveys the impression that any two speakers might not mean the same thing when they identify something as a crisis.

To initially limit the wide range of phenomena denoted by the same term, a classification of crises seems helpful. At first, one can establish a typology of crisis conceived as question of time (past, present, future), of scope (personal, societal, institutional, global), or status (real, imagined) and so forth. Further, one can subdivide crises into different areas (e.g. health, democracy, language, politics). Finally, crisis should be distinguished from other related discourses such as disaster, or catastrophe. However, such an approach says little about the discursive complexity and the volatility of the phenomenon. Even within the more narrow interest of my dissertation in the discourse on a *contemporary*, *global*, *economic* crisis, a rich and wide-ranging body of literature waits to be engaged with. A plethora of approaches, with varying intents and

² Neither the Oxford Dictionary of Philosophy nor the Stanford Encyclopedia of Philosophy have an entry under "crisis." Further, in German "Krise" is also absent from the UTB Handwörterbuch der Philosophie. Solely the, Historisches Wörterbuch der Philosophie features a brief contribution by Reinhard Koselleck and others, discussing mainly his work (Koselleck et al. 1235–45).

³ See e.g. Janet Roitman's entry on "crisis" in *Political Concepts: A Critical Lexicon* stating that "The recent bibliography in the social sciences and popular press is vast; crisis texts are a veritable industry" (3).

disciplinary methodologies, make for a multitude of results, positions, and suggestions. As the example of the Euro-Crisis and its political and cultural fallout makes obvious, it is unclear what an analysis of such a crisis should include, before considering additional questions like the following: Can an economic crisis be isolated, from the political and cultural? Is an economic crisis a purely material, or a primarily discursive event?

In this chapter, I explore the particularities of the term, and theoretical descriptions of crisis, to establish a basis from which to approach cultural production in times of crisis in the chapters to follow. First, starting with a set of standard definitions, I discuss the tension between a material reality and an unstable, discursive, fabricated quality of crises. To this end, I draw on the scholarship of Reinhard Koselleck and Lin Chalozin-Dovrat. I discuss how the problematic of crisis is inseparably linked with a broader diachronic and conceptual history of the term. This concerns namely the roots of crisis in Greek philosophy, Hippocratic medicine and theology and the historically increasing abstraction of crisis as a scientific and political term. I argue that the present conflicting descriptions are merely a symptom of a larger epistemological crisis.

Second, by way of examining the lingering semantic overlap of medical and economic discourse I discuss the use of metaphors in recent accounts of the economic crisis. Here, I demonstrate how many of the earlier observations on crisis as a general discourse play out in the more specific accounts of the Global Financial Crisis and produce both conflicting and discursively predetermined results.

Third, I provide a brief overview of different theoretical descriptions of crisis in economics starting in the 19th century. I show how many of the dividing questions that still haunt debates today had not only been established 200 years ago, but how older

paradigms periodically resurface in times of crisis. By tracing a brief intellectual history of theories of economic crisis, I discuss the conflicting traditions and main ideological divides that predetermine the current interpretations of crisis. Further, I demonstrate how the historical disembedding of markets is paralleled by a disassociation of economic sciences from political and social questions, or a departure from political economy in favor of pure economic theory.

Finally, considering the limitations of a mainstream economic description of crisis, I make the case for the consideration of a Cultural Political Economy (CPE) of crisis. In my discussion of CPE, I provide a model for including cultural and artistic production within my larger framework of analysis. Taking a theoretical lead from CPE founder and scholar Bob Jessop's analysis of the semiotic and extra-semiotic processes in coming to term with crisis, I locate the ambitions of cultural production in a competition of multiple imagined recoveries. In doing so, I prepare a CPE understanding of what I call aestheticcultural production that will inform the analyses of literature, film and video games in subsequent chapters.

1. Defining Crisis

As most scholars agree, we cannot find a "universally accepted" or "single" definition of the term crisis (Rycker and Don 6; Coombs 18). As Lin Chalozin-Dovrat maintains in her essay on "Crisis' in Modernity" there is a discrepancy between the "attractiveness" of the term and its conceptual "vagueness" (76). Granted, no dictionary

definition can encompass the multifaceted, everyday use of the term and its use in specialized debates. Nevertheless, establishing a dictionary definition and examining the etymologic roots of the word offers a productive point of entry to better understand contemporary use and problems with the concept of crisis.

1.1. The Lowest Common Denominator

The Oxford Dictionary presents us with two meanings of crisis (1) the origin of the term in pathology, and (2) the transferred and figurative use of crisis as "a vitally important or decisive stage in the progress of anything".⁴ Three additional definitions are labeled as obsolete (crisis as judgment, crisis as point by which to judge, crisis as a conjunction of planets in astrology.) Similarly, the modern German *Duden* lists two meanings of "Krise." First, we find the contemporary figurative meaning of crisis as a difficult stage, situation, or time that figures as a critical turning point, or peak within a dangerous development. Second, the dictionary states the older medical meaning of crisis as a turning point in the progress of a disease.⁵

Most contemporary (or non-obsolete) definitions of crisis understood as a "decisive stage" feature the interrelated elements of danger, decision and change. Yet the clearcut trajectory, descriptive neutrality or even objectivity that these three terms seem to offer

⁴ "(1) Pathol. The point in the progress of a disease when an important development or change takes place which is decisive of recovery or death; the turning-point of a disease for better or worse; also applied to any marked or sudden variation occurring in the progress of a disease and to the phenomena accompanying it." and "(3) transf. and fig. A vitally important or decisive stage in the progress of anything; a turning-point; also, a state of affairs in which a decisive change for better or worse is imminent; now applied esp. to times of difficulty, insecurity, and suspense in politics or commerce" ("Crisis, n.").

⁵ "(1) schwierige Lage, Situation, Zeit [die den Höhe- und Wendepunkt einer gefährlichen Entwicklung darstellt]; Schwierigkeit, kritische Situation; Zeit der Gefährdung, des Gefährdetseins." and

[&]quot;(2) kritischer Wendepunkt bei einem Krankheitsverlauf; Krisis" ("Krise, Die").

can be easily destabilized. At first, the three seem to be connected by a sense of urgency or an imperative. The recognition of imminent danger imposes a need to decide and to act. Doing so (at a turning point) implies the promise of change for the better; while failing to act suggests a development for the worse. Thus, crisis has a rhetorical dimension, evoking an inevitability and necessary decisions.

This rhetorical dimension (and persuasive power) of crisis in mind, to declare a state of crisis entails a notion of normativity, by posing the question as follows: a crisis compared to what? If a crisis is the sign of a precarious abnormality, what is the supposed normal state of affairs that we came from and what are the ideal conditions that one would want to arrive at? Underlying this normative dimension are the seemingly necessary decisions to be made in a critical development, which depend on processes of interpretation that entail value judgments. As a result, the interpretations of a crisis are framed by personal preferences, shared beliefs or larger ideologies.

Finally, the description of crisis expresses an unsteady temporal dimension. Danger, decision and change imply that crises are processes with corresponding stages, such as beginnings and endings. However, there is the obvious difficulty of pinpointing the exact beginnings of a crisis or even finding the ideal moment to act: two interpretations might present quite different ideas about probable origins or desired trajectory of a crisis. Yet, as this temporal dimension is not predetermined, considerations of time also determine the description of the crisis. In other words, a crisis is determined by that what lies before, the prior way of doing things. Then a crisis is shaped in regard to the turning point in the dangerous development that demands decisions (or judgments) be made when the prior way becomes unfeasible. Finally, as these decisions are directed towards an open future, a crisis is determined by that which ought to come after the crisis, a promise or possibility of change. Crises thus have a diagnostic quality. Assessing the danger, reaching a decision and acting to initiate change, all rely on determining what is wrong with the past, and what should be made right for the future.

All observations pertaining to the rhetorical sense of urgency, the normative power of declaring a crisis, its unstable temporal description and its diagnostic quality, indicate the discursive difficulties of settling on an absolute definition of crisis. However, the difficulty is not simply that crises necessitate a project of recovery and reconstruction in absence of quick, easy or self-evident answers, as some authors pointed out in view of the Global Financial Crisis (see e.g. Hayward 1–12). Rather, the issues above point to a more fundamental problem that lies between the event, and the term or concept, of crisis. The very reason that the shared experience of the event might resist objective descriptions, is that the dominant episteme that underwrites such a description might itself be in crisis. In other words, as an object of knowledge, crisis presents us with an epistemological impasse, of which the multiple and conflicting descriptions and interpretations are the symptoms. While a crisis of larger systems exposes the contradictions of the ways of the past and might trigger an impulse to understand and to change the previous discourses and theories, a crisis also necessarily destabilizes the fundamental truths or assumptions that previously governed a given system. As organizational psychologist Jamie Priestley put it so aptly, crises come as a "shock" to the unsuspecting majority: "What had become normal and reliable is disrupted, often suddenly, and crisis is the label we give to the ensuing struggle between one order and another" (456).

However, this epistemological impasse is not always felt or considered in the various discourses that form around critical events. Faced with the unknown and in absence of a new episteme, we might be tempted to assert what is already broken or reach blindly for older systems of belief and epistemological relief. In such cases event and word come together to form dispositives, organized around personal, or political preferences, and shaped by discursive structures of authority and power.⁶ This expresses a tendency of "normalizing" crisis, or regulating the process of going, or rather *not going* "from one order to the other" (Priestley 456). The double disposition of crisis, that destroys the old and creates the possibility of the new, is met with a dual nature of the discourse on crisis: destabilization, the disruptive diagnostic quality of a crisis that figures as an epistemological impasse, and normalization, that treats a crisis as an objective quasinatural process.

Yet, the normalization discussed here is more than the result of ignorance or a kind of malevolent mechanism that prevents fundamental change. Rather, it brings us full circle from the discursive, rhetorical, normative and diagnostic quality back to the objective description of a dictionary. The conflicting qualities of the term crisis are intimately linked with the conceptual history of the term, a term that at once buries and preserves its etymological roots and semantic record.

⁶ In anticipation of the CPE Model that I will endorse in the last part of this chapter, one way to differentiate this matter is by talking about crisis "in" or crisis "of" a system. Crisis "in" suggests a crisis "within the parameters of a given set of natural and social arrangements" and is associated with crisis management that provides for internal adjustments, and potentially shifting the crisis effects to the future. Crisis "of" a system "occur when there is a crisis of crisis-management" that is, when "efforts to defer or displace crises encounter growing resistance" resulting in "disorientation" (Jessop, "Narratives of Crisis" 27).

1.2. Conceptual History of Crisis

Among the few systematic treatments of the conceptual history of crisis are the work of German historian Reinhardt Koselleck and more recently by history and philosophy of science scholar Lin Chalozin-Dovrat (2013). Koselleck's account elucidates the rhetorical and diagnostic function of crisis through its historical transformations, and accounts for influence of the Greek "Grundbegriff" (krino), the Hippocratic metaphor and the Christian theological understanding of crisis on the modern use of the concept. Chalozin-Dovrat's diachronic analysis, with regards to the scientific use of the term, extrapolates the naturalization of crisis as an objective and politically effective term.

In "Einige Fragen an die Begriffsgeschichte von 'Krise," Koselleck traces the term back to its Greek roots as a "basic concept" (Grundbegriff), where "Krisis" signified a definitive and irrevocable decision (from "krino," meaning to separate, to choose, to cut, to decide, to judge). This concept of absolute decisions (whose alternatives are embodied in the matter itself) had significance in the domains of Aristotelian law, Hippocratic medicine and theology ("Einige Fragen" 204). In the latter, with reference to the New Testament and alongside Aristotelian legal language, *krisis* was eventually paired with *judicium* and came to signify "judgment before God," which Koselleck characterizes as "the unsurpassable signification of crisis" ("Einige Fragen" 204).

In Koselleck's account, crisis "becomes independent" by the eighteenth century, where the reference to its medical meaning (a critical development in the course of a disease) is consciously used as a "metaphor" ("Einige Fragen" 205–06). From then on, the term takes on a decisive role in history and the establishment of many of the social sciences (including economics) as independent disciplines (Koselleck, "Crisis" 381–97).

Crisis as an economic term only enters the German language in the 19th century, but becomes an increasingly central and dominant concept as well as an object of comparatively "rigor[ous] theoretical description" (Koselleck, "Crisis" 389, 392).

Outside of this specialized use in economics, in the course of its conceptual displacements (between medicine and Christian theology) the term crisis entailed a prognosis, which came to imply a prognosis of time. According to Koselleck, crisis becomes a basic concept of the philosophy of history (see also *Kritik und Krise*). The term attains both a diagnostic and a prognostic function. From the vantage point of "one's own time" (that is experienced as a crisis) one claims to explain the "entirety of history," in coming to terms with the past and providing a prognosis for the future ("Einige Fragen" 206).

Koselleck subdivides this historical concept of crisis into three different semantic models: history as a "perpetual crisis," crisis as an "iterative period" of historical change, and crisis as a "final crisis of all history" ("Einige Fragen" 207–08). While Koselleck maintains that these three models might never figure in their pure form, it is fundamental to recognize how they oscillate between the theological meaning of crisis (God as a maker of history, crisis as final judgment) and its figurative use, which tries to provide a distinctly secular historical explanation. Koselleck observes that in this "Sprachgestus," the rhetorical authority of the absolute decisions between final alternatives (the Greek roots) and the associative power of last judgment and apocalypse (Christian theology) are at play ("Einige Fragen" 207).

What emerges from these partial and multiple historical shifts in meaning, is a suggestion of the production of semantic networks, as opposed to a linear history of

semantic substitutions. If Koselleck later (and with regret) diagnoses that crisis has come to be "vague" and "imprecise" in its modern use, it is also the result of this paradoxical continuation and discontinuity of the many meanings and uses of crisis through history. As he asserts, "such a tendency towards imprecision and vagueness, however, may itself be viewed as the symptom of a historical crisis that cannot as yet be fully gauged" (Koselleck, "Crisis" 399).

Lin Chalozin-Dovrat takes a similar look at the semantic and conceptual history of the term and argues that "the trouble with 'crisis'"—i.e. it's vagueness and resistance to analysis—stems neither from its "polysemous nature" nor simply from its "inflationary use" (69). She describes the vagueness of the term as the flip-side of a process of increasing "abstraction," leading from the older to the modern uses of the word. If Koselleck's focus is mainly on history as a discipline, Chalozin-Dovrat is mostly concerned with the role of both social sciences and politics in this process. According to her, the modern idea of an "objective" quality of crisis evoking "historical or natural necessity," is part and parcel with this history. Along with Koselleck, Chalozin-Dovrat observes that in the seventeenth century the word crisis was used in politics as a "rhetorical tool" and prepared a use of crisis that would "abstract crisis from the realm of human action and transform it in an objective, quasi-natural phenomenon" (79).

According to Chalozin-Dovrat, this process of increasing abstraction accelerates in the eighteenth and nineteenth century with the expansion of the term into numerous social and political domains, to designate change and to express abstract knowledge about the modalities of change (92). In terms of its "political utility," the abstraction from human agency meant that the quasi-objective use of crisis (represented in graphs and
statistics) was an effective depoliticization of the term. In societies governed by scientific principles, "it was not only possible, but also justified, to construct a plausible narrative of change that no longer allocated a significant role to human agency" (92). The modern concept of crisis left out the agents of critical change and abandoned the possibility of individual responsibility. Further, crisis came to correspond with a general loss of agency that is relevant today, to the effect that "individuals cannot easily acquire faith in their power to bring about social change, or even imagine that social change is possible" (Chalozin-Dovrat 93).

Adding to Koselleck's semantic web, which spans Greek philosophy, Hippocratic medicine, theology and secular history, Chalozin-Dovrat suggests that crisis both "treasures the arcane knowledge of decisive change and unfolds the procedures of modern abstraction" (Chalozin-Dovrat 93). Both Koselleck and Chalozin-Dovrat insist that crisis is more than an isolated lexical item (as the initial dictionary definition might suggest), and is in fact a phenomenon both historical and contemporary, that shapes discourses and is shaped by them. The imprecision and vagueness of crisis concepts in their modern use, that both authors attest to, are also present in debates on the economic crisis since 2008/2009. Looking at the discourse on the Global Financial Crisis in media and politics, it is worth unpacking the conceptual record of crisis, to explore how its semantic and temporal elements are operationalized and to what effect and end.

2. Medical Language and Metaphors in Discourse on Crisis

In both historic and contemporary debates on economic crises, the etymologic roots of the term in pathology have a lingering presence. This vestige manifests in public policy and media discourse, articles and news items, in reference to the unfolding Global Financial Crisis. The headlines tell either casually of "Boom nations to catch cold as west's financial disease strides the globe" (Bowers in: The Guardian 16 October, 2008), or self-consciously of "An Economy in Need of Holistic Medicine" (Giridharadas in: The New York Times October 23, 2009), in short of "Illness as Economic Metaphor" (Milken and Simons in: The Wall Street Journal June 20, 2009).

This upsurge in medico-economic language was perhaps first noticed by economist Paul Krugman, who in 2010, in a piece for *The New York Times* on a financial stimulus deal, called to "block those metaphors" (Krugman). He suggested that America's economy was not "an invalid who will soon return to health if he gets a bit more rest." More importantly, Krugman charged that "bad metaphors make for bad policy." Hence, if the rest of the article from was concerned with the technicalities and politics of the stimulus deal, the Nobel Laureate sensed that more is at stake in choosing certain images than neutral, illustrative, or decorative purposes of metaphorical language.

Indeed, framing crises in pathological terms often entails further-reaching implications regarding both the discourse on crisis and the practice of managing crises. Crisis as sickness describes the metaphor of the economist, theoretician or policy maker as a "doctor" who describes the "symptoms" (e.g. a financial bubble) who diagnoses an "illness" (e.g. a financial crisis) that has befallen a "patient" (e.g. a national economy) and

proposes a "cure" (e.g. fiscal "injections"). If Krugman's piece mainly regards the simplifications and generalization at play in these metaphors, the ostensive use of metaphors to describe crisis is revealing. Considering the rhetorical dimension of declaring a state of crisis, the sense of exigency is heightened by evoking the easily understood vocabulary and imagery of a disease and death. At the same time, this relates to Koselleck's semantic web of meaning, which oscillates between a figurative, medical and a secularized, theological meaning of crisis. Rather than a mere illustration, the metaphor evokes the diagnostic and the prophetic power of crisis, a right way of understanding and acting. Further, by figuratively expanding a doctor's authority and expertise over life and death to the policy maker, while communicating necessary, or supposedly non-negotiable decisions in the seemingly objective language of natural sciences, Chalorin-Dovrat's notion of an "objectivation" of crisis (as "abstraction" and "depoliticization") becomes visible. A crisis described as a disease is to be left in the hands of (medical) experts and leaves little room for laypeople's individual interpretation and agency.

At the same time, the persistence of the too-readily available and transparent Hippocratic metaphor of crisis betrays the seemingly objective, rationalistic and scientific discourse on crisis. Rather than being merely poetic or rhetorical devices, metaphors pervade the thinking about and the conceptualisation of crises. Moreover, the metaphors not only come to fill terminological gaps, but figure as the signs of pre-established patterns of interpretation. These ritualized forms of understanding tend to cover up the epistemological disruption of a crisis and the underlying normative and interpretative needs of critical events become visible only in the multiple and discrepant pathological descriptions of the current crisis.

To stay in the metaphor, in the discourse on the Global Financial Crisis, a quite diverse set of "medical professionals" (surgeons and witchdoctors) are at work. While interpreters use the same overarching metaphor, they come from different "medical schools" (namely Neoliberalism, Keynesianism and Marxism), conclude differently on the possible origins and often have quite contradicting "remedies" in mind (see e.g. Levi 5–11; Behrmann 14–19). Neo-liberals describe the fever of otherwise perfectly healthy markets, as the results of market-external sources of infection, such as government malpractice (e.g. in providing for false fiscal incentives and wrongful regulation). Keynesians point to the chronic condition, expressed in reoccurring economic cycles that can be mitigated, if not prevented, by the very incentives and fiscal policies neo-liberals reject. Finally, a Marxist critique of the crisis calls the whole diagnosis into question and identifies the entire system of economic reproduction to be the disease rather than the patient. This virulent "medical disagreement" points to the different imaginings of crises, to the way crises are discursively shaped, if not produced.

Yet, as we can see, whether in conflicting imagery of death and disease, or other well-known metaphorical constructs such as "animal spirits" (John Maynard Keynes) and the "invisible hand" (Adam Smith), the socio-economic discussion on the nature and origins of crises are captured in pre-established imagery and normative patterns of interpretation. These patterns of interpretation correspond to interpretative regimes, whose historical and scientific genesis, and the potential limitations they impose on the contemporary discourse on crisis, demands further attention.

3. A Genealogy of Crisis Theories

The debates on the Global Financial Crisis are saturated with historical references and show how the crisis prompted a return of older economic paradigms. The fault lines of the dispute run between neo-liberal (or neo-classical), Keynesian (or social democratic) and Marxist (or anti-capitalistic) positions. Many of the fundamental theoretical divides that inform these three camps (which are themselves not homogenous) were established as early as the beginning of the nineteenth century. Specifically, the divides relate to contradictory imaginings of the nature and role of crisis in a capitalist economy and answer to the following fundamental questions: are crises part of the natural course of economic development, or are they the result of mismanagement and other, noneconomic events? Are crises external or internal to an economic system? Can crises be avoided or prevented? Are crises necessary for economic reproduction, and/or will they bring about the end of capitalism? The disagreement over these questions informs the persistent ideological gulfs between different schools of economics and frames the following discussion of the historical genesis of crisis theories.

In my discussion of classical economic thinkers, such as David Ricardo and Jean-Baptiste Say, I demonstrate how the basic assumptions and axioms of these thinkers and their foundational works remain important authoritative references today, for thinkers and schools of thought that have transformed, or evolved together with the economic processes, over the past 200 years. Rather than simply providing the historical roots of the camps of a contemporary debate, this short excursion into the beginnings of modern economics, also establishes the transformation of the term crisis, and the role and scope of contemporary mainstream economics. Finally, a systematic treatment of crisis theories is indispensable in coming to terms with the limitations and the blinkered attitudes of interpretative regimes that established themselves in dealing with the crisis at hand.⁷

3.1. Laissez Faire, Economic Equilibrium and Social Harmony: From Adam Smith to Jean-Baptiste Say and David Ricardo

The first systematic account of crisis as an economic phenomenon appeared in the nineteenth century, as theoretical considerations of overproduction. However, at the dawn of the nineteenth century it was still debated whether a general economic crisis, or a crisis that is not limited to a single sector (e.g. the isolated trade-, speculation- and production crises of the eighteenth century) was at all possible. Typical instantiations and early theoretical descriptions of an economic crisis associated with larger business-cycles of boom and bust would only surface after 1820 with the crisis in England in 1825.

Arguments denying the possibility of general crises were embedded in larger ideas of balance and equilibrium in economies and society. Both the French economist Jean-Baptiste Say, and English economist and entrepreneur David Ricardo, contested the idea of a general crisis, critiquing (among others) one of their main theoretical influences, Adam Smith and his *Wealth of Nations*. Contrary to a present-day view that positions Smith as the ideological forefather of neo-liberalism, Smith's theory of free markets and their constant need for expansion left room for the idea of limits to economic growth.⁸

⁷ The outline below broadly follows the suggestions of Lutz Brangsch, who in absence of systematic treatments of crisis theories has sketched an overview on crisis theories and concepts.

⁸ For more thorough discussion on Smith's often contradicting accounts of possible "limitations to growth" and his particular historical situation see Benton (144–70).

Without having formalized his thoughts on crisis, Smith also foresaw the possibility of an economic crisis that would affect "all trades" (Brangsch 52). Per Smith, the accumulation of capital would eventually drive down profit rates. In contrast, Ricardo and Say postulated a limitless expansion of markets, in which demand always rises proportionally to production, and accumulation is temporary at worst. Ricardo wrote:

M. Say has, however, most satisfactorily shown that there is no amount of capital that which may not be employed in a country, because a demand is only limited by production. No man produces but with a view to consume or sell, and he never sells but with an intention to purchase some other commodity, which may be immediately useful to him, or which may contribute to future production. (192)

As this idea holds for all producers, production must naturally be balanced by consumption. This state can be disturbed by an oversupply of a single commodity or insufficient demand. Yet price changes reflecting a disturbance of the symmetry of supply and demand would lead to restoration of the equilibrium (Mattick 23). To be sure, this theory is based on an idea of economic reproduction where money plays only a negligible, or strictly intermediary, role. The movement of goods, money and capital, the particularities of capital turnover, and reproduction of capital are reduced to exchange and accumulation.

Considering the postulate of equilibrium, the primary concern is how prices come about. This is where the school of Marginalism offered insight in the 1870s. Focusing on single economic actors, and their rationality, this subjectivist shift in economics further enshrined the impossibility of general economic crises. For the marginalists, the idea of an equilibrium inherent in the totality of economic activities is extrapolated from the individual, to the extent that every supply necessarily creates its own demand. As Brangsch observes, "Say himself had already stressed this over and over again in his letters to Malthus" (52), maintaining that overproduction of one good is simply an expression of the underproduction of another. Disproportional development and crisis only come about by the intervention of external forces (also including political measures) that limit the freedom of the market. The hypothesis of perfect liberty (as also expressed by Adam Smith) is the condition for its functioning (Behrens 129). According to this position, unemployment during an economic downturn is mainly the result of high and wrongful taxation. As Say wrote, "the poor man is interested in defending the property of the rich," for it is the wealthy who guarantee him a "permanent income" (60).

The notion of markets functioning under the condition of perfect liberty and creating an equilibrium certainly did not appear out of nowhere. Rather, the rise of the bourgeoisie in the eighteenth century, and the French Revolution and its political consequences at the end of the eighteenth century, opened a new chapter in social history: the bourgeoisie now reached for state power and attempted to reorganize it to its needs. The formerly centralized and mercantilist governance of the crown was replaced with several economic freedoms (e.g. of guilds, liberation of farmers) and ultimately free trade, that came to define a new era of economic liberalism (See Hofmann 47). The development of this new (and now "classical") bourgeois economy went hand in hand with the industrial revolution and the changing conditions of production, the "final victory of industrial capital over trade capital" (Behrens 129).

Classical liberalism remained skeptical towards ideas of a general crisis, and (as a progressive force against aristocratic rule) was optimistic regarding the social consequences of a free play of forces. Yet, under the experience of the economic crises of the nineteenth century, numerous tendencies of social criticism emerged. Present in these theoretical accounts is a shift in focus from ideas of economic equilibrium and social harmony, to the forces of disruption, or even destruction, as well as a discussion of social inequality in the economic order of nascent industrial capitalism.

3.2. A Perilous Equilibrium: Simonde de Sismondi and Robert Malthus

The Swiss historian and national economist Jean Charles Léonard Simonde de Sismondi (1773-1842) was among the first to challenge Ricardo's and Say's theoretical considerations. The experience of crises of overproduction in his time led Sismondi to renounce classical theory and to eventually reject the liberal system as a whole (Mattick 23). In Sismondi's view it is precisely the free play of interests (or competition) that, instead of resulting in an equilibrium and general welfare, opens the way to "the misery of overproduction" (Mattick 23). Sismondi shed the rigid idea of a reciprocal agreement of supply and demand in favor of a concept of a (national) economic circulation of goods and services determined by capital turnover. In this model, possible disruptions of an equilibrium become evident:

By a circular concatenation, in which every effect becomes a cause in its turn, production gives revenue, revenue furnishes and regulates a consumable fund, which fund again causes production and measures it. [...] But whenever the proportion among them is broken, the state decays. A derangement of the mutual proportion subsisting among production, revenue, and consumption, becomes equally prejudicial to the nation, whether the production give a revenue smaller

than usual, in which case a part of the capital must pass to the fund of consumption; or whether, on the contrary, this consumption diminishes, and no longer call for a fresh production. To cause distress in the state, it is enough that the equilibrium is broken. (Simonde de Sismondi 26–27)

Sismondi's view that production and sale of goods are two distinct processes that can run (dangerously) independent of each other, provided for a perspective that challenges the concept of "neutral money" integral to the classical dogma of Say and Ricardo (Hofmann 61). Consequently, Sismondi's focus was on the precarious and uncertain nature of the stability of markets. This suggests the possibility of a general crisis and forwards an understanding of crises (as the result of a variety of disproportions) as an inherent part of the bourgeois economy. However, as multiple scholars have pointed out, Sismondi himself was not coherent about whether crises come about in the "natural course of capitalist development" or are the result of external events (see i.e. Brangsch 55).

Sismondi, together with the English clergyman and political economist Thomas Robert Malthus (1755-1834), are commonly thought of as the founders of the theory of underconsumption of economic crises. Underconsumption identifies a contradiction in capitalist production. If industrial capitalists meet competition by expanding their production without limits, at the same time, the pressure of competition prompts producers to drive their costs down as far as possible. Hence, among other measures, producers will be prone to pay the lowest possible wages to their workers, who are simultaneously the consumers. Both Sismondi and Malthus explained crises as a result of underconsumption, as production and consumption grow disproportionately. In other words, a general crisis of overproduction was seen as the inability of the workers to "buy back" the full product they produce. In this account, crises both cause social distress and inequality, and are the result of a contradiction in capitalist production that cannot solve itself.

To address the tendency of crises to produce social misery, Sismondi (innovatively for his time) redefined the role of the state that saw "the primary object of political economy" as "the development of national wealth" (94). As opposed to the laissez-faire of classical liberalism, the government should not provide for a maximum of freedoms in order not to disturb an expected equilibrium. Rather, in the interest of correcting the tendency of markets to produce disproportionalities, the state should intervene as a regulatory force, for the good of its people. If this concept of the patriarchal state has made Sismondi into the grandfather of the modern welfare state, or a precursor of Keynesian fiscal policy of the twentieth century, Sismondi had a more modest concept in mind. As Hoffman expresses, Sismondi perceived government spending "from the standpoint of a solid housefather" (56). Sismondi, who identified good housekeeping as "the most essential quality which a nation can ask in its government," put it as follows (105):

A government which borrows, after having dissipated its capital, makes posterity a perpetual debtor in the clearest part of the profit arising from its work. An overwhelming burden is cast upon it, to bow down one generation after another.

(108)

Malthus, agreeing with Sismondi on the origins of crises, drew quite different conclusions. While Malthus expressed his concern for the consequences of "economic distress" for the "laboring classes" during times of growing poverty, he defined it as a "malaise" that is both natural and "irremediable". Importantly, Malthus's attempt to create a general theory of economic irregularity, gives crisis an objective quality.

Per Chalozin-Dovrat, who cites Malthus as an example of an increasing "scientific" abstraction in her diachronic analysis of crisis, Malthus' idea of an objective necessity of crisis "had depoliticized the role of particular policies and specific actions" (82). Rosa Luxemburg has famously qualified the fundamental difference between Sismondi's and Malthus' views as follows:

Sismondi is critical of capitalist production, he attacks it sharply, even denounces it, while Malthus stands for the defense. This does not mean that he denies its inherent contradictions, as Say or MacCulloch had done. On the contrary he raises them quite unmercifully to the status of a natural law and asserts their absolute sanctity. (Luxemburg 220)

Notably, more than a mere judgment of character, what is articulated in this difference is also the difference between the methodology and interests of the increasingly specialized and rationalistic economic sciences on one hand and political economy on the other hand. In other words, the difference between Malthus and his predecessors designates an emerging change from the former bourgeois political economy of the nineteenth century, concerned with larger social, political and historical-philosophical questions, to what would become neutral or "pure economic" theory of the economic sciences (operating with graphs, statistics and scientific abstraction).

3.3. Marx's Radical Critique of the Bourgeois Political Economy

One of the vital theoretical inspirations for the work of Karl Marx and Friedrich Engels was the work of French clergyman Charles Fourier (1772-1837), who combined his critique of the economy with a critique of civilization. Fourier attacked Sismondi's concept of underconsumption on the basis that the central problem was not this single issue within a circular economy, but the essential falseness of circulation as such. According to Fourier it is the incomplete nature of economic circulation that leads to disproportionate distribution of wealth, to the effect that "poverty is the result of affluence" (qtd. in Brangsch 57). By condemning the economic order and the social conditions it produces, Fourier distanced himself from political economists that saw social harmony and free markets in a constitutive relationship and from authors like Sismondi, who suggested ways of correcting the course of a sometimes imperfect capitalist economy to ensure it would also produce the social good. Fourier was also an early observer of a change in the economic discipline of his time. Through the experience of economic crises, the economic sciences came to define their own role as a passive and neutral "observer" of economic processes (see Brangsch 58).

Marx's critique of the bourgeois political economy aimed in a similar direction. In many regards his critique of Ricardo and Say is telling in that it illustrates the intimate relationship between Marx's theory of crisis and his socially critical theories (Brangsch 53). Economic crises, that from the perspective of Ricardo are merely coincidences, are in Marx's concept both inevitable and organically linked to the fundamental dynamics of the bourgeois society. The redistribution between labor and capital is closely related to the movements of fixed capital, i.e. the social reproduction of the material conditions for the process of capitalist reproduction itself. This idea builds on Marx's theory of value. While this is not the place to fully reconstruct the theory, it is sufficient to say that Marx's concept of crisis cannot be explained out of one single element of his theoretical system (e.g. his economic analysis, see Brangsch 53). The critique of crisis and critique of the social conditions coincide. For Marx, economic crises are the expression of all the contradictions of the bourgeois economy.

According to Marx, crises "must be regarded as the real concentration and forcible adjustment of all the contradictions of the bourgeois economy" (qtd in Mattick 73). In Marx's perspective, crises are both disruptive and vital for capitalist reproduction. In contrast to Fourier (who proposed a utopian counter-model to the capitalist reality he critiqued), Marx and Engels conceptualized overcoming the historical and social misery that they see in capitalism, out of the contradicting dynamics of the bourgeois economy itself. As stated in the often-cited passage of the Communist Manifesto:

It is enough to mention the commercial crises that by their periodical return put the existence of the entire bourgeois society on its trial, each time more threateningly. In these crises, a great part not only of the existing products, but also of the previously created productive forces, are periodically destroyed.[...] The productive forces at the disposal of society no longer tend to further the development of the conditions of bourgeois property; on the contrary, they have become too powerful for these conditions, by which they are fettered, and so soon as they overcome these fetters, they bring disorder into the whole of bourgeois society, endanger the existence of bourgeois property. The conditions of bourgeois society are too narrow to comprise the wealth created by them. And how does the bourgeoisie get

over these crises? On the one hand by enforced destruction of a mass of productive forces; on the other, by the conquest of new markets, and by the more thorough exploitation of the old ones. That is to say, by paving the way for more extensive and more destructive crises, and by diminishing the means whereby crises are prevented. The weapons with which the bourgeoisie felled feudalism to the ground are now turned against the bourgeoisie itself. But not only has the bourgeoisie forged the weapons that bring death to itself; it has also called into existence the men who are to wield those weapons — the modern working class — the proletarians. (Marx and Engels 103–06)

What Marx describes in this passage is the inherent nature of crises in capitalist production, their increasing destructiveness and reach, and the temporal displacement of their consequences by capitalistic expansion. Importantly, he recognizes the way crises increasingly put "the entire bourgeois society on trial." Simply put, commercial crises, in Marx's account, increase pressure on social divides—they have a class character. Considering this argument from Marx's perspective, it is in the interest of the proletariat to not look for a solution to crisis that is inherent to the system (i.e. government regulation, or social redistribution), but to get rid of class relations, consequently transcending the system. According to Marxist traditions, crises, and the contradictions they articulate, point to the final telos of capitalism. Discussion of the debate within Marxism (and later in Leninist and Stalinist conceptions of crisis) addresses whether or not capitalism would automatically produce its own downfall (see Brangsch 63–68).

In the years leading to mid-nineteenth century, the fundamental positions in theorizing economic crises were established: first, the classical liberalist school of economy (Say and Ricardo) sees crises as exceptions, not linked to a capitalist economy itself, but the result of external disturbances and interventions. Second, the lineage from Sismondi to Malthus explains crises from underconsumption and begins to put forward an understanding of economic crises as an inherent part of capitalist accumulation. Third, the development from Fourier to Marx assumes crisis as both endogenous and fundamental to the regime of accumulation. All three perspectives establish a different understanding of economic development and doctrines that entail different ideas of critique. These fundamental positions started to differentiate further after the midnineteenth century, were revigorated at the beginning of the twentieth century, and continue to provide the basis for the fundamental divisions in economic paradigms today.

3.4. Into the Twentieth Century: From a Market Equilibrium to Keynes and Back

Say's theorem of a market equilibrium found its way with the proponents of the Marginalist school in the 1870s (Carl Menger 1840-1921, Leon Wallras 1834-1910), through the neo-classical school at the turn to the twentieth century (Alfred Marshall 1842-1924), to Milton Friedman (1912-2006) and the schools of neo-liberal economics. The postulate of an inherent equilibrium in economic development is also the anchor point of the mathematical turn of economics around 1900.

A separate effort develops, under the increasing impression of the cyclical nature of economic development, drawing from the work of the French anatomist-turnedeconomist, Clemens Jugulars (1819-1905). The publication of his book in 1862 marks the "shift from the emphasis on crisis to that of a cycle" (Frobert and Hamouda 174), acknowledging at once the inevitability of economic crises and their normalization. Innovative to Jugulars' approach was the use of empirical analysis, that built the "descriptive" counterpart to Marx's abstract and "theoretical" account of a cyclical development (see Hofmann 93). Indeed, as the empiric pressure on economic theory increased, the term "crisis" no longer fit the demands of an economic science. Rather, as Chalozin-Dovrat expresses, "[b]y the first decades of the twentieth century, economic theory had gradually abandoned the discourse about crisis and replaced it with the more attractive theory of business-cycles" (85).

Joseph Alois Schumpeter (1883-1950) built on Jugulars' work and completed this shift from crisis to cycle in 1912. Schumpeter reintroduced the idea of "economic development" (rather than a static equilibrium) into economic thought. According to Schumpeter, economic development is fundamentally cyclical. As moments of transition, the "creative destruction" of crises mark the moments where older structures of economic organization are replaced by new innovations (see Hofmann 105). With this concept Schumpeter engaged with an argument already central to Marx: the productive, dialectical nature of crises. Schumpeter, in his later work, called this "the essential fact about capitalism":

The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. [...] The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation [...] that incessantly revolutionizes the economic structure from within, incessantly

destroying the old one, incessantly creating a new one. (Schumpeter, *Capitalism, Socialism and Democracy* 82–83)

The view according to which periodical crises are the result of innovation and an integral part of an organic development of economies, later leads to an adaptation of "Schumpeter's gale," as a kind of remorseless description of capitalistic progress. The destruction and hardship of crises in the short run is justified in its neo-classic interpretation as a beneficial self-correction of markets. This correction is best left undisturbed, since it promises a future improvement of not just the economy but the welfare of societies as a whole. The limitations of this take on Schumpeter, and my own expansion of the notion of creative destruction to include cultural and ideological change in times of crisis, will be discussed in the last chapter.

While the periodical (and inevitable) nature of economic downturns were more and more recognized, theories started developing that concerned the possibility of regulation and control of economic activities. Swedish economist Knut Wicksel (1851-1926) researched the influence of credit and interest rates on economic development at the turn of the century. Central to his work was the idea that crises arise out of a disproportion in production, i.e. a lack of borrowed capital (a credit shortage) on the part of producers (see Hofmann 133–45). Wicksel established the idea of fiscal policy (via regulation of banks and interest rates) as an omnipotent instrument to influence economic development at large. Considering the rising importance of credit and financial capital in the course of the twentieth century, Wicksel's views had a profound influence on many economists. It allowed the Marginalist school to reintegrate the otherwise neglected theory of economic development into their subjectivist theory (Hofmann 142). Namely, Carl Menger

correlated low interest rates in the credit system as the source of artificial expansion of production (the boom and bubble) and its necessary downturn (the bust). Later Austrian economist Friederich Alfred von Hayek (1899-1992) further developed Menger's theory of "monetary overinvestment" and the possibility of a prevention of crisis in order to maintain the assumed inherent equilibrium of the economy (Brangsch 60).

Apart from Schumpeter, economic thought on crisis at the beginning of the twentieth century was largely dominated by the idea of external disturbances, in which the increasing role of the state and large conglomerates was a main interest of research. The world economic crisis of 1929 and the following recession of the thirties became the motor for new ideas. In 1930, Alfred Weber maintained that large economic crises were a thing of the past, and that the future would at worst hold moderate up and down swings of economic development (Brangsch 60). By 1936 John Maynard Keynes (1882-1946) accepted what would become a leading position, asserting that economic crises were inherent parts of economic activity. As the market was suddenly no longer seen as automatically returning to a state of equilibrium, research regarding the potential of regulating markets (and preventing crises altogether) flourished in the decades to follow.

Early in his career as an economist, Keynes rejected the idea of a self-regulating, efficient free market and pronounced "The End of Laissez-Faire" in 1926 in an essay by the same title. Not only did he doubt that "private and social interests" would "coincide" in decentralized markets (qtd. in White 16), but he challenged the adequacy of the free market to produce sustainable economic growth. With the experience of the World Economic Crisis, in his *General Theory of Employment, Interest and Money* (1936) Keynes further emphasized this view and argued for "an enlightened government" to take

more control over the economy, while opposing the "complete state planning" of Russian Communism (see White 16–17). While Keynes established his theories based on a reading of and a partial agreement with Marx and neo-classical theories, Hayek represented the developing school of neo-liberalism, heavily influenced by classical liberal thinkers like Smith and Say—in stark and outspoken opposition to Marxist or socialist economic theories (see e.g. *The Road to Serfdom*, 1944). If Keynes became the leading (and for most of the twentieth century, dominant) advocate for more government control over the economy, Hayek came to represent the view that government should interfere less with market forces.

In Germany, the opposing views on the role of government prompted the neoliberal variation of Ordo-liberalism (ordo, for "ordered" liberalism) of the so-called Freiburg school after 1920. This school of thinkers around Walter Eucken (1851-1950) and Franz Böhm (1895-1977) also postulated a fundamental market equilibrium as the result of free competition. However, according to the Ordo-liberalists, equilibrium is no longer regarded as automatically or naturally occurring. Rather, accounting for disturbances of competition, Ordo-liberalism is concerned with the regulation of markets, to create and guarantee the right conditions for free competition so that such an equilibrium can occur. After the second world war, this thinking resulted in the German "third way," the social market economy under chancellor Konrad Adenauer, heavily influenced by the Cologne School and the concepts of Alfred Müller-Armack (1901-1978). Social market economy relates the principle of freedom of markets with social redistribution (see White 231–45 on "The Postwar German 'Wonder Economy' and Ordoliberalism"). The idea of imperfect markets, necessary state regulation, and social redistribution increasingly lost their persuasive power, due in part to the economic crises of the 1970s, the oil crisis, the collapse of the Breton-Woods System, and the recession that followed in most of the Western world putting an end to the post-war boom, and later, the fall of the UDSSR, and the dramatic changes in socio-political structures that followed. This manifested in 1982 with the consecutive rise to power of Margaret Thatcher in England, Ronald Reagan in the USA, und Helmut Kohl in Germany. It marked the return of the apriori efficient and self-regulating markets—the late but decisive triumph of Hayek and neo-liberalism over Keynes over Keynesianism.

The diagnostic and disruptive quality of crises became evident during the nineteenth century, accelerating during the twentieth century. Times of large financial and economic distress coincided with reassessments of the conventional wisdom in economic thought and policy. Such changes certainly happened during the two great economic crises of the twentieth century—the Great Depression of the 1930s and the Great Inflation of the 1970s and 1980s. Crises are the historical moments, when forced collective introspection leads to the replacement of apparently failed ideas by those that seem to better explain the crisis and which offer greater promise of stability in the future.

Whether the Global Financial Crisis is resulting in a paradigm shift of the same magnitude might still be historically too soon to tell, but there are signs of distress in the economic order and in the economic disciplines, and calls for a reassessment of preestablished, habitual modes of thought. What becomes clear is that in the absence of radical new alternatives, the fundamental divides of the nineteenth century—between the equilibrium of rational markets and crisis ridden imperfect markets, between a view of crises as external to economic activity and a view that identifies crises as inherent to economic development, between states as a perpetrator and as indispensable control mechanisms—have become even more pronounced and divisive in the economic models and political debates on economic crises in this century.

If I have established the fundamental theoretical assumptions governing the socioeconomic discourse on crisis, the goal cannot be to validate or devaluate one or the other view, to embrace one or the other economic paradigm. In order to establish the place of aesthetic and cultural production in this discourse it becomes necessary to take a theoretical position that a) accounts for the contradictions at work in describing, narrating and engaging with the crisis at hand, b) accounts for the discursive practices themselves and their hegemonic mechanisms of inclusion and exclusion, and most decidedly c) that reaches beyond an economically reductionist or a politically or ideologically predetermined view of what the crisis is, does and means. To this end, I critically examine the increasingly reductionist and limited scope of mainstream economics, in preparation for making the case for the more holistic theoretical approach of a Cultural Political Economy that I now turn to.

4. Towards a Cultural Political Economy of Aesthetic-Cultural Production

Present-day economics and dominant economic paradigms are the result of an increasing specialization and narrowing of the economic subject. At the same time, it is noteworthy how much contemporary socio-economic discourses are guided by

theoretical assumptions that in some cases (e.g. Say's Theorem) reach 200 years into the past. If crises have historically opened the doors for new theories, today this seems to signify the reintroduction of a fundamental clash of older ideas: that is, of recently forgotten Keynesian concepts and social market theories with continuously dominant neoliberal theories, with Marxist, or radical anti-capitalistic commentary on the sidelines. The postulated fundamental openness of a crisis is appeased with interpretatory rituals in politics, media and academia. The discursive situation lies in between the process of an objectification of crisis, as an unavoidable natural fact that can be described scientifically and addressed with conventional policy measures on one hand, and the epistemological disruption of a crisis on the other, that allows for the first time since the 1980s for a return of alternative conceptions in mainstream economic discourse.

However, I submit that already the neo-classical turn in the early twentieth century and the neo-liberal turn in the last quarter of the century, just like the current return of older paradigms, has been crucially incomplete. If the dispute as to whether crises are produced by non-economic factors or external events is still alive, it is remarkable how little attention is paid to the role that so-called non- or extra-economic factors play in the process of understanding, managing and working through a crisis (other than shifting and applying blame to those factors). More fundamentally, the naturalness of this very separation of the economic and the non-economic is revealing. As discussed above, not only Marx, but many of the so called "classic" economists, like Smith, Ricardo or Sismondi did not see economy as a practice isolated from other human activities. Instead, these scholars were concerned (in varying ways) with the reciprocal effects of economic, political, social and even cultural forces. If today the term "political economy" is tentatively seen as only a technocratic extension of economics, or the efficient translation of the findings of a scientific discipline into policy, it certainly came a long way since the nineteenth century. When earlier political economy claimed independence from other nascent social sciences as economics (short for economic sciences), the discipline did more than shed a name. By the same token, if economics came to disfavor the term crisis for the more neutral business cycle, it did more than change terminology. Rather this language served to further disconnect economic thought from the multidimensional quality of economic phenomena and has narrowed an understanding of economic crises for which the disruption of business is only one aspect.

Considering the genealogy of economic crisis theories, what Chalozin-Dovrat observed holds true: the increasing abstraction of crisis, in the guise of scientific objectification of change, led to a disenfranchisement of the public. The current series of crises of an ever-growing geographical and quantitative magnitude have profound effects not only on abstract economic ideas but on individual lives, societies and cultures all around the globe. However, more than ever these effects are experienced as a force of fate. Akin to a natural disaster, the destructive forces seem far removed from individual social, or cultural agency. Once more we move between Koselleck's taxonomy of history as a "perpetual crisis," crisis as an "iterative period," and crisis as a "final crisis of all history" ("Einige Fragen" 207–08), while the now-secularized meaning of crisis asserts itself as destiny, fate and higher power.

To go beyond the predominant sense of powerlessness towards economic forces, and to come to terms with the current crisis, past the ritualized economic disagreement between Neoliberals, Keynesians and Marxists, requires returning to and reconsidering a more inclusive notion of political economy. Keeping in mind the context of the historical narrowing of political economy as economic sciences also assists in making the case for a Cultural Political Economy (CPE). Turning to CPE requires discussing its central assumptions in reference to the limitations of both classical political economy and contemporary economic mainstream. I make the case for how the inclusion of culture as an analytical dimension is both meaningful and necessary in approaching contemporary global economic developments. Furthermore, I interrogate the applicability of CPE to an analysis of crisis and introduce Bob Jessop's central notions of imaginary recoveries and economic imaginaries. Understanding the ideological struggles over meaning of economic processes in wake of the Global Financial Crisis as the competition of multiple conflicting interpretations of the economy, allows for a better understanding over the constitutive role of semiotic and cultural processes in coming to term with the crisis. Finally, I posit an initial reflection on the use of CPE in analyzing artistic and fictional forms of cultural production. In preparing a discussion of the functions of cultural production, I point to the distinct semantic properties of art in coming to terms with the crisis and present a number of guiding assumptions to recognize what I call aesthetic-cultural production.

4.1. What is Cultural Political Economy (CPE)?

Acknowledging the narrowing of economic theory and the resurgence of political economy since the 1980s, CPE tries to account for what traditional modes of politicaleconomic analysis miss: the cultural dimension. Growing out of International Political Economy, this post-disciplinary school of thought takes inspirations from the cultural economy literature in anthropology and geography.

Centralizing "culture" in political economy is an attempt to place the theories of a potentially reductionist logic of a capitalist economy in its wider socio-cultural and political context, as described by Sum and Jessop in their book *Towards a Cultural Political Economy* from 2013, and by Best and Paterson in their essay on "Understanding Cultural Political Economy" from 2010. The goal of such a project is to provide tools and concepts to understand the complex social, political and cultural relations and the semiotic processes in which an economic system is embedded. As opposed to strictly rationalistic economic theories, semiosis as process of "sense- and meaning making" (Sum and Jessop viii) is posited as the crucial link between that that appears conventionally to be purely economic, solely political and merely cultural. As I discuss below, this concept also creates the necessary link between what can be seen as exclusively socio-economic (an economic crisis) and what is simply artistic (the engagement with such a crisis in artistic media).

Yet, more than responding the historical specialization of economics, there is an essential cultural dimension to recent developments in the global economy, that tends to be overlooked and that cannot be captured with the more narrow categories provided by either mainstream economics (predicated on rational and self-interest-models), or conventional (e.g. Marxist) political economy. As Best and Paterson submit, these important changes concern the shifts to consumption in economic development (in shaping growth and legitimation of current economies), to financialization (the increasing

permeation and rise of finance and financial markets in the global economy) and neoliberalism (as a predominant socio-political paradigm since the 70s):

These shifts cannot be reduced to the 'rational pursuit of self-interest' given that their complex cultural underpinnings reveal that what counts as 'self-interest' and 'rationality' are themselves being constantly redefined. Although the language of class might be invoked to understand the political strategies of neoliberal politicians, such an analytic approach quickly reaches its limits in understanding these phenomena. A focus on institutions, as common in institutionalist economics and rationalist political economy, might be able to describe these as processes of institutional change but would struggle to get to grips with the power of the intangibles entailed in the desires that produced, for example, the fragmentation of consumer markets. Political economy, as conventionally understood, whether in neoclassical, public choice, institutionalist, statist, or Marxist terms, thus fails to fully explain its object because it abstracts political economy from its cultural constitution. (Best and Paterson 1–2)

This critique of conventional approaches to political economy presents a strong case for the inclusion of culture in any analytic approach to economic phenomena, not simply to enrich (or unnecessarily complicate) economic analysis, but to address the limitations and blind spots of economic theory. Such a revitalization of political economy is even more in order, as the limitations turned out to be inadequacies, and as the shifts to consumerism, financialization and neo-liberalism are intimately linked with the Global Financial Crisis and the ensuing crisis of economics. One of the hallmarks of CPE is the exploration of the "embedded" quality of economic activities, of "how they are set within social relations and cultural contexts that make difference to those economic processes" (Sayer 697). For CPE, the "disembedding of markets" (Karl Polanyi) from social norms that took place with the arrival of the concept of a self-regulating market, did not detach markets from culture, but rather reconstituted the "content of the culture" (Best and Paterson 3). Even underneath the "spectacle of global finance," lies a set of daily practices of borrowers and savers and a reshaping of individuals as "investing subjects" (1). This corresponds to the aforementioned rhetorical separation of the cultural and economic parts of social life that are crucial for the establishment of an idea of a free-market economy, that has (even with the victory march of neoliberalism in the past 40 years) in fact never realized "its utopia of a culture-free economy" (3).

While culture plays an important role in both the contemporary and historical evolution of political-economic practices, "culture" does not take a fixed definition in CPE: "It is as much about the 'low' culture of workplace norms and consumer desires as it is about the 'high' culture of great art and philosophy" (Best and Paterson 10). Rather than establishing a rigid definition of culture, CPE is concerned with that what culture does. Following Marx's basic insight, cultural processes have a "constitutive role" as they work to produce the basic actors and objects in the economy and to define their relationships with one another, without following Marx's deterministic class categories (14). Second, culture also plays a "contingent role", intersecting with other social, economic and political processes to help to determine a particular economic outcome (12).

However, many of the cultural dimensions of economic activities and the fundamental transformations of the past four decades have only gradually become part of a cultural embedding that supports the economic order and, in doing so, also became increasingly invisible. In the terminology of David Harvey, neo-liberalism has steadily become "naturalized" (Harvey 24). That is to say, the fundamental concepts of neo-liberalism have "become so deeply embedded in commonsense understandings that they are taken for granted and beyond question" (24).⁹ Accordingly, as Best and Paterson point out, we might not "recognize" the cultural constitution of basic economic activities because they are "internalized as habits" (19). Yet, because economic cultures are both "plural" and "dynamic" they are well worthy of our critical attention:

We may no longer be experiencing the kind of dramatic cultural change that accompanied the invention of the modern market economy, but transformations are nonetheless still ongoing (Best and Paterson 15).

In sum, CPE's inclusion of culture in a political economy reconsiders culture and politics as part of economic phenomena, in responding to the increasing specialization of economic theory in its intellectual history since the 19th century. As such, CPE is also an attempt to "revitalize" a certain strain of political economic thought and to account for the "detour taken from 1890 onwards" (Best and Paterson 3). This diversion from political economy concerns the development towards a "pure" economic theory, concerning the subjectivist turn in economic sciences at the end of the nineteenth century, that came increasingly to rely on abstract mathematical and hyper-rationalist macro-economic

⁹ For Harvey's historical account on how neo-liberalism and its variants has established itself as "a hegemonic discourse with pervasive effects on ways of thought and political economic practices to the point where it is now part of the commonsense way we interpret, live in, and understand the world" (1), see his insightful essay on "Neoliberalism as Creative Destruction."

models that dominate the economic sciences and economic textbooks today. Hence, culture as an analytical category linked through semiosis, suggests addressing a loss in the explicatory power of both classical political economy, and mainstream neo-classical economics.

On its flipside and in reference to the Global Financial Crisis, CPE offers muchneeded and exciting new critical perspectives, going beyond the ideological stalemate of dominant crisis interpretations. That is, if the Global Financial Crisis lifted some of the naturalness and transparency of neo-liberal assumptions, a CPE approach to crisis promises more than a mere technical reconstruction of the events since 2007/2008. Rather, while the multiple productivities of crisis allow a better understanding of the role culture plays in this construction and in working through a crisis, in centralizing culture we can come to terms with the fundamental constructedness of the thing we habitually call the economy.

4.2. What is a CPE of Crisis?

For CPE the analysis of crises is especially fruitful to study the intersections of economy, politics and culture, as crises themselves show multiple and intersecting dimensions of productivity. First, a crisis has an "economic" productivity described from Marx to Schumpeter that can be read as "creative destruction," referring to the (at times, violent) purging of the market of inefficiencies and making room for new technologies and practices. Second, a crisis has a political productivity, concerning the opening of new political ideas and policies. Third, a crisis has an epistemological/diagnostic productivity: an opening of eyes and ears to things not seen and heard before. While the initial

dominant economic and political reactions to a crisis tend to be predictable, repetitive and symptom-driven, crisis can also be a litmus test to renegotiate the relationship between a society and an economy, a redistribution of power in a political economy, and an unsettling of the naturalized dominant economic patterns of interaction and their underlying convictions.

The "dynamic transformations of economic cultures", as described by Best and Paterson, are also dramatically accelerated in times of economic crisis. This especially concerns the diagnostic and disruptive notion of crises. Crises, as CPE founder Bob Jessop puts it, are "interesting":

[...] they often produce profound cognitive, strategic, and practical disorientation by disrupting actors' sedimented views of the world. They disturb prevailing metanarratives, theoretical frameworks, policy paradigms, and/or everyday life and open the space for proliferation (variation) in crisis interpretations, only some of which will be selected as the basis for 'imagined recoveries' that get translated into economic strategies and policies – and, of these, only some will prove effective and are retained. ("Recovered Imaginaries" 137)

As a result of this proliferation in possible interpretations, a CPE approach to economic crisis is able to examine how individual and collective responses to crisis are shaped by the ensuing contestation and struggle over the meaning of crisis and, by extension, the economy. The breaking of sedimented views Jessop describes, however, does not only provoke room for new and competing interpretations but also creates awareness and disorientation outside of strictly economic issues.

If anything, the most recent history and series of crises brought a broader consciousness about the increasingly intangible and immaterial nature of finance and an accompanying sense of individual and democratic disenfranchisement that e.g. Chalozin-Dovrat articulates. More than a mere property of abstract and scientific modern-crisis discourse, these changes indicate "material" shifts from national to transnational economies (Ohmae), from material to immaterial labor, and from industrial capital to financial capital (Foster and Magdoff), all of which have significantly troubled and complicated the world we live in.¹⁰ As a result, the lack of overview and orientation in the economic order provoked a profound social and cultural unsettling. This crisis in the prevailing economic and cultural order has become broadly visible in the aftermath of the most recent crisis, along with the epistemological difficulties (acknowledged or not) it has come to pose for economists, policy makers and a general public alike.

In public and political-economic discourse, the epistemological dimension of the Global Financial Crisis reveals itself as a crisis of representation. More precisely, it is a crisis of "Repräsentation" in the German sense of the word, referring to both aesthetic and political representation, a notion that Venkat B. Mani points out in his study of Cosmopolitanism and Turkish-German literature (29). In other words, the crisis makes difficult to depict ("darstellen") and to represent politically ("vertreten"), i.e. both the capability to adequately render intelligible and to politically account for the economic order

¹⁰ Kenichi Ohmae describes *The End of the Nation State* (1996) as a conflict between a traditional way of both understanding and governing economies in terms of the national and a new regional and potentially "borderless economy" that renders the nation insignificant (12). Similarly, Foster and Magdoff account for a shift of the gravity of economic activity from the more concrete realm of production to the more abstract world of global finance. What the authors subsequently label "the financialization of capitalism" resulted in a relative independency of capital and a "more uncontrollable system" on both a national and international level (77-88).

have been destabilized. As a result, crisis discourse is troubled by that what lies between the event and the term.

Regarding the broader destabilization and the representative difficulties during crises, Bob Jessop writes that "crises offer a real-time laboratory to study the dialectic of semiosis and materiality" (11). Crises allow observation of the shaping of what he calls "imagined recoveries," involving "processes of variation, selection and retention," mediated through a complex mix of semiotic and extra-semiotic variations. The notion of "imagined recovery" refers to the fact that recovery scenarios (i.e. the promise of change in strategies and policies) follow one from the selection of discourses, one narrative or one (social) imaginary from among competing alternatives.

The central notion of "imaginary" refers to the semiotic system that gives meaning to and shapes our understanding of what we habitually call the economy. An imaginary refers to a particular aspect of social reality:

An imaginary is a semiotic ensemble (without tightly defined boundaries) that frames individual subjects' lived experience of an inordinately complex world and/or guides collective calculation about that world (Jessop 4).

In Jessop's account, in times of crisis, various existing, new and recovered/re-politicized imaginaries compete to simplify and structure the complexities of crisis, and ultimately, to inform "private and public strategic and policy initiatives to manage the crisis and/or move beyond it through imagined recoveries" (Jessop 7). Meanwhile, semiosis figures as an important moment of "complexity reduction" (3) and hence as an attempt to address the problem of representation. Important to recognize are the moments of public distress and panic, as captured by multiple and contradictory forces. Per Jessop, in the discourse on

crisis, "power matters" (13). The multiple and competing imaginations that are activated in moments of crisis all seek to transform or preserve the dominant economic imaginary.

This description of the competition of imagined recoveries with the potential of a transformation of dominant imaginaries becomes vivid when considering how severe economic crises are traditionally periods in which history is "made." For example, the World Economic Crisis of the 1930s allowed for various ideologies to blossom and ultimately led to the seizure of power by the Nazis in Germany; the oil shock in the 70s led to rewriting of the global economic order. Similarly, if the contemporary context of the Global Financial Crisis has not initially let to a fundamental challenging of the neo-liberal imaginary, strict neo-liberal policies have certainly begun to crumble and insisting on them has started to shake the global order. The Global Financial Crisis has reactivated the struggle between the global North and South and prompted a global resurgence of nationalist imaginaries and protectionist policies in opposition to free trade and liberalism. In extension, the Eurozone-Crisis prompted both vivid reaffirmation of the European project and an increasing return of nationalistic voices longing for lost national sovereignty over more than economic affairs.

In sum, CPE offers a framework to understand the constitutive and contingent role of cultural processes for a seemingly independent economy or remote global financial sphere. Part of the critical purchasing power of this approach is the willingness to engage with economic issues outside of the increasingly rationalistic and specialized discipline of economics, and look at semiosis, and at the production of meaning, as a crucial link between what appear to be objective and purely economic facts and what are seen as merely political opinions or cultural artifacts. Especially in the processes of working through a crisis and shaping imagined recoveries, we can appreciate how alongside and in concert with political and economic discourse and policies, cultural production of meaning plays an important role.

However, in pushing CPE's generalist notion of culture further, I suggest that it is worthwhile to study how explicitly fictional semiotic production engages in this matter. An examination of the cultural production of artworks will prove central to understanding the larger epistemological crisis that came with the unfolding Global Financial Crisis since 2007/2008.

4.3. CPE and the Ambitions of Aesthetic-Cultural Production

In the following chapters I discuss aspects and concrete examples of cultural production for which I have established the necessary terminology relevant for the analyses to follow. This, for example, concerns the intersections of socio-economic and artistic discourse in determining the underlying concepts of crisis and their intellectual-historical genesis of a given cultural artifact. But more importantly, with my analysis of examples I establish the different aesthetic modes of engaging with crisis and clarify the stakes of cultural production within larger social "imaginaries of reconstruction" (Jessop 7). In line with the fundamental interest of CPE in what culture does, I propose to extend that inquiry in asking: What can a novel, a film or a videogame do? What does aesthetic production know about the paradoxical creative and destructive power of crisis and what is aesthetic production blind towards? What are the explanatory or blurring, preserving or transformative, functions of aesthetic production with regard to the promise of change?

What is possible in aesthetic production that is not viable to do in political or economic discourse—and the other way around?

In approaching these questions, I extend the analysis of culture in CPE to what I call aesthetic-cultural production. While CPE is concerned with a broader concept of culture to understand the often-hidden semiotic processes underneath the seemingly distant, and purely rational working of financialized capitalism, I propose considering a more specific idea of culture, i.e. the communicative, discursive and imaginative work of novels, films and video games. This concerns the fine-grained sensorial capacity of artistic media in registering the radical openness of crisis, that I established as the epistemological impasse of crises. I suggest that aesthetic production has a particular set of semantic possibilities and strategies to account for both the semiotic and extra-semiotic properties of crisis, and the normative, rhetorical and paradoxical qualities of the discourse on crisis. This also concerns the media-specific aesthetic potential of a novel to narrate, of film to depict, and of video games to simulate crisis. But more than the analytical and representative function of cultural production, the following three chapters will also establish to what degree cultural production can develop an ambition to contest and intervene in the process of variation, selection and retention.

I preface my subsequent analyses with a number of assumptions that inform my understanding of cultural-aesthetic production. What follows is by no means a catalogue of final and authorial thoughts about Art with a capital A; rather these ideas are heuristic as they concern different aspects of aesthetic-cultural production that I call their communicative, their critical and their imaginative functions. I complicate and expand upon these assumptions as they inform the subsequent analyses and I complement and
revise them in the chapters that follow, discussing the imaginary of blame in Chapter II, the claims to abstraction in Chapter III and the imaginative practice of creative destruction in Chapter IV.

First, artistic expressions such as novels, film and video games are not only pastime and entertainment but bodies of reflection of societies. Aesthetic-cultural production registers social, cultural and economic changes, attributes meaning to them and (re)contextualizes them. Second, in doing so, works of art and their reception also affect such changes. Aesthetic-cultural production not only offers a repository of ideas, but also knowledge about, or alternative descriptions of reality. This production is not outside, but part of, the discourses that accompany, intersect with and co-determine larger material and semiotic changes. Third, as aesthetic-cultural production is both discursively and materially entangled in its subject matter, it is neither fully independent from nor absolutely determined by it. While a work of art emerges from, is influenced by and participates in a larger discourse about reality, it cannot be reduced to it.

Following these guiding assumptions, it is not a coincidence that times of intensive confrontation of economic phenomena in the arts also historically corresponded to phases of economic upheaval, of structural transition and change and vice versa (see e.g. Celikkol; Zimmerman; Lyons; Finel-Honigman). It is evident that the current economic crisis has brought forward a similar productive contention with the subject matter. If the dominant imagined recovery puts finance and bankers, questions of responsibility and morality at the core of its crisis narrative, a plethora of novels, theater plays, film and even video games have contributed to a (re)imagination of the power of finance and the world of banking. If financial experts, politics and media have invoked the abstract, immaterial

and unfathomably complex nature of finance to various ends, then literature, film and video games have found poignant and formally innovative ways to contest these claims. Finally, if the political assurance of the absence of alternatives to a neo-liberal, financialized world, and the proclamation of the end, or the dangers of utopia have delimited the role of social and artistic imagination, we can find practices of aestheticcultural production that exceed a narrow understanding of art or fiction as outside of politics and economics and which delineate the condition of the possibility of change. Thus, what CPE considers the "semiotic order" that an economic imaginary establishes (Jessop, "Critical Semiotic Analysis" 160), that regulates interactions (genres) and coins semiotic identities (styles), is not solely defined by or established in political disputes and policy, in specialized scientific arguments, news reporting and commentary, or a larger social discourse and its practices. Rather, aesthetic-cultural production as a site of social reflection and imagination contributes to, works to confirm or subvert, to stabilize or destabilize a given or nascent semiotic order, or even to imagine the formerly unimaginable.

Chapter II

The Imaginary of Blame - The Dominant Imagined Recovery and the Communicative Function of Cultural Production

In 2014, German Chancellor Angela Merkel spoke at the 5th Lindau Nobel Laureate Meeting on economic sciences. In her keynote address, Merkel invoked the title of one of the panels "How Useful is Economics – How is Economics Useful?" as a "leitmotiv" to discuss the relationship between politics, society and economic sciences. While she expressed her hopes and expectations to the laureates and young economists in attendance, to "build bridges" between theory and practice, she was quick to express her frustration as a politician. Her sentiments, shared by large parts of the general public, were: "Why were the economic sciences in the past several years of crisis so badly off the mark in terms of predicting or describing economic reality" (Merkel qtd in Kasper-Claridge)?

Insofar that seven years into the crisis, policy was more dependent than ever on expertise of economists, the reproach of the German Chancellor is revealing. Her disappointment marks more than a temporary crisis of confidence in those who purport to be authorities in economic matters. The widely recognized destabilization of expert economic knowledge (Colander et al.; Dale; "Why They Crashed Too") speaks to the profound disorienting effects the crisis had even on ordinary beliefs governing the "economic reality" Merkel invoked. However, the sudden difficulty in understanding and communicating about economic phenomena, and the epistemological difficulties that came along with the events since 2007/2008, do not appear to have had a lasting

impression on the dominant policy response. Policymakers seem to have remained largely optimistic towards the ways and wisdom of the past. Indeed, in closing, the German Chancellor seemed more concerned with the communication of existing knowledge, urging her audience to "speak understandably" and proposed that "even the most complicated matters can be expressed in simple language."¹¹

The difficulties in accessing, representing, or "predicting" a presumed "economic reality," and the challenge of doing so in language that is understandable and useful, are the central and interconnected concerns of this chapter. In trying to come to terms with a communicative function of aesthetic-cultural production in times of crisis, I ask the following questions: How is an economic reality rendered intelligible in different discourses? What are the difficulties and consequences of representation? And ultimately, how does the representation of crisis shape economic reality itself? To this end, I examine the representation of crisis in terms of socio-economic and aesthetic-cultural production.

In the first part of the chapter, I outline the way the Global Financial Crisis has been construed in economics, politics, and social discourse at large. In this CPE critique of post-crisis discourse, I focus on what has emerged as the dominant policy response and identify an imagined recovery that puts banks and finance at the center of crisis interpretations. In my discussion, I identify a tension between a narrative of complexity and unintelligibility in the immediate aftermath of the crisis and the emergence of a strategy of complexity reduction and appeasement in representing the crisis. I submit that

¹¹ Translated by Kaipainen "Sprechen Sie verständlich als Wissenschaftler. Auch komplizierteste Sachverhalte lassen sich in einfache Sprache fassen" (Merkel 5).

the representation of the Global Financial Crisis as a crisis *in* financial accumulation has allowed for preservation the neo-liberal episteme, and made it possible to defer the larger systemic questions. Further, I suggest that the excessive focus on the responsibility and deviance of bankers is instrumental in capturing public imagination and retaining the imagined recovery as a dominant narrative.

In the second part of the chapter, I analyze a first set of novels, novella, films and video-games, considering the dominant imaginary. I examine these examples regarding what I call the communicative function in cultural production. The communicative function concerns how cultural production takes part in the process of understanding and working through a crisis, how cultural artifacts take up- and take part in the dominant discourses. A central theoretical research question of this chapter concerns the media-specific aesthetic potential of a novel to narrate, of film to depict, and of video games to simulate crisis. This allows me to discuss how media and genre conventions affect or play into the way crisis is represented.

I put this analysis of aesthetic-cultural production in conversation with the dominant socio-economic imaginary of blame and its inability to move beyond the older episteme. I argue that a veritable cottage industry appears to have developed around the scheme of banker-novels, -plays and -films. This communication of crisis is synchronous with the dominant imaginary insofar as it eschews a systemic perspective in favor of a moral legibility of the Global Financial Crisis. However, I maintain that this particular aesthetic representations of crisis do not simply create complicity in the dominant imaginary or provide support for its semiotic order. Rather, I show, how aesthetic-cultural production complicates the larger crisis narrative. The communicative function of the examples

analyzed in this chapter self-reflexively points to the issues of representation and complexity reduction and bring a larger crisis of representation to light.

1. The Dominant Imagined Recovery

Following the epistemological credo of CPE, every attempt to talk about economic phenomena necessarily engages in process of "complexity reduction" (Jessop, "Critical Semiotic Analysis"). While this semiotic process is indispensable for any kind of meaning-making or communication about "reality," the limited, selective representations of the world that follow are not simply the result of ignorance or ideology. What laypeople, business leaders, politicians, and economic experts observe is not THE economy, but the chaotic sum of all economic activity exposed to a certain way of questioning. The results of such an inquiry are refracted through pre-existing hierarchies of knowledge, practices, beliefs, interests, and preferences that make up economic imaginaries.

While crises may reveal the limitations of prevailing imaginaries, and might provoke new recovery projects based on new or recovered imaginaries, the current revival of Minsky, Keynes and even Marx, is anything but a free and equal competition of ideas. Rather, as I illustrate in the following description of the dominant policy reaction, power matters. Crisis management, led by international institutions such as the IMF or the G8, and executed by individual nation states and the EU, had a double effect. First, it determined how we came to understand the events of the Global Financial Crisis. Second, the political efforts effectively controlled the very way the crisis has played out and has changed, or failed to change, the economic system we think, act and live in.

1.1. Crisis Narratives, Political Responses and an Imaginary of Blame

From the beginning of the first signs of the Global Financial Crisis, the crisis narratives were haunted by an account of threatening complexity. It became a trope that financial markets and their products had gotten so technically and mathematically complex, that no one could understand them fully, or explain them in plain English, much less realistically assess the aggregated risk embedded in finance for the entire economic system. In other words, as Merkel reminded us, when even the economic "experts" failed to predict and elucidate, the crisis emerged not only without warning,¹² but as an event that cannot be understood or communicated in straightforward ways.

In 2008, Peer Steinbrück, German Minister of Finance, addressed the German parliament, asking: "How do I explain something to the larger population that eludes simple explanations and colloquial meanings of words? (...) We are dealing with very complex processes, with an almost anonymous world, where numbers are coming up that escape any imaginable dimension."¹³ The fallout of these difficulties of understanding and

¹² See e.g. Richard Dale's essay from November, 2008: "The Financial Meltdown is an Academic Crisis too" that draws the following conclusion: "What we have witnessed in recent months is not only the fracturing of the world's financial system but the discrediting of an academic discipline. There are some 4000 university finance professors worldwide, thousands of finance research papers are published each year, and yet there have been few if any warnings from the academic community of the incendiary potential of global financial markets. Is it too harsh to conclude that despite the considerable academic resources that go into finance research our understanding of the behavior of financial markets is no greater than it was in 1929/33 or indeed 1720" (117)?

¹³ Translation by Kaipainen "Wie erkläre ich einer breiteren Bevölkerung etwas, was sich sehr leichten Erklärungen und umgangssprachlichen Wortprägungen entzieht? (...) Wir haben es zu tun mit sehr komplexen Vorgängen, mit einer fast anonymen Welt, wo von Zahlen die Rede ist, die sich jeder vorstellbaren Dimension entziehen" (qtd in Peter 137).

explaining, the disorienting effects of the crisis, came into view when the financial products in question turned out the be as toxic as they were sophisticated, when economic models "collapsed" together with the markets ("Why They Crashed Too").

With a simultaneous "systemic failure of academic economics" (Colander et al. 2) and an unanticipated, comprehensive economic meltdown on the horizon, governments had to act despite uncertain conditions. The public, with jobs, savings and pension funds in peril, was left with a blurred, unsettling image of distant, unpredictable forces that suddenly and dramatically determined their lifeworld. It was not a simple business cycle that had occurred, but a shock to both the material and symbolic order of the system. In the distressing first weeks, the epistemological dimension of the crisis became graspable, even inspiring historical comparisons beyond the worldwide economic crisis of the 1930s popular in the media:

For many of the Enlightenment thinkers, the great Lisbon Earthquake of 1755 shattered that idealism, and provoked an epistemological reassessment of the attribution of "goodness" to the natural order. The current crisis is similarly epistemological in that it forces us to reassess faith in our ability to reduce the complexities of the world into understandable systems, and to use algorithms based on those regularities to predict and control the future. The problem is not the complexity of economic models and financial algorithms, but the fact that they, by necessity, must imperfectly simplify a complex world. It is our Panglossian faith in them that deserves to be shattered. (Lipshaw 302)

Of course, this epistemological shock could not last, nor was there time to sit down in the Habermasian public sphere and agree on something new. Rather, as the markets kept falling and longstanding financial institutions started failing, there was pressure to take action and assign responsibility.

A prominent target for blame quickly emerged: banks. Not coincidentally, the spectacular insolvency of the Lehman Brothers on September 15, 2008 marks the definite arrival of the economic crisis in public perception, and the beginning of many crisis narratives. Yet, as the heavily mediatized sequence of events made obvious, even before and after Lehman, banks (in their various forms) played an important role as the US mortgage crisis turned into a financial crisis, into a banking crisis, into fiscal crises and into a global economic recession. Banks provided the uncertain mortgages to new homeowners, banks created and traded dubious derivative financial products based on mortgage debt, banks stumbled into insolvency, banks had to be bailed out and recapitalized by nation states, and banks were unable or unwilling to provide liquidity for the real economy. Finally, banks recovered, while nation states were facing historic deficits and the recession persisted for everyone else.

While the systemic importance of banks provided a political reason and motivated urgency for record-setting bailouts, banks were also identified as obvious suspects; needing to be held accountable for costly policy actions. The bank bailouts left their marks on political agendas, economic research questions and public opinion alike. The argument of "too big to fail" was met with the newly-unearthed rhetoric of "privatizing profits and socializing losses."¹⁴ As the political system tries to return to a normal state of

¹⁴ this notion is a liberal reproach to government bailouts dating back to the 19. century, also known as "lemon socialism" (see e.g. Shaw).

affairs (e.g. banks being denationalized at a rapid rate and efforts are underway to reregulate the financial sector) the image of banks seems enduringly damaged.

Negative sentiments regarding banks in general, and investment banks, are widespread. Even sensational court rulings against individual banks and financial professionals in past years seem to have confirmed a common suspicion and done little to appease the general audience. Scandals involving bankers, shocking inside stories from traders, confessions of CEOs, etc. continue to attract attention, making their way into headlines, political commentaries and daily cartoon strips of newspapers around the world. The negative image of Wall Street is an integral part of the dominant crisis narrative that cuts from politics to economics to society: in national politics, the role of the state vis-à-vis bank insolvencies; in supra-national politics, the regulation of shadow-banking dictates the agenda (Merkel; Harutyunyan et al.; Ghosh et al.). In the economic sciences, effort was immediately put toward understanding financial stability and disentangling the "risky" relationship between banks, states and "the" economy (Kambhu). For society at large, the Occupy Wall Street movements in banking districts around the globe might not have succeeded overall, but had a lasting influence on social discourse.

In consequence, the spatio-temporal fix administered by swift government intervention co-produced its own crisis imaginary. Yet the consequences of this representation of crisis—what makes it believable and retainable, considering an initial narrative of complexity and unintelligibility and its relationship to the larger epistemological crisis—demands further attention. In the following section, I first discuss how this crisis narrative helped to counter the initial epistemological shock, and effectively sidestepped the issues of complexity, deferred systemic problems, and ultimately avoided the underlying epistemological crisis. Second, I investigate factors that helped to select and retain this particular imaginary in allowing for a moral legibility of the Global Financial Crisis.

1.2. Representation as Complexity Reduction

Contrary to the memorable confession of Alan Greenspan in 2008, who found himself "in a state of shocked disbelief" that the efficient, self-interested and selfregulating markets failed to deliver on these very expectations (Greenspan qtd in Felsenthal), the majority of people and politicians around the globe seemed reluctant to wake up in a chaotic, willful and ungoverned economic reality. Certainly, the enthusiasm for the natural balance of markets may have been dampened and the paradigm of the rational self-representative agent in economics shaken. On the surface, a partial (or rather temporary) return of Keynesian ideas of anti-cyclical state intervention, or of Ordoliberal ideas of regulated-free markets, seems to have become possible.

However, within the dominant narrative, market imperfection has not been seriously considered as an expression of a system that might itself be faulty (as recovered Marxist imaginaries of a general crisis tendency of capitalism would suggest). In consequence, "the Financial Crisis Blame Game,"¹⁵ quickly abandoned the more radical and unsettling alternatives for identifying those presumed to have disturbed the rational markets and their natural balance. As the 2010 World Bank report on *Finance, Crisis and Growth* suggests, the "necessary and desirable," stronger regulation of finance in the

¹⁵ This is how *TIME* titled a "far-from-exhaustive list" of those potentially responsible for the crisis and great recession that followed in Dec 2009 (Fox), after publishing a more specific online poll of "25 People to Blame for the Financial Crisis" earlier the same year placing politicians alongside bankers for the questionable honor of "most blamable" ("25 People").

West and the developing world is also something to be critical of, as it will increase the price of credit and limit growth in the free market (xi–xii).

It becomes clear, as Jessop has argued, even if the Global Financial Crisis has been construed in the global North as "a crisis *of* finance-led accumulation" or, more generally, as "a crisis *of* neo-liberalism," "the neo-liberal economic imaginary remains dominant and continues to shape imagined recoveries" (Jessop, "Recovered Imaginaries" 17). Although competing imaginaries still play an important role in academic discussions and in the way ongoing crisis management is qualified by opposition politics, the dominant response managed to establish itself as without alternative. But how did we get from an epistemological shock, from a systemic crisis that challenged the dominant economic models, policies, and beliefs to a situation where "the practical response" has been a "further strengthening of the neo-liberal project" (Jessop, "Narratives of Crisis" 39)? Indeed, the way this narrative operates, how it avoids larger systemic questions, and its success in the competition of imaginaries, demand further scrutiny.

1.2.1. Complexity Reduction and Shaping of the Imaginary

The double nature of the discourse on crisis—the "destabilization" (its disruptive diagnostic quality that figures as an epistemological impasse) and its "normalization" (that treats crisis as a depoliticized, objective and quasi-natural process)¹⁶—swiftly moved from systemic shock to reinstating a new normal state of affairs. That is, the initial epistemological challenges of the crisis, the threatening complexities of the current regime of accumulation it exposed, and the limitations of dominant imaginaries and

¹⁶ See Chapter I, Crisis or the (Im)possibility of Change

policies laid bare, were absorbed by the normalizing tendency of crises. The naturalization of the crisis was realized in the expert-led crisis management by governments and supra-national institutions. The co-emerging imaginary that put finance and banks at the center of its narrative justified the political response and neutralized, or rather ignored, the epistemological threat to the system. The way this imaginary came about—the identification of parts of the economy as responsible—functioned as a first, deciding moment of complexity reduction, consisting of two steps: 1) Representation of the Global Financial Crisis as a crisis *of* financial accumulation (part of the system, not the whole), and 2) Representation of the crisis *of* financial accumulation as a crisis *in* financial accumulation (individual parts of the sub-system, not finance accumulation as such). These two steps operate with a series of exclusions that limit alternative readings.

First, as economist Richard Wolff suggests, the problem with representation already starts with the name "Financial Crisis"; arguing that "to put an adjective in front of it is an attempt to make it small, to make its impact seem restricted" (Wolff). According to Wolff, it is not a crisis produced, shaped, and controlled by Wall Street. The dominant narrative suggests a crisis that originated in and spilled over from an isolated financial sector, and its speculation with mortgage-based products, to the rest of the system. The narrow focus of this imaginary leaves out other potential critical factors and systemic complexities leading to the part of the crisis that concerned the financial industry. More than restricting causes and impact of the crisis to the financial regime of accumulation, this also contains the crisis narrative to a short history that does not warrant analysis beyond the generally accepted triggering event, the US subprime crisis.

Second, it is no coincidence that financial institutions are at the heart of a large economic crisis. After all, the importance of banks and finance for the current economic system can be seen as a logical, if not willed, consequence of a pre-crisis imaginary, that has underwritten the financialization and neo-liberal deregulation of the past four decades.¹⁷ While the Global Financial Crisis exposed the risk of these processes and prompted government interventions that seem contradictory to the neo-liberal imaginary, the epistemological cover-up consists of portraying the situation as specific rather than symptomatic, as an excess rather than a norm. Hence, the interventions are not viewed as a return to Keynesian policy; they are not addressing a systemic need but represent extraordinary measures in reaction to extraordinary circumstances. In the words of Brassett et al. "the proffered solution to the crisis pre-empts genuine analysis of its causes by enforcing the characterization of their manifestations as abnormalities" (2). That is to say, finding a culprit, in lieu of a systemic cause, allows a discursive appeasement of the potential crisis of the system, with the promise that removing a smaller internal problem would leave behind an otherwise healthy system.

Third, the dominant narrative framed the assumed culpability of banks, to a large extent, as a crisis in leadership and corporate culture (see e.g. Organisation for Economic Co-operation and Development 14, 29–34; SIGTARP). As Brassett et al observe "Perhaps predictably in such circumstances, the mantra of good governance [...] has been dusted down and given new life as a catch-all antidote" (378). As evidence, we see "the rhetoric of 'seriously delinquent' finance" emerging from the IMF, and the political

¹⁷ For a detailed account of the continuous deregulation of banks from the 1970s onwards, see e.g. Dewatripont et. al, especially Chapter I - "Regulation in a Historical Perspective" (1–3).

denouncement of bank behavior, such as UK Chancellor Alistair Darling's reflections on the social irresponsibility of some bankers' "kamikaze manner" (qtd. in Brassett et al. 378). This focus on governance allows a move away from a potentially faulty, unstable financial system, towards the irresponsibility and deviance of a limited number of actors within finance. In doing so, policymakers can resist calls for more stringent regulation, or at least dismiss fundamental reforms of the financial sector. Indeed, among the measures immediately taken were the criminal persecution of individuals and the promotion of better government oversight to improve corporate governance, suggesting that more regulation would not really help against a "toxic culture" shaped around finding "loopholes" in the first place (SIGTARP 5).

In sum, the representation of the Global Financial Crisis in the dominant imaginary as a limited financial crisis, as a historic abnormality, and as a crisis in financial governance enables the preservation of the pre-crisis imaginary for the status quo ante. This more manageable narrative does not challenge the fundamental macro-economic beliefs, such as the assumed natural equilibrium in accumulation or the self-governing rationality of markets, but instead dismisses a systemic analysis of crisis altogether. To address Lipschutz's comparison to the Lisbon Earthquake, this imaginary has made it possible for us to keep "our Panglossian faith." In other words, the dominant imaginary allows to continue to believe that, in times of recession, despite widening inequality and costs estimated to rise as high as "any of the two world wars" (Wolf, *What We've Learned*), that all is good in this best of all possible worlds.

1.2.2. Retaining the Dominant Imaginary

While it is difficult to measure the pervasiveness of the dominant imaginary, the 2013 "Global Trust Report" of the Gesellschaft für Konsumforschung (GFK, German Society for Consumer Research) conducted in 25 different countries confirms a fundamental loss of trust in banks and an increase of trust in the government that, as in the case of Germany, allowed governments to "capitalize on crisis management" (qtd. in "Studie Immer weniger Deutsche vertrauen Banken - immer mehr der Bundesregierung"). Even amidst the Euro-Crisis, this trend continued in the 2015 report (Lades).¹⁸ Thus, even in times when the Global Financial Crisis (and its management) created fertile soil for more radical political dissidence and allowed Anti-Euro parties in Europe to rise to power, the dominant political response to the crisis was still able to secure popular support.

Since the imagined recovery emerged as a side product to the immediate political measures taken to address the crisis, it serves as a striking example of how power matters in the way imaginaries are selected over others. The success of this interpretive regime necessitates creating a sense of continuation and stability as it abides by the values and beliefs of the neo-liberal project and submits to pre-established patterns of interpretation. Legal prosecutions and communication of political efforts to regulate banks, however effective, further a sense of law and order. In its most narrow representation, the rhetorical (rather than analytical) focus on financial leadership is

¹⁸ Apart from individual, or collective sentiments and populist politics, the crisis imaginary certainly has measurable effects on daily economic choices and practices. As a study of the Deutsches Aktieninstitut at the end of 2014 has revealed, in the eyes of private investor the information provided by financial institutions or brokers have "dramatically" lost importance in terms of "trustworthiness", "comprehensibility" and "actuality" (37). Further, the politically demanded higher equity capital of banks, to avoid unpopular and (considering the neo-liberal imaginary) contradictory bank bailouts, has contributed to a prolonged liquidity problem, or credit crunch for the private sector, with notable effects on the recovery of the real economy.

instrumental in capturing public imagination and retaining the narrative. Moreover, it is what I call a "moral legibility" of the crisis that trumps alternative and more unsettling imaginaries and that allows for a reintegration of the cataclysmic events into the threatened lifeworld.

Portraying the Global Financial Crisis as a result of moral and ethical shortcomings of institutions and individuals (rather than for example explaining market behavior and incentives from the system itself) replaces anonymous market forces with a seemingly finite number of personalized human perpetrators. Tales of greed and excess are as seductive as they are easily brought to bear in pre-established world views. Popular suspicions about the ominous world of finance and investment bankers that the political denouncement plays to is not new, but itself an imaginary that has been recovered and expanded upon.

In the more recent past, the rise to power of investment banks can be traced to the 1980s and the following three decades, which made for a "golden age of investment banking" where the excesses of Wall Street were at the forefront of the popular imagination (Augar 25). The notoriety of Wall Street investment bankers as "masters of the universe" also stems from this time, receiving its name from a work of fiction. Tom Wolfe famously has his high-powered, bond-trading protagonist in *Bonfire of the Vanities* (1987) describe himself as a "Master of the Universe." Wolfe borrowed the term from an action figure and a comic book series popular in the 1980s.¹⁹ The name that has stuck in

¹⁹ "The Masters of the Universe were a set of lurid, rapacious plastic dolls.... They were unusually vulgar, even for plastic toys. Yet one fine day, in a fit of euphoria, after [Sherman McCoy] had picked up the telephone and taken an order for zero-coupon bonds that had brought him a \$50,000 commission, just like that, this very phrase had bubbled up into his brain. On Wall Street he and a few others – how many? - three hundred, four hundred, five hundred? - had become precisely that... Masters of the Universe. There was... no limit whatsoever" (Wolfe, *Bonfire* 56)!

popular imagination to designate the power, as well as the hubris and amorality of investment bankers, has had a strong revival in politics and media after 2008 ("Whose Masters Of The Universe?"). Apart from Wolfe's "Sherman McCoy," the stock figure of the amoral investment banker was also immortalized in Oliver Stone's film *Wall Street* of the same year and the fictional character Gordon Gekko, who has had, as discussed in the next part of this chapter, a timely return to the silver screen (Stone, *Wall Street*; Stone, *Wall Street: Money Never Sleeps*).²⁰

Another factor helping to retain this imaginary is the symbolic place held by banks, on the axis of the material, real economy (e.g. the manufacturing and exchange of goods) to the seemingly incorporeal derivative financial markets. Keeping in mind the narrative of far-removed and too-complex-to-be-understood market forces, banks also serve as the visible, material interface to that what went wrong. Far from being neutral intermediaries, banks and their names have become symbols for the public imagination of the Global Financial Crisis, as in the now-famous words by journalist Matt Taibbi, who described Goldman Sachs as a "giant vampire squid wrapped around the face of humanity" (52).

Furthermore, even the newly recognized complexity has been denounced as part of the problem of governance. Disparities between hyper-rational economic models and unpredictable markets, between naturalized economic common sense and a chaotic economic reality, have not been framed as something that needs to be reevaluated from

²⁰ These attitudes towards finance and speculation and the mistrust towards bankers has a much older genealogy, reaching back to the eighteenth and nineteenth century, routed in moral, political and religious history and regards the very processes of legitimizing finance as morally justified, socially useful, different from gambling, etc. (see de Goede; Finel-Honigman). These older debates do not only echo in the contemporary political discussions regarding the role of finance, but are part of an often overlooked cultural disposition of finance that I revisit in the second part of this chapter regarding the communicative function of cultural production.

the ground, or that should be understood better or differently. That is, in restricting the crisis narrative to finance, the dominant imaginary treats the complexity of financial products and markets as isolated and separate from macro-economic, or systemic complexities. The dominant narrative has thus been able to denounce the complexity of financial products and markets as complexity-by-design. It has been dismissed as an effort by investment bankers to hide "increased risk taking" and to "circumvent" regulatory attempts by governments (World Bank 49).

Finally, the proffered moral legibility of the crisis also integrates with the fundamental axioms of the dominant pre-crisis imaginary. It suggests that human flaws such as excessive greed and criminal behavior have troubled the rational machine of the liberal economy. The numerous psychological, or psychopathological, explanations play into a narrative of isolated excess that represents the crisis as a historical abnormality within a (single) rational, objective, and atemporal economic system. In other words, moral legibility also insists on the strict separation of the economy from everything else.

According to this narrative, and in line with the neo-liberal belief that crises are the result of external events, culture figures as the non-economic factor that caused the crisis. Culture as an external trigger is emphasized in the official 2013 report of SIGTARP, the US government oversight agency overseeing the crisis relief fund. The term "culture" is used repeatedly throughout the entire 500 page document, and the report states that, "at the core of the Global Financial Crisis was a pervasive culture at financial institutions throughout the country of rampant risk-taking and greed combined with significant and unchecked power" (SIGTARP 5).

In sum, the mobilized moral legibility of the crisis seems to meet Merkel's criteria that "even the most complicated matters can be expressed in simple language" (Merkel 5). However, it is a simplicity gained as the result of a predisposed process of complexity reduction in representing the crisis, informed by what increasingly appears to be ideologically-determined patterns of interpretation, based on moral rather than analytic categories.

To be clear, I do not suggest that there cannot be moral concerns regarding the parts of individuals or institutions in the financial industry, that there has not been mismanagement, or illegal practices, nor do I deny that individual responsibility exists within an economic system in general. However, the excessive focus on the masters of the universe, governance and a culture of greed is too convenient if it avoids reintegrating these so called "cultural factors" into the system, encouraging us to forgo a systemic analysis altogether. Accordingly, the moral legibility of the crisis is an essential part of an interpretive regime to retain the dominant imagined recovery, and further distracts from the epistemological work the crisis necessitates.

Another way to look at this problematic is to recognize the apparent clash between the optimism of the dominant imagined recovery and the epistemological shock of the crisis that led to a crisis in the economic sciences. While the dominant imaginary represents an institutionalized interpretation of the crisis and asserts the fundamental beliefs of the status quo, the economic sciences no longer seem to innocently underwrite the axioms of the pre-crisis imaginary. Revisiting Merkel's reproach to the profession from this perspective might not suggest that economists are off the mark, but rather that the economic mainstream no longer unconditionally shares the optimism of the neoliberal political project. However, while its scientific basis is slipping from underneath, the interpretive authority over the Global Financial Crisis is still firmly in the hands of the established order and its institutions.

Maybe not coincidentally, in Germany, the word "alternativlos" ("non-negotiable", or "there is no alternative") was elected as the "Unwort des Jahres" (worst word of the year) in 2010. The jury reached its decision in view of the language emerging from Merkel's cabinet, suggesting it would lead to an increase in the "public's disillusionment with politics" ("Unwörter Ab 2010").²¹ Thus, considering a larger destabilization of economic knowledge, the imagined recovery is able to realize an objectivation of crisis, that coincides with Chalozin-Dovrat's observation of a disenfranchisement of the general public over economic matters and cements the separation of the economy from everything else.

2. The Communicative Function of Cultural Production

While the first part of this chapter is a CPE critique of the dominant imagined recovery that depends on the separation of the (rational) economic from the (moral) cultural, in the second part, I extend the analysis of culture to aesthetic-cultural production. This more specific idea of culture and what it does, in regards to the imaginary of blame, concerns the discursive work of a first set of novels, films, and video games

²¹ This disappointment has also led to Chancellor Merkel's nickname "Tina" (there is no alternative) that she inherited from Margaret Thatcher (see e.g. Wocker; Baumgarten).

and designates a first purpose of aesthetic-cultural production in coming to terms with the Global Financial Crisis that I call its communicative function.

One side of the communicative function of aesthetic-cultural production concerns the way that fictional texts, films and games can help a broader audience to reflect on and imagine economic phenomena. Confronted with of a sense of impenetrable complexity and disenfranchisement, the fictional representations of the Global Financial Crisis' aesthetic-cultural production provides both powerful and suggestive images and narratives. In this sense, omnipresent references to the "masters of the universe" in politics and media not only testify to what has repeatedly been denounced as a post-crisis "witch hunt against bankers" (see e.g. "Royal Bank of Salem"; Kaletsky; Hanke), but to the way in which works of art partake in how an economic imaginary comes about. These fictional representations address the critically heightened uneasiness towards the abstract realm of finance and have the potential to filter into political discussions, and influence collective modes of perception.

As Irene Finel-Honigman in her *Cultural History of Finance* suggests, "semantically and ideologically, banking and financial operations have an intrinsic lack of transparency and accessibility which feed into stereotypes, biases and mythologies" (4). Given the opaqueness of finance, it is due to a lack of a broader understanding of finance (a deepseated disconnection between a general audience and the world of high finance, experienced as fundamental disorientation and threat in times of crisis) that make the fictional and cultural imaginations and stereotypes of finance especially potent and attractive. However, in contemporary socio-economic discourse and along the line of my CPE critique of the dominant imaginary, the references to the present-day Gordon Gekkos serve an analogous function to the Hippocratic metaphors of crisis discussed in the last chapter. Similar to the images of disease and death, the metaphorical use of the stock characters of greed and excess are the signs of pre-established patterns of interpretation. These patterns tend to cover up the epistemological disruption of the current crisis and superimpose a moral order over the chaos and imbalance it initially exposed. This creates a complicity of aesthetic-cultural production in the dominant imaginary that denies any radically different possibilities and works to reproduce its own conditions.

Yet, the other side of the communicative function of aesthetic-cultural production concerns the critical potential it carries in its own representative form. If we take aesthetic-cultural production seriously and on its own terms—i.e. not as the site of a moral battle over finance, or as a warehouse of suggestive stock characters and metaphors—the specific form of aesthetic-cultural production and its particular relationship to reality both elucidate and complicate the issues of representation. The ways in which fictional and aesthetic expressions communicate crisis insist on, rather than conceal, the issues of selection and complexity reduction.

Cultural-aesthetic production is expressive (and at time self-aware) about the necessary choices a writer, film maker or video game designer makes in creating fictional worlds as a way of giving shape and form to the extra-literary, extra-filmic and extra-ludic world(s). On a conceptual level, paying close attention to fictional representations of crisis allows us to rethink the mechanisms of representation and their implications at work in the discourse at large. Admittedly, as in the use of the master-of-the-universe-metaphor, and as I show in my subsequent analyses, the popular reception of cultural production

might often ignore the critical potential of the communicative function of aesthetic-cultural production and uncritically integrate their narratives and imagery in support of the dominant imagined recovery. However, in the spirit of New Economic Criticism, as proposed by Woodman and Ostmansee, a more careful analysis allows not only for how the two supposedly separate spheres of culture and economy "profoundly condition each other" (5), but, understood as a communicative intervention of cultural production in a dominant economic imaginary, aesthetic-cultural production and socio-economic discourse also become mutually enlightening.

The double role of the communicative function as complicity and critique, corresponds to what Max Haiven has argued regarding the "pivotal importance" of "imagination" for "social and cultural organization" (3). As he argues, "financialization," as the defining process of present-day capitalism and the current crisis, "both relies upon and contributes to a colonization of the imagination (individual and collective senses of possibility) in order to accelerate and empower financialized capitalism" (1–2). Haiven insists that social imagination is both constitutive for and determined by economic systems. This dialectic holds especially true in regards to role of finance in an economic system, as the so-called "fictitious capital" (as opposed to the material, real capital) is heavily reliant on the forces of social imagination and itself understood as "an imagination of the future" (1). If the responses to the crisis since 2007/2008 have shown a "shocking paucity of radical imagination" (3), Haiven diagnoses that the narrow spectrum of answers the crisis produced are "symptomatic of a broader crisis of imagination that fails to locate and map finance's place in a broader system of accumulation or to posit the sort of alternative futures we so desperately need" (4).

It is important to recognize aesthetic-cultural production within a broader social imagination as both part of a "crisis of imagination" (determined by and reproducing the status quo) and for its critical potential (in exposing the limits of current imaginations and harbouring the possibility of change). If the examples featured in the following analysis of the communicative function of cultural production seem to make a weak case for art, since they all in one way of the other are part of the problem, it is not to underestimate or dispel any idealistic or utopian potential of art (addressed in Chapter IV). Rather, cultural production as part of the problem and cultural production as part of the solution designates two inseparable sides of the same coin. Both are necessary to show how economy and finance do not exist in a vacuum, separated from everything else, but that economic imaginaries are both shaped by and shaping the imaginary forces at work in cultural expression.

Further, offering moral clarity and seeking the origins and reasons for the Global Financial Crisis in the amoral behaviour of bankers does not simply mean that these novels, films and games misinterpret or misrepresent the crisis. I do not argue that amoral bankers and questionable individual or collective forms of financial behaviour do not exist, or have not contributed to how the crisis has played out, nor do I suggest that moral considerations are theoretically unfeasible. Rather, I suggest that the narrow focus on the (very real) scandals of the Global Financial Crisis involving bankers (e.g. the use of bailout money), and the moral outrage they produced, contributes to a myopic view of crisis that is both symptomatic of, and an attempt to soothe, the epistemological shock of the crisis.

As such, if these examples of aesthetic-cultural production fail to account for the systemic dimensions of the crisis, the simplifications and moral clarity these works offer

become visible as compensation for the threat of increasingly intangible, immaterial and uncontrollable qualities of finance no longer obviously tied to material modes of production. As expressive forms of representation, these works of fiction allow us to reconstruct the representational issues at stake in the imaginary of blame, and approach the larger epistemological crisis that has marked financialized capitalism for longer than the events of 2007/2008. Scrutinizing the representational inadequacies of works of fiction, rather than dismissing them outright, exposes how the financial imaginary that was shaken in the Global Financial Crisis has profoundly conditioned and paralyzed the imagination of financialized capitalism and is the first and indispensable step in locating the possibility of change.

Considering the assumptions about aesthetic-cultural production presented at the end of the last chapter, I analyze examples under the following hypotheses: First, they are not only contemporary entertainment inspired by the most recent past, but they reflect on, attribute meaning to, and recontextualize the potential changes that the Global Financial Crisis brought about. Second, they not only comment on the dominant imagined recovery, but are part of it. Third, if in consequence, they both determine and are determined by the dominant imaginary; as works of art they not only have a kind of aesthetic surplus, but as works of fiction they carry unique critical potential, regarding their own representative limitations and those of the dominant imaginary as a whole.

2.1. Narrating Finance, Narrating the Crisis

"Be aware that your correspondent is merely bringing you the news when he reports how many people have besieged the author of '*The Bonfire of the Vanities*' over the past week with the question, 'Where does this leave the Masters of the Universe now?'" Tom Wolfe wrote in an article for the *New York Times* in the portentous month of September of 2008 ("The Masters of the Universe Have Left New York" WK12). "This" refers to the unfolding Global Financial Crisis; Wolfe being the author of said book and inventor of the phrase denoting the hubris and amorality of a new class of investment bankers that emerged in the 1980s. In the article, Wolfe contributes a couple of anecdotes to the public debate on the origins of the Global Financial Crisis. Yet he does not address the more blatant question as to why, in the middle of a meltdown of the financial markets that left the most sophisticated scientific financial models to crumble, journalists and laypeople have turned to an author and work of fiction in the search of answers.

In the myopic space of public media and cultural memory, traders, bankers and brokers might have appeared as a new culprit after 2007/2008, or indeed as the resurfacing of a cast of characters no older than the financial excesses of the 1980s. However, in literature, the depiction of businessmen and their dubious dealings in the world of finance does not start with Wolfe. Bankers as perpetrators of social misfortune and personal suffering have long captured the imagination of authors and readers and staged and shaped the cultural perception of finance through the last two centuries. Finel-Honigman goes so far as to suggest a "cyclically occurring" cultural and psycho-social reaction to financial crises, occurring since the mid-nineteenth century, of finding scapegoats and vilifying financiers and bankers. While stereo-types and cultural reactions have evolved together with finance and changed over time, from Goethe, Balzac, Dreiser, Dos Passos, Faulkner to Wolfe there is a rich tradition of what Finel-Honigman calls the "anti-heroes of finance" (6).

Ambivalence in the fictional depictions of moneymen, oscillating between fascination and condemnation, is tied to the religious and moral condemnation of money since antiquity and the often-opaque nature of financial affairs. The characters have "[...] an element of alchemy, mystery and power which, when successful, yields vast profits. However, once they fail or are perceived as the primary cause of large scale losses, they are accused of being obtuse, esoteric, and dangerous to the health of the individual, institution and nation" (Finel-Honigman 4–5). High and Low culture, together with the press, "both codify and debunk" this political and economic "mythology" that shapes the popular imagination of finance (Finel-Honigman 6). The cyclical return of the mythology, stereotypes and suspicions in art, that Finel-Honigman insists on, suggests little innovation in artistic discourse in representing the increasingly complex and far-reaching reality of finance.

In her extensive study of American literature, concerned with the representation of "abstract capitalism," Alison R. Shonkwiler centralizes the issue of representational adequacy. She focuses on the beginning and end of the twentieth century as periods of dramatic quantitative and qualitative economic changes. Her investigation features "writers' efforts to find formal strategies adequate to represent changing conditions of economic abstraction" (ii). Shonkwiler identifies the shared historical problem of writers to narrate an increasingly illegible economic reality, a financial imaginary "based on a perception of capitalism as becoming less material, less tangible, less controllable, and less about specific modes of production" (Shonkwiler 4).

In the attempts of some writers to reach back to traditional forms and trying (and sometimes failing) to adapt to the changing economic circumstances, Shonkwiler recognizes (similar to Finel-Honigman) what she calls "varying levels of uneasiness at the prospect of economic abstraction with the potential to influence our collective perception and understanding of finance" (5). More specifically, in the case of writers at the end of the twentieth century, such as Richard Powers and David Denby, she sees a return of nineteenth-century notions of "economic virtue," expressing that "questions of moral selfhood" have not been discarded: "quite the reverse, as did their counterparts a century ago, these writers interrogate the subjective ways that allow us to "see" the abstract forces of capitalism perceived to elude the power of narrative representation" (7). If the more avantgardistic texts of their time such as Theodore Dreiser's *The Financier* (1912) and Don DeLillo's *Cosmopolis* (2001) explicitly relate "the problem of financial abstraction to the problem of narrative representation" (9), it is "no coincidence" that these texts have been received "as aesthetic failures," suggesting "to what extent readers continue to associate the representation of capitalism with the familiar moral and social lens of the economic novel" (Shonkwiler 19–20).

Finel-Honigman's and Shonkwiler's historical assessments of literature's ability (or inability) to react to economic and financial change shows strong continuity, if we look at cultural production in response to the most current financial crisis since 2007/2008. Though initially commentators bemoaned a lack of literature on the Global Financial Crisis (see e.g. Müller), it is striking that in recent fiction, many novels seem to consciously or unconsciously inscribe themselves into older financial imaginaries and grapple with ways to adapt pre-established vocabulary, metaphors, characterization, or forms of representation to the context of the largest financial crisis since the 1930s. Even though this new literature is frequently void of the magical, demonic attributes historically

attached to literary descriptions of finance, the texts reproduce and rely on older motifs and stereotypes and offer a moral condemnation of Bankers in their crisis narratives.

In relying on older literary tropes and techniques, the new crisis literature is also in close thematic correspondence with an imaginary of blame invoked over the rest of the political and media-scape, where an efficient financial system was derailed by overconfident and amoral bankers. With Jonas Lüscher's *Frühling der Barbaren*, I present a text that both relies on and seeks to subvert the imaginary of blame. In analyzing *Der Koch* by Martin Suter, I discuss the potential and limits of literary strategies that seek to illustrate critical transnational economic forces and point to the limitations of narrative representation of crisis. To be clear, the goal in analyzing both texts (as with the other media that follow) is not to expose and disqualify them as inadequate representations of crisis or of finance, or to return to Wolfe, to accuse artworks of undue presumption. Rather, as expressive and, at times self-reflexive, forms of representation, these works of fiction allow us to come to terms with the representational issues at stake in the imaginary of blame and to approach a larger epistemological crisis brought into focus by the representational struggle with the Global Financial Crisis.

2.1.1 Jonas Lüscher's Frühling der Barbaren

Swiss writer Jonas Lüscher's literary debut, *Frühling der Barbaren* (Barbarians' Spring),²² was published in 2013. At first review, the story about a wedding party of financial professionals gone bad appears to be a one-sided take on barbaric bankers, lending support to a (re)imagination of the financial profession as amoral, and ultimately

²² translated to English under the title *Barbarian Spring* by Peter Lewis for Haus Publishing, 2014.

responsible for the crisis. I argue that a closer look at the novella reveals a more subtle critique of culpability, in a world permeated by finance, and draws attention to systemic issues of agency while simultaneously exposing the limits of narrative accounts of crisis.

In the novella, the older, peculiar, Swiss entrepreneur Preising recounts the story of an eventful North-African business trip to an unnamed narrator. At an exclusive tourist resort in Tunisia, Preising attends the wedding of two young, successful British traders, with a party of 70 people, comprised mostly of young professionals from the financial industry in London. During the festivities Preising shares a tale about a fabled Bedouin wedding dish in which an entire camel is stuffed with an entire sheep and other smaller animals. On the night of the luxurious ceremony, the British pound sterling collapses and the next day, Great Britain is forced to declare bankruptcy. As the wedding guests nurse their hangovers, they learn that the British pound depreciated tenfold and that their credit cards had been frozen. Since they can no longer pay for the 250,000 pound wedding, they are told to vacate the resort before the afternoon. Stranded in the middle of the desert, a group of the investment bankers break into the bar and help themselves. Just before their mobile phones lose service, they learn that they have lost their jobs. When the beer starts running out and they are unable to break open the kitchen storage, the increasingly-disinhibited bankers arm themselves with kitchen knives to hunt for food. Soon they find and decide to kill the camel that the bride rode on the night of the wedding. In a twisted variation of Preising's story about the Bedouin wedding dish, the bankers attempt to stuff the whole camel with the hotel's dog, and the dog with her own puppies. The pool boy gets in the way and is murdered by the frenzied crowd. When they skin and disembowel the animals, and light a fire for their culinary grotesque using the pool chairs, the entire resort goes up in flames. Preising, who witnessed all of this, escapes in the last moment and makes his way through a resumption of the Arab spring and to the Swiss embassy.

The short text follows, at first examination, a fairly conventional novella structure, with a frame narrative in which Preising tells the main story to the first-person narrator during a walk in the garden of a mental institution. The novelty, or unheard event, is an unprecedented financial crisis that functions as a turning point in the narrative, and dramatically affects the wedding party in the resort. In addition, in the German tradition of the novella, Lüscher's text has a reoccurring *Novellensymbol*, a camel (a herd of camels is killed in an accident with the bus of the wedding party, the bride rides on a camel that is later slaughtered by the bankers, etc.).²³ The novella also alternates between three different narrative situations: Preising's own narrative is occasionally interrupted by the first-person narrator who asks questions, reflects on the story, or attempts to keep Preising from deviating too much from the main anecdote. Finally, the text features the sporadic intervention of an omniscient narrator (a carefully-introduced anomaly for a novella that I will return to shortly) that fills in events that Preising did not witness or gives an alternative perspective on Preising's report.

While the novella offers a rich set of characters with multiple side stories and conflicts, the unrestrained behavior of the investment bankers (the "barbarians" of the title), before and during the economic meltdown, takes center stage. Soon after Preising arrives at the Thousand and One Night Resort, inspired by that what "market research"

²³ Preising himself, telling the story to the first-person narrator, refers to the camel as a "leitmotiv" (77).

has "calculated to be" a Berber settlement for the "Tunisia tourist of the premium class,"²⁴ he meets Philippa Greyling, disapproving mother-of-the-groom, English teacher, and lover of poetry. "Pippa" introduces Preising to the social composition of the resort and the "core group" of the wedding party of financial professionals.

The analysts, traders and account managers are described at length, characterized as a homogeneous group in both their appearance and behavior. They were all "young people in their late twenties and early thirties. Loud and self-confident. Slim and in good shape [...].²⁵ All follow the same dress code to the point that even when they are almost naked at the pool, they seem "as if they were wearing uniforms.²⁶ Among themselves, the bankers are teasing, promiscuous, and arrogant towards those they perceive to be of lower status. They talk in jargon, ²⁷ brag, show off, party excessively and have a taste for fast and expensive cars; a young trader describes the acquisition of a Porsche with her "annual bonus" as the "happiest day in her life" (44). In short, Lüscher's "bankers" from London are bitingly stereotypical. Even the character Sanford, Pippa's

²⁴ All translations by Kaipainen, "Das Thousand and One Night Resort in der Oase Tschub war einer temporären Berbersiedlung nachempfunden oder vielmehr dem was sich der von der Marktforschung errechnete typische Tunesientourist der Premiumklasse unter einer Berbersiedlung vorstellte [...]" (29).

²⁵ "Junge Leute in ihren späten Zwanzigern und frühen Dreißigern. Laut und selbstsicher. Schlank und durchtrainiert [...]" (33).

²⁶ "Selbst nahezu nackt wirkten sie wie in Uniform" (33).

²⁷ See e.g. Quicky's speech during the wedding ceremony: "Quicky gave a longer speech, that I couldn't really follow. But that,' said Preising, 'did not surprise me, since he simply talked in the characteristic style that I was familiar with from presentations of management consultants (...). He talked about merger, about win-win-situations, about return and bonus, about teamwork and investing in the future. The whole thing was decorated with aggressive metaphors of war and hackneyed phrases of eastern philosophy'." "Quicky hielt eine längere Rede, von der ich wenig verstand. Aber das', sagte Preising, 'erstaunte mich nicht, denn er bediente sich dafür genau jenes Duktus, den ich von den Präsentationen von Unternehmensberatern kannte (...). Es war von Merger die Rede und von Win-win-Situationen, von Gewinn und Bonus, von Teamwork und Investitionen in die Zukunft. Und das Ganze garnierte Quicky eloquent mit kämpferischen Kriegsmetaphern und Versatzstücken fernöstlicher Weisheiten" (80).

sociologist husband, is "amazed" "how much energy these people seem to invest in fulfilling every cliché."²⁸

Once the crisis hits, the effect is satirical: "the masks come off" (Hartwig) and the immorality and unrestrained brutality of the bankers is exposed. One of the bankers, "Quicky," who is a bit "older" but perceived by the outsiders of the group as even louder and more self-confident than the rest, emerges as a natural leader of the excesses that follow. Quicky's personal career (that he relates to Preising on the night of the wedding) exemplifies the seamless transition from banker to barbarian in the novella. Before Quicky joined the financial industry, he served in Iraq, first as an SAS soldier of the US-led coalition, then as a gun-for-hire for a private security firm. The last career change took place, as Quicky "didn't tire to insist," because of "the 'way better' pay (87)." If readers are to believe his account, it was a "short distance" from mercenary to financial professional. Quicky's adaptable talent gave him his nickname: "'quick trigger finger. That's why they all wanted me, the army, the firm and the bank" (88).²⁹ Consequently, as the events in the resort suggest, as effortlessly as a former soldier can become a banker, a banker can become a killer. Or, put differently, the analysts, traders and bankers in Lüscher's novella have always been barbarians. This characteristic made them good at their profession but was normally thinly disguised by lingo, tailor-made suits, dresses, and Blackberry phones.

It is tempting to read *Frühling der Barbaren* as demonstrated above, as a literary confirmation of the dominant crisis imaginary. The novella seems to play neatly into the popular sentiments towards the financial industry and to exemplify the decadence and

²⁸ "[...] doch hier sei es absolut beeindruckend, welche Energie diese Leute darauf verwendeten, jedes Klischee zu erfüllen" (42).

²⁹ "Quick trigger finger. Deswegen wollten sie mich alle, die Armee, die Firma und die Bank'" (88).

amorality of investment bankers and their ilk. Lüscher's barbarians enter the broader crisis discourse side by side with the recovered masters of the universe and confirm the readers' worst suspicions about bankers. Indeed, the novella has received much media attention and was nominated for both the Deutscher Buchpreis and the Schweizer Buchpreis in 2013. Criticized for its blatant stereotyping (Bucheli) it has also been celebrated as a "most humorous and convincing satire of the ridiculous excesses of those responsible for the Financial Crisis that began in 2008" (Cohan). The camel, the novella's reoccurring symbol, might further strengthen such a didactic reading, because "it is easier for a camel to go through the eye of a needle than for a rich person to enter the kingdom of God" (Mark 10:25). This biblical quote suggests a tradition of associating money with vice and ties the novella' symbolical center to older pre-disposed readings and stereotypes of Finance.

However, like the Bedouin wedding dish, Lüscher's carefully-crafted text has multiple layers that need to be unpacked. To begin, the question of responsibility of the bankers *for* the crisis is never explicitly raised. The fictional economic crisis of the novella (a British default shortly after the "real" financial crisis of 2007/2008) is not analyzed in the text. Rather, the novella studies the effects of the crisis on the closed society in the resort. While throughout the first two-thirds of the book, the signs and rumors of the coming financial disaster were present (in reactions to recent international news by the novella's characters), the description of the crisis itself is short and abrupt: "While Preising slept, England met its demise" (Lüscher 89).³⁰ Thus begins the novella's crisis narrative that spans no more than a single page. The reader learns that by nightfall in England "the

³⁰ "Während Preisung schlief, ging England unter" (89).

inter-banking market had collapsed" (89). As soon as the markets opened in different time zones, other countries had quickly liquidated their British pound reserves. Meanwhile, "the prime minister's cabinet" had met until the early morning hours, but was "unable to agree on who was responsible for this mess" (89).³¹ In consequence, the government failed to suspend trading for the coming day, and by the time the British market opened, the "historic descent" of the currency had "turned into a nosedive" (89). Before anyone could react, automated trading programs had "annihilated billions in minutes" in a way that "none thought was possible" (89). When the London Stock Exchange closed five minutes after it opened, it became clear that England would not be able "to service its horrendous debts" (89). The declaration of government bankruptcy later that day is a "mere formality" (96).

The reader is presented with a more or less plausible crisis scenario.³² However, it is not a critical representation of the Global Financial Crisis that reflects on it in categories of good or bad, innocent or responsible. Lüscher's omniscient narrator simply lists the events that make up for the crisis without addressing or evaluating underlying causes. If ironic undertones in this account seem to expose the inability of the British government to act, the description achieves this precisely by addressing their obsession over the question of responsibility. Notably, markets take center role in these events, as anonymous, efficient entities with far-reaching, but unaccountable, agency. High finance

³¹ "Man hatte sich aber doch nicht geeinigt, wer für das Schlamassel die Verantwortung übernehmen sollte (...)" (89).

³² Indeed, with London as a key node of the financial industry, the outlook for Great Britain was glum in the early crisis years. Still, at the end of 2009 the European Commission had predicted a negative GDP growth rate for England together with Spain and Ireland. However, starting in July 2008, the pound sterling had fallen by almost 25% against the US Dollar and the Euro. The currency depreciated at one of the fastest rates in history and hit a historic low by the end of December 2008, almost reaching parity with the Euro ("Pound Hits New Low against Euro").
and its protagonists (other than automatic trading as an accelerator) are not even mentioned in this crisis description.

Lüscher has curiously separated the crisis narrative from the representation of bankers. As a result, the events in the oasis do not suggest that the bankers once were in command but have lost control of the markets, but that their fate is simply, more immediately, tied to the dramatic ups and downs of the market. As part of the satire, this helps to unmask the hubris and self-assured importance of the characters, but as a representation of finance it significantly departs from, and even subverts the dominant imaginary that has framed the crisis as a crisis of governance.

In addition to the immediate portrayal of the crisis in England and its impact on the people in the resort, the novella offers many descriptions of the seemingly-unaccountable power of markets and finance, using the characters in the novel and the way this translates into their behavior and world views. An instructive moment arises when the wedding guests speculate about the meaning of money departing from the behavior of the bankers. Preising is at first irritated by the "ironic" and "playful" way in which the bankers interact, as if everything they did was a "game" (64). Yet, Preising concludes that they are able to "sell their game as serious" because the game was "so powerful"³³ and had such "profound effects on society."³⁴

Further, departing from the idea that money is the same as truth, Sanford, the sociologist, speculates that "since the days of Margaret Thatcher" the disproportionate distribution of wealth has increased and with it "the distribution of truth" (65). If in

³³ "wirkungsmächtig" (64).

³⁴ "Wie konnte etwas , das so große Auswirkungen auf die Gesellschaft hatte als Spiel abgetan werden" (64)?

consequence Sanford feels that his profession and opinions have become "marginalized," "degraded" to "frivolous hobbies of retirees," his wife, Pippa similarly "feels" that "the likewise broad-chested and thin-hipped narrative of the financial markets were declaring her English lessons, her reading circles and her love for poetry as futile,"³⁵ Even Preising who has plenty "of truth" in his bank accounts, is unsure why he feels so intimidated by the "self-confidence of the derivative traders and product developers" (65).

While these speculations on finance and money, from the points of view of the novella's main characters, depart from the uneasy way they feel towards the bankers in the resort, it becomes apparent that similar to the crisis description, the bankers are not held responsible for the way the world is. Rather, than being individually responsible, the bankers are described as simply participating in a larger system, (or indeed as players in a game) that rewards their behavior. Consequently, while the bankers and their professional milieu are at the center of literary social experiment in world dominated by finance—i.e. what happens if a group of bankers are in an isolated setting and there is a large-scale financial crisis?— they are not at the core of the literary crisis narrative as perpetrators. Certainly, the outcome of such an experiment and the excesses that follow are not surprising, given the ironic and stereotypical drawing of the characters in the first place. However, contrary to what some reviewers have claimed, rather than "unmasking" the true nature of bankers (Hartwig), much less holding them "responsible for the crisis" (Cohan), the novella seems to point to something, or someone, else.

³⁵ "[Pippa], die [...] deutlich spürte, dass die ebenso breitbrüstige wie schmalhüftige Erzählung der Finanzmärkte ihren Englischunterricht, ihre Lesekreise und ihre Leidenschaft für Poesie für nutzlos erklärte" (66).

A closer look at the perspective from which the story is told, and the literary and formal means that establish it, challenges a reading of the novella that would enlist Lüscher's barbarians alongside the masters of the universe, in reading the novella as lending narrative and semiotic support to the dominant imaginary. The beginning and end of the novella should arouse readers suspicions as to whether the story has an easy and clear-cut moral. After all, the frame narrative is set in a mental institution. Whether Preising's report is based on actual memories or delusions remains as unclear, as does the reason he tells it to the narrator in the first place. *Frühling der Barbaren* begins with the following sentence: "No", said Preising, "you are asking the wrong questions." And it ends with the following exchange between Preising and the first-person-narrator:

'What have you proven with this [story]?', I asked him mercilessly. A hidden knowledge and worry regarding the very same seemed to be in his answer. 'Once again, you are asking the wrong question', said Preising.³⁶

The key is in what Preising senses, but as narrator is unable to articulate from his own position; the critical thrust of Lüscher's novella is not in a synthesis of what is told about the crisis, and it is maybe less in the satire about bankers as such. The critique that *Frühling der Barbaren* communicates lies in the way the story is told and by whom. It requires taking the novella's characteristics as a work of literature seriously (and not to regard it as piece of evidence for a particular take on crisis), to reconstruct Preising's narrative position, and consider the formal strategies that set it up.

³⁶ "Nein", sagte Preising, "du stellst die falschen Fragen" (7).

[&]quot;Was hast du damit bewiesen?', fragte ich ihn unerbittlich. Ein verborgenes Wissen und Kümmernis über ebendieses schien in seiner Antwort zu liegen. 'Du stellst schon wieder die falsche Frage', sagte Preising" (125).

What the first-person-narrator and Preising have in common is their inability to act. Yet, while the narrator is being treated for a "common depression,"³⁷ Preising's diagnosis is more complicated and unclear (15). With Preising, Lüscher created an unusual character for a literary text, insofar that he never acts, is unable to make decisions and never intervenes in the events he professes to witness. What Preising himself considers his "prudence," is precisely what his doctors are unable to find the "correct psychopathological terminology" for (15). While Preising is the formal owner and chief executive of Prixxing, a large international telecommunication company that he inherited in the fourth generation, it is effectively his "employee" Prodanovic and the board of advisors that run the business. Prodanovic brought Prixxing to its international scale, and simply keeps Preising around for representative purposes. Preising, who never wanted to be an entrepreneur but studied music in Paris, is more interested in good food, good literature and classical music than economic affairs.

Thus, it is also Prodanovic who characteristically sends Preising on his business trip to visit with a supplier in Tunesia, when back at the company "important decisions are on the agenda" (10). Further, though Preising is well-meaning, whenever he is confronted with unpleasant facts and difficult decisions during his travels, he simply hides behind what the narrator calls his "cultural relativism" and "liberalism."³⁸ Preising hesitates and

³⁷ "[eine] ordinäre Depression" (15).

³⁸ As the first-person narrator notes "Preising [...] was also a declared cultural relativist, and for that one of the completely non-chauvinistic kind. His liberalism was a relativism of the lukewarm kind of that of a shallow pool. Nonetheless, on our walks, he was always prepared to flaunt the ethics of virtue like a monstrance. Preising who was a great adherent of the Aristotelian doctrine of mesotes, who was happy that the mean was not arithmetic, but rather, well, yes, had to be decided on case by case basis."

[&]quot;Preising (...) war auch erklärter Kulturrelativist, und zwar von einer gänzlich unchauvinistischer Sorte. Sein Liberalismus war ein Relativismus von der handwarmen Art eines Kinderbeckens. Gleichwohl war er auf unseren Spaziergängen immer bereit die Tugendethik wie eine Monstranz vor sich herzutragen.

considers until the possibility to act has passed or someone else has made a decision for him. Even if he disapproves of events he witnesses, he always "finds reasons not to act."³⁹ For example, when Preising is confronted with potential child labor in his own factories, he reminds himself that the source of this information might be dubious, and that the issue (according to Prodanovic's liberal entrepreneur friends) is "more difficult than a starryeyed idealist would like to have it."⁴⁰

If Preising's strangely consequent indecisiveness regarding everything (from what he should wear to if he should save the existence of a camel herder and his family), leads to absurd and funny situations, it also informs the way he tells the story of a resort going up in flames in a more or less detached manner.⁴¹ All of this seems to contradict what the narrator observes at the beginning of the novella:

If Preising's stories were true or not, one never quite knew, but it was not about that. Preising was concerned with the moral. He believed that there was one in every story that was worth to be told. And most often his stories were testimony to his prudence that he took great pride in.⁴²

Preising, der große Anhänger der aristotelischen Mesoteslehre, der froh war, dass die Mitte keine arithmetische ist, sondern, nun eben ja, von Fall zu Fall entschieden werden musste" (13).

³⁹ "Preising fand immer Gründe, nicht zu handeln" (27).

⁴⁰ "Viel schwieriger, als dies gemeinhin der Gutmensch gerne hätte [...]" (13).

⁴¹ Roman Buecheli, who did not accredit this characteristic style of narrating to the character Preising criticizes this "language" of the novel and its effect on the reader as follows: "[...] Jonas Lüscher's novella is written in such an ostentatious provocative carelessness that one ought to believe: he is not really interested in his story." Trans. Kaipainen "[...] Jonas Lüschers Novelle ist mit einer geradezu ostentativ aufreizenden Nachlässigkeit geschrieben, dass man glauben muss: Eigentlich interessiert ihn seine Geschichte nicht" (Bucheli).

⁴² "Ob Preisings Geschichten wahr waren oder nicht, wusste man nie so genau, aber darum ging es nicht. Preising ging es um die Moral. Er glaubte, dass in jeder Geschichte, die sich zu erzählen lohne, eine solche steckte" (15).

The story that Preising tells destabilizes both the idea that the text offers easy lessons to be learned, or that his prudence is indeed a positive quality (e.g. even when Preising witnesses actual child labor in his factories at the very end of his story, he is still unable to learn, or do anything about it).

Throughout his own story, Preising is constantly faced with crises, that reach from the banal to matters of life and death. These critical events challenge his beliefs, the way he approached things in the past, the crises demand decisions that could alter how the events will play out. Yet Preising is stuck. Often all-too aware of the need to decide, he is paralyzed by his own permanent state of crisis and unable to take responsibility or enact change. Preising's lack of an answer for the narrator's final question ("what have you proven with this [story]?") suggests it is no coincidence that Lüscher chose to tell the events in the resort through him. Lüscher uses stereotypes not to show that the world is different than commonly supposed (finance and markets dictate the parameters of life, bankers are barbarians, etc.), but to demonstrate that we do know how it is, but still don't or are unable to do anything against it. Lüscher seems to suggest that, similar to his fictional character Preising, we are not only not in charge of our economic affairs (a seemingly anonymous system of finance and markets has taken over), but faced with crisis, we all behave like Preising: well-educated and well-meaning but merely witnesses at a distance, ultimately complicit in our passivity.

Preising's distressed encouragement of the first-person narrator to ask different questions necessarily points outside of the story, to questions that he as a character and he as part of his own narrative is unable to ask or answer. The narrative form of *Frühling der Barbaren* advances this self-reflexive, critical inquiry: apart from its status as a work

of fiction testified on the cover ("novella") it is the narrative situation of the genre that calls attention to the act of narration itself. The novella form, rather than suggesting an "objective" report of events, stresses that the story inside the frame narrative is told in a particular setting and from a particular position, i.e. it has a perspective that is tied to a specific character (Preising), refracted and limited through his views, beliefs, use of language, etc. Further, the interruptions of the first-person narrator and interventions of an auctorial narrator constantly remind the reader of this subjectivity, and overtly call the reliability of Preising's account of the events into question.

This untrustworthiness of Preising and his story, together with the setting of the frame narrative in a mental institution, adds a pathology to the crisis narrative on multiple levels. First, regarding content, this pathology refers to the behavior of the main character as someone who never acts (even when he thinks he should). Second, in a critical reading of the text it refers to a pathological condition of the world, where agency dissolves when confronted with an omnipresent and threatening system of finance. And finally, taken together the pathologies question to the possibilities of narration itself. That is to say, Frühling der Barbaren recalls the literary trope of the "Welt als Tollhaus" that inverts (or here dissolves) the clearly demarked borders between the inside and outside of an asylum, often declaring the world itself a madhouse and the institution a refuge (see e.g. Daemmrich and Daemmrich, sec. "Wahnsinn" 368ff). Preising's curious condition is not an individual mental disorder, but rather reflects on to the condition of the world. While this last observation might further Lüscher's panoptic vision of finance to the point that there is no longer an outside, it also fundamentally questions the possibility of a critical narrative representation of such a world from the inside. The addition of an omniscient narrator (unconventional for a novella) exposes the limitations of the subjective perspective of Preising as a narrator and marks the impossible position of narration: the outside.

This deliberate, or necessary inconsistency in Lüscher's novella, the impossibility of an objective narrator, points to fundamental representational issues exposed by the crisis. Experienced as an epistemological shock, without an outside perspective and no readily available new set of fundamental truths, the older forms of representation would no longer serve to capture the events of the crisis, and the destabilized beliefs would not help in finding a way out of it. Both the attempt to fall back on older forms and episteme as well as the effort to experiment with the radically new are predicated on this epistemological shock. If the dominant imagined recovery did the first and relied on an imaginary of blame, it compensates for the representational and epistemological difficulties the crisis exposed. However, *Frühling der Barbaren* undermines this compensatory effect; the way the novella deploys the imaginary of blame insists on the problem of knowledge and its representation, rather than presenting a solution.

In sum, if some reviews miss the finer points of the novella (Cohan; Hartwig) Lüscher's narrative of the consequences of a financial crisis as a literary social experiment certainly relies on and communicates the crucial ingredient of the dominant crisis imaginary: the supposedly amoral nature of bankers. Within the larger discourse on crisis this has the potential to produce uncritical readings (not only from professional reviewers) for which the fictional text simply provides and exposes the usual suspects and stereotypes. However, Lüscher's literary experiment is rigged. Insofar that it examines a profession that is already refracted through a particular lens, the outcome is predictable. Neither the clichés that set the experiment up, nor the insights that might follow from them are questioned. However, what is questioned, complicating this fictional and seemingly simplistic take on bankers and the Global Financial Crisis, is our own fatalistic attitude towards both these clichés and what the critical economic events exposed: the power of finance, and markets. Like the barbaric roast by the bankers—an engastration of puppies in a dog, in a camel—Lüscher has nested multiple crises to construct this effect: The novella's immediate crisis in the resort (bankers becoming barbarians) is the result of a crisis in England (financial markets gone wrong), which is part of a larger crisis of agency (finance and markets controlling every aspect of life). In relation, because rather than despite their homogeneous description, the "bankers" are not painted as individually evil, or acting out of bad intent, but as fulfilling a function in a system that incentivizes and rewards their behavior. The crisis in the novella exposes the kind of actors and beliefs this closed system (re)produces. Put differently, the dominant imaginary relies on preestablished and negative views of bankers, as does Lüscher's satire at the heart of the novella. Yet, if the dominant imaginary creates a moral legibility of the crisis, that judges individuals and absolves us from both critical analysis of the crisis and the need to act (as this kind of crisis is the responsibility of our legal and regulatory systems), Lüscher's textual strategies, the story's construction as a work of fiction, undermines the moral legibility and criticizes our own fatalistic passivity towards economic affairs.

The camel in the room is that little can be learned in further investigating how bad bankers are, or how profoundly finance impacts and determines our lives; we already know that we don't live in the best of all possible worlds, but in one that produces both predictable and negative outcomes—yet we are still "asking the wrong questions." Yet, the problem with the right question, Lüscher suggests, is not simply that it cannot be raised by Preising, or within the closed world of his narrative. Rather, the impossible question references an inescapable inadequacy of our interrogations of the crisis that is predicated on the fundamental representational difficulties that a larger crisis of financialized capitalism has exposed.

2.1.2. Martin Suter's Der Koch

Similar to Lüscher's novella, Martin Suter's novel explores the effects of a crisis on a cast of literary characters. However, rather than describing a fictional crisis, *Der Koch* follows the factual political and economic events of the first years of the Global Financial Crisis (2008-2009). In the following reading, I trace Suter's formal and narrative strategies which rely on a mobilization of the imaginary of blame. I argue that if stereotyping and personification allow Suter to represent the critical forces of crisis as the complex interplay between the local and the global, these techniques also expose the limits of narrative representation. Finally, if *Der Koch* superimposes a moral order over the chaos and imbalances the crisis exposed, Suter, through the characters in his novel, offers a moment of conscious reflection on representative inadequacies and a need to compensate for them.

Suter tells the story of Maravan, a Tamil immigrant in Switzerland. Maravan is a talented cook, having learned the secrets of Ayurvedic cuisine and its knowledge of aphrodisiacs in his youth in Colombo. However, when the novel opens in March 2008, Maravan is an asylum seeker and working as a dish washer for Chez Huwyler, a luxury restaurant in Zurich where he is mocked and belittled by the chefs. The restaurant, which specializes in molecular cuisine for well-off patrons, is a meeting point for the international

business elite. Among them is Eric Dalmann, a businessman and networker who lost a lot of money in the stock market.

When Maravan loses his job for secretly borrowing high-tech kitchen equipment for his private culinary experiments, he becomes desperate for money to support his relatives amid the civil war in Sri Lanka. Entrepreneurial waitress Andrea (who experienced the aphrodisiac quality of Marvan's cuisine firsthand) guits her job as well and convinces Maravan to start an erotic catering service, Love Foods. Because of Maravan's religious and moral concerns, the catering is first oriented towards married couples and the dinners are arranged by a therapist. However, due to financial difficulties amid the crisis, the catering must expand its clientele; Maravan, pressured for money by his diaspora, is forced to lower his standards. Love Foods becomes involved with shady businesspeople, ransom and prostitution. Among the patrons is Dalmann, under pressure himself from the financial crisis and his losses; he arranges for semi-legal arms trades and caters the events with Love Foods. Before long, Maravan becomes aware that Dalmann is also profiting from the war in Sri Lanka. Marvan conspires with Makeda, a call girl from Ethiopia who had uncovered Dalmann's involvement in the arms trade, to kill Dalmann. When Maravan cooks his love menu for a last time, Dalmann dies from a heart attack.

The story is told by a third person narrator and moves between the main characters in the narrative. This allows the novel to switch between different socio-economic layers in which the critical events of the crisis years are perceived and represented. These layers are the worlds of well-connected business tycoon Dalmann and of struggling immigrant, Maravan. Suter, who has frequently written texts set in the world of high-powered managers and the business elite, ⁴³ consciously chose an underdog as the protagonist of *Der Koch*. As he revealed in an interview, the author did so in order show the "biggest possible contrast" (Suter 68). Through this contrast, Suter sketches a web of the effects of critical global forces of the crisis: from Dalmann who loses his investment money and in consequence makes shady business deals, to Maravan who can't find work, to support himself and his family back in Sri Lanka and as a result lowers his own ethical standards.

In contrast to Lüscher's representation of the crisis as an impersonal, external force that affects his characters, in Suter's novel the effects are explicitly bidirectional. Dalmann and Maravan are simultaneously victims or playthings of economic forces, part of and partially responsible for the critical events the novel discusses. As the negative portrayal of Dalmann and his business partners (rendered in Suter's characteristic ironic prose) contrasts with the downtrodden but upright hero Maravan, his conspirators, and their final act of vigilant justice, it is easy to read also Suter's narrative as another moralizing confirmation of the dominant imaginary. As one commentator from the German FAZ had it, Suter "sketches a veritable horror cabinet of nothing but evil, corrupt, greedy and sexobsessed business tycoons. In their attempt to dodge the impending Financial Crisis whilst even trying to outsmart each other, the characters all too stereotypically reveal the ugly face of capitalism."⁴⁴ Thus, in the novel, the crisis works as a catalyst to unveil this "ugly face," but if the crisis has also uncovered a world out of balance, Suter reaffirms, or

⁴³ See e.g. Martin Suter's weekly column about the *Business Class* (Suter, *Business Class, Bd.1, Der Manager in der Westentasche*; Suter, *Business Class, Bd.2, Mehr Manager in der Westentasche*; Suter, *Business Class, Bd.3, Noch mehr Manager in der Westentasche*)

⁴⁴ Translation by Kaipainen "Suter entwirft ein regelrechtes Gruselkabinett aus lauter bösen, korrupten, geldgierigen und sexbesessenen Wirtschaftsbossen. In ihrem Versuch, sich vor der drohenden Finanzkrise wegzudrücken und dabei auch noch gegenseitig auszutricksen, zeigen die Figuren allzu schablonenhaft die hässliche Fratze des Kapitalismus" (Kegel).

superimposes a stable moral order. If the commentator sees this as "morally justified," but as leading to an "artistic dead-end," it is worthwhile to study the textual strategies (other than the positive and negative stereotyping of characters) that allow Suter to represent the interconnectedness and complexity of the crisis, while simultaneously exposing the limits of such a representation. Ultimately, while Suter is successful in bringing the seemingly distant and abstract forces of crisis to life, the moralizing tendency of the novel points to a more primary issue of narrative representation.

"The Financial Crisis had arrived in Europe," Suter writes in the first half of *The Chef* (*Der Koch* 132). The year is 2008. However, instead of a setting like Iceland (which barely avoided state bankruptcy), or Spain or Greece at the onset of the Eurozone crisis, the novel is set in relatively tranquil Zürich, Switzerland. The location is the luxury restaurant Chez Huwyler, while the crisis did not arrive for most of the well-off patrons that evening, it arrived for one guest, Eric Dalmann, who is dining with his investment counselor. The latter lost a good amount of Dalmann's investments: "At Huwyler's the crisis had not yet arrived, except in the person of Eric Dalmann (*Der Koch* 132).⁴⁵ This odd formulation, "in the person of," demands a second look. Already at this point of the plot, Suter seems to point towards a crisis that *is* Dalmann rather than a crisis happening *to* him. How Dalmann's persona is indeed representing or is made to represent something bigger, is part of a textual strategy of personification. At this point, the restaurant scene in urban Switzerland and the portrayal of Dalmann as both a winner and victim of financial capital is clearly ironic, echoing Suter's satirical texts about the personal problems of rich

⁴⁵ All translations by Kaipainen: "Im Huwyler war die Krise noch nicht angekommen. Außer in der Person von Eric Dalmann" (*Der Koch* 132).

and famous managers from the New Economy in the 90s. When Dalmann complains about losing his personal "venture capital," his loss appears minor in contrast with the hardship that the Global Financial Crisis has brought to others and other parts of the world (*Der Koch* 133).

In fiction as well as reality, the impression of geographical distance can be deceiving. Certainly, Switzerland may not have been hit as hard as other nations in Europe, and Europe was not as severely affected as other parts of the world. Yet, as sociologist Saskia Sassen (*Globalization and its Discontents*) has argued even before the most recent crisis, the divides between those who benefit from economic globalization and those who are marginalized do not run across a tidy, geographically-defined global North-South axis, nor are such differences captured in strictly national terms. As Sassen argues, the South is embedded in the so-called North, and vice versa, and the global is connected with the sub-national through flows of capital and labor migration, which undercut national economies. Nowhere are the coexisting inequalities and contradictions of the contemporary economic world order more apparent than on the brightest nodes of the web of globalization, the big cities, big cities; financial hubs like Tokyo, New York and, indeed, Zürich.

Similarly, in Suter's novel, it only takes a few steps from the table of Dalmann to pass from one world to the other. The reader is quickly taken through the swinging door of the heavily decorated dining room, into the kitchen where Maravan gets by as a kitchen help. As a migrant laborer, Maravan represents another nexus of crises in Zürich extending well beyond the financial havoc of the late 2000s. In the person of Maravan, 25 years of both regional and civil conflict in Sri Lanka, the critical experiences of migration, marginalized labor, and of diaspora, arrived before the financial misfortune of Dalmann and others. In the run of the novel, Dalmann's dubious line of work at the height of the Global Financial Crisis, the labor of Maravan and the war in Sri Lanka are destined to collide.

The novel's multiple economic relationships form a tragic-ironic constellation: Maravan cooks for and is paid by Dalmann, while Dalmann makes money arranging for semi-legal arms export from Switzerland to Sri Lanka. These exports fuel both sides of the war that dislocated Maravan. In return, Maravan, whose catering service serves the rich and powerful, is pressured by parts of his own diasporic community to donate his earnings to the war efforts of the Tamil Tigers, who then spend their money on arms deals arranged by people like Dalmann. In Suter's fiction, the war in Sri Lanka—what Makeda, another migrant character, calls a "third-world-war" (*Der Koch* 250)—is more intimately linked with the economic upheaval, and closer to Zürich, than it appears on the surface.

The economic and political events of 2008-2009 (a presidential election in the US, the end of Lehmann Brothers, an arms-trade scandal in Switzerland, and a global recession) accompany the plot of the novel from the beginning. As the text proceeds, the crisis comes increasingly to the foreground, driving the actions of its fictional characters. Put differently, to tell his story, Suter synchronizes world time and the fictional-subjective time of his characters as the global crisis unfolds, and determines the lives and livelihoods of the worlds of Dalmann and Maravan. In doing so, the global crisis is translated into personal crises and character motivations, not simply a set of larger, impersonal, external forces. The novel dramatizes how the dealings of a diverse set of actors, though local in nature and motivated out of personal need or ambition, are part of and take part in a larger

world in crisis. The various crises do not merely provide the backdrop for the author to tell a contemporary story. Rather, the novel illustrates, by way of personalizing news headlines from the first years of the crisis, how seemingly-distant global forces of war and capital are linked, channeled through, and coproduced by the local, personal and private.

The obvious price for this textual strategy, which allows managing and illustrating the complexity of an interconnected world in crisis in a novel, is simplicity and schematism. Because Dalmann, not only stands for a world economy gone wrong, but is also portrayed as morally flawed, this can be read as forced moral simplicity, keeping in mind the complex system the novel seeks to illustrate. Yet Suter raises the issue of a simplistic representation that symbolically over-determines the role of an individual at a deciding point of the narrative. Towards the end of the plot Makeda visits Maravan after the involvement of their shared client in arms trades is exposed. As both Maravan and Makeda were displaced by wars, she desires revenge and suggests they murder Dalmann:

Marvan dismissed the plan with a wave of his hand. 'Dalmann is small fry.' Makeda nodded. 'But he is our small fry.' Marvan said noting. After a long silence, Makeda said intently: 'He stands for all the others.'⁴⁶

Thus, Dalmann is not deployed by Suter solely to represent a corrupt economic order within the dramatic arc of the story, but for the characters of the novel, who are aware that he is only a cog in a larger machine, he stands in symbolically "for all the others," to help them make sense of a world out balance. Even the final act of killing Dalmann

⁴⁶ "Maravan machte eine wegwerfende Handbewegung. 'Dalmann ist ein kleiner Fisch' Makeda nickte. ,aber er ist unser kleiner Fisch.' Maravan schwieg. Nach eine langen Pause sagte Makeda eindringlich: 'er steht für all die anderen'" (*Der Koch* 277).

becomes part of this symbolic need or desire. A migrant prostitute and a migrant chef from quite different backgrounds come together to plot murder. Makeda wants Dalmann, who is suffering from a heart condition, to "screw himself to death," while Maravan wants to poison him with his food. Not only do the servants of the rich and powerful turn against their masters (in a faintly Marxist trope), but, in the symbolic order of the novel, it is their services that will kill Dalmann, the services on which the machinery of a seeminglyimmaterial, financialized globalization depends. If the issue of moral simplicity or symbolic over-determination in considering a complex and interconnected world is not resolved, this moment in the novel addresses and complicates the relationship between a transnational economy in crisis and its representation in the symbolic order of a novel. Suter himself answered the question, from the German magazine *Focus*, as to whether his novel was about "morals" or "the amorality of the business elite" as follows:

No. It is, and only among other things, about people that betray their principles, sometimes with very respectable financial motives. It is, if you want, a proxy drama, in which nobody is directly responsible. With an amoral, yet slightly moralistic ending.⁴⁷

Regarding plot, the narrative need for symbolism and simplification is thus not hidden, but motivated through the diffusion of meaning and responsibility in a seemingly-impersonal, abstract network of human affairs. This is part of the referential problem of the crisis that

⁴⁷ Trans. by Kaipainen: "'Es geht Ihnen in dem Buch also um die Moral beziehungsweise die Amoralität der Wirtschaftselite?' 'Nein. Es geht, und zwar nur unter anderem, um Leute, die Prinzipien aus zum Teil sehr ehrbaren finanziellen Motiven verraten. Wenn Sie so wollen, ist es ein Stellvertreterdrama, bei dem niemand direkt verantwortlich ist. Mit einem unmoralischen, aber etwas moralistischen Ende'" ("Die Anarchische Wirkung" 30).

no one is directly responsible. It is the disorienting lack of both definite causes and accountability that the Global Financial Crisis exposed. Ultimately, Suter's novel grapples with the same conundrum that informs Lüscher's novella, approaching it with a different literary solution. If Lüscher's novella refuses to recreate (moral) order for his readers (and is pointedly set in a mental institution), Suter's self-reflexive attempt to do so sheds light on a more fundamental limitation of novels, or narration as such. As narrative representations of crisis, Lüscher's critical (or nihilistic) description of the status quo, and Suter's offer of moral meaning and vigilante justice to the reader, necessarily simplify and create order out of extra-literary reality, in trying to capture chains of responsibility, or show their diffusion to the point of their absence.

Maravan, with his trade as the titular "Chef" of the novel, opens another way to examine the uneasy relationship between economy and aesthetic representation; respectively, labor and artistic production. Throughout the novel, Maravan is both a migrant and laborer and an artist. If the reader first encounters Maravan as the former, a lackey for star chefs in the kitchen of Chez Huwyler, in his later catering service he can practice what he understands as his art: cooking. He is caught between Switzerland and the Tamil Diaspora; similarly, Maravan's art draws from multiple worlds. Those worlds are the traditional art of Ayurvedic medicine and aphrodisiacs native to Southeast Asia, and the marriage of modern sciences with cooking in the Western art of molecular gastronomy. While Maravan struggles with both parts of his identity, as a chef he successfully combines the two.

Thus, if Maravan's migrant identity is caught between two conflicting worlds, his art is a hybrid art. More than that, the aphrodisiac knowledge of Ayurveda and its recipes are not simply updated, or refined to the taste of the West, but strangely enhanced in the process. In Suter's fiction, the western techniques and technologies of molecular cooking, together with the Ayurvedic wisdom, make for a moment of magic realism. In concert, the two have a magic transformative power as the sexually stimulating results are instant; like a love potion in fairy tale, they overpower the will (or in Andrea's case, the sexual orientation) of those who eat the dishes. However, as much as his art is able to transcend and transform conflicting worlds, the magic is co-opted and tainted by another transformative power: money and the multiple economic relationships in the novel that make up the tragic-ironic constellation, discussed above.⁴⁸ Tanja Rudtke has argued that sophisticated food in Suter's novel is mainly "the sign of economic success," a "status symbol" for a "corrupt" financial elite, which ultimately illustrates "the power of money" (253). This is namely, the venality of "sensual experiences," where sex and Maravan's molecular cuisine are commodified and "instrumentalized in multiple ways" (253).

In the schematic assemblage of the novel, the commodification of art is linked with becoming complicit in the morally (pre)qualified economy of the text. Given Suter's strategy of personification in dealing with abstract concepts or relations regarding the economic crisis, in the person of Maravan, the text similarly offers a reflection on the role of artistic production in relation to economic globalization. Art, as seems suggested here, is potentially magical, transformative and transcendent, maybe even a means of positive cultural exchange. Further, the hybrid art cooked up in Maravan's kitchen promises to

⁴⁸ The quasi-magical or "transformative" nature of cooking in general is addressed by Maravan himself in another context: "Back then I learnt that cooking is nothing else than transformation. Cold to warm, hard to soft, sour to sweet. That is why I became a cook. Because transforming fascinates me."

[&]quot;Damals lernte ich, dass Kochen nichts anderes ist als Verwandeln. Kaltes in Warmes, Hartes in Weiches, Saures in Süßes. Deswegen bin ich Koch geworden. Weil mich das Verwandeln fasziniert" (*Der Koch* 207).

leave national, or regional affiliations behind. Even as his art offers an escape, it is recaptured by a morally flawed economic sphere.

Here, Suter's certainly problematic Orientalist activation of exotic and erotic India, with old and secret arts, serves as a trope regarding a quality of art always already lost to the totality of a global economic rule. This discourse about the transformative power of economic forces over art is similarly at work in Lüscher's novella, where Pippa feels that literature and poetry have become marginalized by the power of finance; this power extends to threatened sense of selfhood experienced by Sanford and Preising. In *der Koch*, the penetration of money and economic forces into everyday life and identity is exemplified by a scene in which Maravan's character seems fully defined by the contents of his mailbox. Upon arriving home, he discovers: a colorful brochure of a conservative party, advertising their policy for a tougher stance on immigrants, a mail-order catalogue for high-end kitchen gadgets, and an invitation for a fundraiser of the Tamil diaspora in Switzerland.

Conversely, the transformative power of art has a seductive quality on its own, with the offer of aesthetic transformation of economic chaos and injustice into an understandable and morally legible network of human affairs. Certainly, Suter's novel, which between 2010 and 2015 has seen 52 editions and was published in 11 languages, is curiously entwined in the relationship between the artistic and the economic. The author, a former marketing professional and director of the Swiss art directors club, is no stranger to the successful means of selling ideas. That is to say, the stylistic, rhetorical and thematic choices do not simply lend themselves to expose how seemingly intangible economic forces are produced locally. Rather, they also allow for a successful commodity: an entertaining, timely story, an accessible language, a complete dramatic arc, the fulfillment of reader expectations; in short, a bestselling novel. Suter's reliance on conventional literary techniques and tropes such as the personification of abstract concepts and his offer to understand an unhinged world in terms of good and bad, labor and capital (rather than say an experimental novel that both enacts and exposes the issues of representation for the reader) are part and parcel with this.

To conclude, in Suter's novel, a textual strategy of personification allows for an aesthetic reconstruction of a transnational economy, with which the text engages. However, in doing so, the symbolic economic relationships in the text at once expose and limit the complexity they seek to model. Further, in this attempt to turn the economic crisis into a narrative, Suter simultaneously points to the issues of representation, and the transformative potential of the aesthetic discourse, while his reliance on older forms reintegrates the uncertainties and unsettling into an older cultural mode of understanding. Maravan and Makeda's desire to hold someone responsible corresponds to the larger issue I characterized in my CPE critique of the dominant imaginary, i.e. the difficulty of understanding the economic order that became unraveled through the Global Financial Crisis (the epistemological shock) and the seductive, convincing nature of the imaginary of blame that sidesteps the epistemological work the crisis necessitates in favor of a reassuring moral legibility of the world.

2.2. Screening the Crisis

Like the rich and lasting tradition of anti-heroes of finance in literature, cinema has produced colorful (and black-and-white) visions of men and money. Setting aside the differences between the two media, stereotypes and popular suspicions have traveled between the page and the screen and, in popular film, have perhaps been less subtle. As *The Economist* observed in a comprehensive survey of Hollywood film: "Generally, the role of businessmen and financiers in films is as pantomime villains, ruthlessly pursuing profit at the expense of human life" ("Money in Film"). Even when the fabula does not focus on bankers or financial events, finance as conspiracy, shady Swiss bankers, offshore accounts, and callous men in Armani suits are part of the standard vocabulary of popular cinematic fiction. As Coffin and Renaud have pointed out, even an animated children's film, *Despicable Me* (2010), casually references the Global Financial Crisis in this vein. The main character visits the Bank of Evil, a bank that funds villains and evil plots around the globe, to apply for a loan. The visuals are telling: said bank is hidden in the restroom of a boring and respectable looking bank, and the placard above the door that displays the bank's name as "Bank of Evil," though small letters read, "Formerly Lehman Brothers."

If literature since the nineteenth century has been understood as a defining cultural force of financial imaginaries, the last hundred years might have done more than simply added the medium-defining twentieth century mass culture to the media landscape. Rather, the history of the emergence of cinema is intimately linked with the arrival of financial modernity and more profoundly linked than film production's intensive need for capital might suggest.⁴⁹

⁴⁹ For how film in its early decades became the intense focus of financial practice, involving among others investment banks like the Lehman brothers, and Merrill Lynch see Gabber Bakker "The Economic History of International Film," who proposes the following comparison in the emergence of cinema: "the motion picture industry became the internet of the 1910s. When companies put the word motion pictures in their IPO investors would flock to it" (Bakker).

Owen Lyons, in his extensive study of cinematic representations of finance in Weimar film, investigates the simultaneous emergence of a qualitatively new stage of finance and of a new form of cultural representation. He argues that if the seismic shifts in international markets started to transform everyday experiences around the world, filmic depictions of finance "gave form to the otherwise invisible forces of financial exchange. (...) For non-specialist viewers of these films, fictional accounts of financial activity provided an image of the interconnected global economy, and distilled its complexity into key tropes and stereotypes" (i). Adding to an argument connecting cinema, in more general terms, with modernity as a medium that technologically and representationally reflected and restructured the social and psychological experience of a dramatically changing reality of time and space (see e.g. Elsaesser, Doane, Creary), Lyons insists on finance as the "specific scene of crisis" that constitutes the key markers of modernity, as "an increasingly financialized everyday experience, and a growing awareness of the central pressure of the world economy" (151).

In his analysis of Weimar cinema, Lyons positions Fritz Lang's *Dr. Mabuse* (1922) as a symbolical center of the cinematic image of finance: "Dr. Mabuse is an 'allegory of modernity' that produces the distended abstract space of a newly emergent 'world economy" (9). For Lyons, the film's central character, Mabuse, is a "figure of the new international economic order that threatens notions of territory, border, and nation" and provides a face for the menacing experience of money and finance, both everywhere and nowhere, tied up in the rational and irrational (9). Yet, Mabuse is more than purely negative figure. Lyons, in engaging with the historical fascination for Lang's movie and the seducing qualities of its central character understands Mabuse as "an anti-hero that

represents a fantasy of mobility and vision that is tied to the free flow of capital, for the new demographic of financial workers" (Lyons 152). The archetype that emerges in Lyons' analysis of *Dr. Mabuse*, representing both the lure and threat of modern finance, expresses a set of characteristics of cinema's anti-heroes of finance that has persisted through the history of film until today. As will become clear in the following analyses, the double life of Mabuse in cultural perception as a positive fantasy and negative stereotype, closely resembles both *Wall Street*'s (1987, 2010) Gordon Gekko and the *Wolf of Wall Street* (2013).

Outside of Weimar Cinema, pre-Hollywood film in its early decades established an enduring language to depict finance on the silver screen. D.W. Griffith's Corner in Wheat from 1909 serves as a paradigmatic example. In contrast to Dr. Mabuse's invocation of the occult and uncanny in finance, Griffith offers a heavily stylized but decisively realist short drama about a ruthless tycoon who corners the world wheat market. The film more immediately addresses the uneasy feeling towards modern finance and remarkably combines cinematic innovation with the morally familiar. Cross-cutting, the cinematic novelty of this piece, demonstrates the effects of stock manipulation and rising grain prices, by cutting back and forth from a trading floor, to the mansion of the Wheat King, to a bakery shop, to a farm. More than simply establishing a relationship between different locations and actions, cross-cutting contrasts the lavish wealth of the cigar smoking "Wheat King" and his high-society entourage and the downtrodden misery of the working masses. The brusque cuts between seemingly-disparate settings suggest a larger picture of the simultaneity and interdependence of economic processes and a visual expression of near-instantaneous chains of cause and effect of financial movements across the entire

economy. In this case, the cuts evoke continuity in the sense of a unidirectional responsibility of the speculator, tying his gains and wealth to the suffering and poverty of everyone else. Towards the end of the movie, the Wheat King meets an ironic fate as he accidentally falls into a wheat mill and dies. For the fictional plot, the accident indicates a kind of higher justice that does not help, mitigate or end the social misery he caused. In a last shot, we see the farmer despairingly working his fields as the night falls. Nothing seems to have changed for him. Rather, the crimes of the financier, are not persecuted in this world (whereas the folks who can no longer afford their bread are taken away from the bakery by the police).

If the central technique, cross-cutting, was formalized in early documentary film and forms the basis of radical soviet montage to deploy editing as a didactical tool that evokes new, complex relationships between discontinuous shots, in popular narrative cinema (the focus of this chapter), it became an indispensable tool. For Griffith, in the form of continuity editing, established editing conventions would allow for a consistent and logical progression of narrative (rather than abstract concepts.) Hence, *Corner in Wheat*, shows the representative potential of film to engage with complex economic phenomena, but also establishes a cinematic convention that would subsume such didactical gestures under the primary of narrative. Already in *Corner in What*, the focus of the film is on the story to be told in a chronological progression: the actions of a tycoon that bring him riches at the expense of society, and his symbolic death, which provides moral closure and clarity. Even if finance-film has never become a distinct, popular genre and films that have focused on financial events have been rare, in popular narrative cinema, characters like the Wheat King, and narratives of crime and punishment, hold an iconoclastic and defining power in the cinematic depiction of finance.

Since 2008, the list of films dealing with finance and the ensuing global economic crisis has grown. Many documentaries—e.g. American Casino (2009), Capitalism: A Love Story (2009), Inside Job (2011), Der Banker: Master of the Universe (2013)—stand next to dramatizations of real events, such as The Last Days of Lehman Brothers (2009), Too Big to Fail (2011), as well as dramas, such as Margin Call (2011), The Company Men (2011), The Big Short (2015), an action movie (Assault on Wall Street, 2013), a comedy (Bailout, 2012) and a romantic comedy (Larry Crowne, 2011). Yet, as film scholars Kinkle and Toscano maintain, "by contrast with its enduring attraction to images of social and environmental collapse, which may now double as allegories of economic crisis, mainstream U.S. cinema has produced few depictions of the unfolding process of crunches, defaults, and devaluations, and ever fewer of these have been compelling" (39). The filmic strategies that the authors identify testify to the difficulty or impossibility in moving beyond cinematic convention in framing finance. While crises "make the abstract concrete, the invisible visible" and offer many compelling images, the dominant modes the authors observe run the risk of "framing the crisis in familiar narratives and clichéd images" (40).

In terms of the popular imagination of finance and the dominant imaginary of blame, it is striking that almost all of these films choose to search for origins, explanations, and the spectacle of the Global Financial Crisis in banks. Like the novels analyzed in the last part of the chapter, films tell of the biographical impacts of the crisis that are resolved privately or tell tales of greed and hubris of individual bankers, which are then resolved morally. As a result, Kinkle and Toscano conclude that, at least in popular cinema, "any useful glimpses of a social and political map get lost because of the urge to personify greed or suffering; any sense either of the broader dynamics or of the possible levers of change vanishes into the background" (50).

However, for literature as well as film, the representational shortcomings are instructive and bring a larger crisis of representation into focus, which is at the heart of the dominant imagined recovery. Thus, in this part of the chapter I analyze two of the many possible Wall Street banking and finance films that have come out in the years since 2007. Oliver Stone's reanimation of the "personification of greed," Gordon Gekko, in *Wall Street Money Never Sleeps* and Martin Scorsese's *Wolf of Wall Street*, illustrate the limitations of personifying the issues and visually representing complex and largely invisible economic matters. In addition, these examples enlighten the role the communicative function of cultural production plays in the dominant imaginary, both in providing powerful images in support and a space for critically coming to terms with dominant imaginary of blame.

2.2.1 Wall Street: Money Never Sleeps

Apart from Wolfe's masters of the universe, Gordon Gekko, the icon of greed and the anti-hero of two *Wall Street*, is undoubtedly the most referenced fictional character in connection with the Global Financial Crisis since 2007/2008. Countless newspaper articles, scholars and some politicians have used Gekko (as played by Michael Douglas) as a signifier to come to terms with the how and why of the crisis. Prominent examples include a 2008 speech by Australian Prime Minister Kevin Rudd titled, "The Children of Gordon Gekko." Concerning the behavior of bankers leading into the Global Financial Crisis, Rudd suggested that we are "still cleaning up the mess of the 21st-century children of Gordon Gekko" (Rudd). Similarly, in 2009, Vatican official Cardinal Tarscio Bertone referenced Gekko's famous "Greed is good" slogan in a speech to the Italian senate, suggesting that in the wake of the Global Financial Crisis the free market had been replaced by a "greed market" (qtd in Doyle).

However, a close relative to Dr. Mabuse, the discursive mobilization of Gekko as a condemnation of unscrupulous finance has a curious flipside. As a New York Times review of Oliver Stone's second Wall Street movie Money Never Sleeps suggests, "back in 1987, 'Wall Street' may have been intended as a cautionary tale, but it has also always been an irresistible advertisement for the excess it condemns" (Scott). The double afterlife that fictional financier Gordon Gekko has taken on off-screen, as both the ultimate negative stereotype to criticize Wall Street and a role model that inspired Wall Street, is recalled in a Financial Times article entitled "How 'Wall Street' changed Wall Street" (Guerrera). The "20-plus real Wall Street denizens" interviewed for the article go on the record to express an encyclopedic knowledge of the movie's plot and Gekko's infamous one-liners, and chronicle how the movie became "a cult phenomenon on business school campuses," how it "inspired generations of financial people to ape the characters," how Gekko became "a hero" rather than a villain, and how the path of Gekko's in-film disciple, Bud Fox, from rags to riches, led to seeing in this "muscular, vivid portrait of money and its transformative social powers, a modern parable for the American dream with braces replacing bootstraps" (Guerrera). As Douglas had remarked in an interview, the continued resonance of Gekko in this popular vein has "probably been the biggest surprise of my

career; that people say that this seductive villain has motivated [them] to go into this business(qtd in Doyle). Director Oliver Stone said in 2009, "I can't tell you how many young people who have come up to me and said 'I went to Wall Street because of that movie' (qtd in Doyle)."

More recently, the lionizing perception of Gekko in the financial industry, led to another strange exchange between fiction and reality in 2012. Michael Douglas was enlisted by the FBI for a public service announcement in a campaign against securities fraud and insider trading, as part of a law and order effort in lieu of more stringent regulations, which has defined the dominant political reaction to the Global Financial Crisis. In the short segment, after a brief clip from the original *Wall Street* in which Gekko declares that "greed is good," Douglas addresses the camera not as Gekko but as Michael Douglas, the actor, to remind the intended audience that Gekko was fictional:

In the movie 'Wall Street' I played Gordon Gekko, a greedy corporate executive who cheated to profit while innocent investors lost their savings. The movie was fiction, but the problem is real. Our economy is increasingly dependent on the success and integrity of the financial markets. (Federal Bureau of Investigation)

Maybe tellingly, this let two writers on the *Financial Times's* finance blog, *AlphaVille* to sarcastically comment that Douglas' announcement was "a noble effort no doubt," even if his work for the FBI was "not as memorable" as series of Gekko quotations of the movie the authors proposed in contrast (Cottrill and Garcia).

In this section, I focus on the most recent movie starring Michael Douglas as Gordon Gekko, *Money Never Sleeps*, but analyze the film by referring to the original *Wall Street* film. The intensive cultural reception of Gordon Gekko's character features into the message of the second film. I retrace how *Money Never Sleeps* carries a critique of the Global Financial Crisis in line with the imaginary of blame, bringing back Gekko and his legacy as the original and more-relevant-than-ever archetype of the amoral, greedy financial executive. I also show how the struggles of Oliver Stone's sequel to incorporate the Global Financial Crisis into its narrative undercuts this critique, and exposes the limits of older modes of representations, making visible a deficiency that extends beyond the film.

Like the original *Wall Street* (1987), the plot of Oliver Stone's sequel (2010) is set historically two years prior to the date of its release, in the critical year 2008. In the film's prologue, Gordon Gekko is released from prison in 2001 after serving eight years for insider trading and securities fraud, of which he was convicted at the end of *Wall Street*. In a sequence illustrating both his legacy and how times have changed, Gekko is handed back his few belongings ("a money clip with no money in it") together with his mobile phone. The Dyna Tac Phone, one of the first handheld cellular devices, that in the original *Wall Street* movie was a visually prominent status symbol, is by modern standards a comically oversized and hopelessly outmoded contraption. Gekko exits the prison with no one waiting for him.

Seven years later, the main plot picks up in 2008 with financial trouble brewing. The former icon of greed, Gekko, is on TV promoting his book "Is Greed Good? Why Wall Street Has Finally Gone Too Far." Living in New York, Gekko's estranged daughter, Winnie (Carey Mulligan) runs a small, non-profit news website, and is dating Jacob "Jake" Moore (Shia LaBeouf), a young, idealistic broker at Keller Zabel Investments. Jake is the protégé of managing director Louis Zabel (Frank Langella) and is promoting green energy investments. When Keller Zabel's stock starts rapidly losing value, Jake finds Louis Zabel walking a dog in the park. Jake asks if the company is going under, but Zabel replies that he's asking the wrong question: "Who isn't?" Zabel tries to arrange a bailout for his company with the help of the federal reserve and other investment banks. However, his efforts are thwarted by Bretton James (Josh Brolin), head of rival firm Churchill Schwartz, which Louis Zabel had refused to bail out eight years earlier. Bretton offers to buy Keller Zabel's stock for a fraction of its value. The next morning, Zabel commits suicide.

When Jake hears the news, he is distraught, but immediately proposes to Winnie, who accepts. A few weeks later Jake attends a lecture given by Gordon Gekko at Fordham University. Jake introduces himself to Gekko as the future husband of his daughter. Gekko and Jake agree on a trade: Jake will try to reunite father and daughter and Gekko will help him to seek revenge for his lost mentor. Soon after, with the help of Gekko, Jake can confirm Bretton James' involvement in the demise of Keller Zabel. Jake spreads rumors about the nationalization of an oil field that Churchill Schwartz is heavily invested in.

After Schwartz's stock depreciates significantly, Jake is summoned by Bretton, who, impressed by Jake's audacity and skill, offers him a job. Jake agrees and in his new position, he impresses Bretton by convincing Chinese investors to fund fusion research with 150 million dollars. Jake participates in a fundraiser with Winnie and pays for Gekko to be able to attend, where father and daughter have an emotional conversation and reconcile. Over the next few months, the economy tanks and the stock market crashes. In an emergency meeting with federal regulators it becomes clear that all the major companies were holding the toxic debt that brought down Keller Zabel. However, Bretton

and his business mentor Julius Steinhardt (Eli Wallach) manage to scare and convince the Feds that drastic actions must be taken to prevent a total collapse.

At the same time Winnie announces to Jake that she is pregnant with a boy. After a motorcycle race in upstate New York, Bretton reveals to Jake that the Chinese investment is not going to be used on fusion research. Jake quits immediately. Gekko proposes a solution, using a \$100 million trust fund account he had setup for his children in Switzerland, to finance the research and save the company. Jake convinces Winnie, who never wanted the money, to now use the funds to make a difference. To avoid tax problems, Winne signs the money over to Jake, who entrusts the funds to Gekko to legitimize the money for investment in the fusion research company. However, the money and Gekko disappear. Jake realizes that Gekko had been using him to get to the money from the beginning. Jake confesses everything to Winnie, who breaks off their engagement.

Meanwhile, Gekko has established himself in London, running a hedge fund operation, capitalized with his daughter's money. Jake tracks Gekko down to propose one last trade: Gekko gives the money back, and he can participate in his grandson's life. Gekko refuses. Back in New York, Jake pieces together everything from Keller Zabel's collapse to the bailout of Bretton's own company and gives the information to Winnie who publishes the story on her website. Bretton James is exposed. The investors, including Steinhardt, promptly abandon Bretton and go to Gekko, who had been hugely successful betting against the market. Bretton finds himself under intense legal scrutiny by the government and his career is over. Sometime later Gekko reappears, he reunites Jake and Winnie and tells them that he deposited \$100 million into the fusion research's account anonymously. One year later, Gekko is seen along with Jacob and Winnie at his grandson Louis's first birthday party.

The narrative focus of *Money Never Sleeps* is on Jake, the main character caught in two intermingling and conflicting worlds of family and finance. Jake's ambition on Wall Street conflicts with his sincere love interest, Winnie, who despises the industry that has formed her father into a manipulative, money-obsessed, amoral criminal (or, arguably, the other way around). This central conflict is also encapsulated in Jake's idealistic struggle to use finance for good (green energy), which clashes with a Wall Street mentality mainly interested in short term profits.

Gekko enters this configuration in disguise: a seemingly-reformed man denouncing the greed on Wall Street he once promoted, momentarily assuming a similar position to Michael Douglas' FBI public service announcement. How bad must things have gotten if even Gekko is seemingly shocked by the greed on Wall Street? Just like the real would-be traders and MBA students who watched the original *Wall Street* with open admiration for Gekko, in the sequel, Gekko's legacy gives him a strange gravitational pull over Jake. Jake meets behind Winnie's back with her father, knowing she disapproves. Increasingly falling under Gekko's spell, Jake turns to questionable Wall Street methods to avenge his old mentor, and in doing so he finds a new father figure in Gekko. Gekko, a thoroughly mephistophelic character, offers his help in the form of trades; in return, Jake is supposed to reunite a repenting old man with his estranged daughter.

In seducing and threatening Jake, the true nature of Gekko—with whom viewers of the original movie are already familiar—is apparent from the beginning. However, it is

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not until he betrays both Jake and his daughter and runs with the money that he truly reveals himself. Leaving the relationship of Gretchen and Faust, respectively pregnant Winnie and Jake in shambles. Nonetheless, Gekko returns as a deus ex machina and in a short final scene, solves all the remaining conflicts at once. He returns the money to Winnie, and by investing the funds into fusion research as originally intended, fulfills Jake's original ambitions and earns his daughter's forgiveness. He reunites the couple and proposes to be the missing father figure in both their lives. The film concludes with a happy end, without dialogue, but showing Gekko, a happy Winnie and Jake united at their son's first birthday party on a New York rooftop. Yet, the movie does not end without a certain ambivalence: in the final shot, the camera lingers again on children blowing bubbles, and tracks the bubbles as the wind carries them high above the skyline, where they pop one by one.

While the above could comprise a family drama about the temptation of money and Wall Street, the film includes the Global Financial Crisis. While the original *Wall Street* centered around a young banker and two opposing father figures of apprentice Bud Fox (the corrupting Gekko and the working-class biological father), *Money Never Sleeps* introduces a third father figure: Bretton James. James, in Jake's eyes, is responsible for the suicide of Louis Zabel, but offers himself as a mentor. In an oedipal father-son relationship, Jake seeks to simultaneously impress and slay Bretton. He is lured by the possibility that Bretton wants to do more than just "polish his resume with a little green investments" (as Gekko suggests) and that he, together with Churchill Schwartz's massive capital, could "change not just the energy market, but the entire world." Bretton, in many ways, figures as a new, slightly updated Gekko. For example, he replies to Jake's question about how much money he would need to be satisfied ("What is your number?") by simply saying "more." Bud posed a similar question to Gekko in the original *Wall Street*, with Gekko deflecting, saying about the illusory quality of wealth, "It's a zero-sum-game."

Just like Gekko had betrayed Bud Fox in the original movie, Bretton betrays Jake, by redirecting the investment Jake had secured for fusion research to oil and coal. He does so on the grounds that if fusion energy would prove successful it would hardly be profitable. As a major financial force in traditional energy trading, such as oil and gas, the possibility of infinite green energy is a conflict of interest and a potential future loss for Bretton's company. After Jake's unsuccessful attempt to trade Gekko into giving Winnie's money back, the third father is slain instead of the second. Jake now decides to use his insider information to becomes a whistleblower. He brings down Bretton for illegal stock manipulation and alerts the federal authorities to a misuse of the bailout money. After Bretton is done with, Gekko returns to fulfill the family fantasy, now merely a successful businessman, and mainly a father and grandfather.

The visual style that follows this tale of finance and family is abounding with allegorical images and visual effects (split screens, super impositions, irises, and montages) that attempt to capture the feel and meaning of the financial world. Among the most noteworthy are a conversation in Central Park between Louis Zabel and Jake on the impending financial disaster, which ends with the camera lingering on bubbles children are blowing in the background rising high above the New York skyline. In the same conversation, the aging Louis, who is unable to control his positions in the market, is unable to control the young dog belonging to his wife. In Bretton's office, a painting by Goya, "Saturn Devouring His Son," foreshadows the two betrayed mentor-son and father-

daughter relationship. On two occasions, the up and down of stock chart is superimposed on the New York skyline, and the stock market crashing is announced by a montage of a continuously sped-up descent in a glass elevator, dominoes falling, etc.

The most visually and thematically noteworthy is a symbolically-charged montage scene that represents Jake spreading the rumor of the nationalization of an oil field. The part begins with a series of short sequences, first showing Jake sending emails from his workplace, then jumping from an up-scale reception, to a gym, to an art opening where Jake mentions the rumor to what appear to be investors. The camera leaves Jake and the footage becomes an ever-accelerating montage of split screens showing computer screens displaying graphs and numbers and people on the phone, on trading floors, on the street and in restrooms. The sound fades fasters and faster between voices and conversations, forming a cacophony of sound bites repeating the rumor and hastily issuing sales. Then, the camera cuts to a sped-up tracking shot of a man walking through a server room. Red stock tickers are superimposed along cables through corridors, and form a visual bridge to an unchained camera suddenly moving freely around in an abstract space of dark towers with myriads of screens displaying people making phone calls, TV news, and stock information. The sound bites continue but slowly fade into the background as the music plays louder and louder. While red and blue stock tickers continue to frenetically crisscross between the floating towers like traffic, screens start tumbling from high above towards the camera. The sequence ends one on of these screens and revealing Jake and his conspirator watching Mad Money, a TV show reporting the news on a completed trading day, explaining that both the stocks, the oil fields, and Churchill Schwartz took a significant hit.
The sequence is reminiscent of two similar moments in the original *Wall Street*, where the young hero Bud Fox manipulates stock using rumors, first as an introduction into illegal practices by Gekko, then used in revenge to wrestle his father's company out of Gekko's control. In the two movies, the visual and audible play of fast talking between fast cuts, illustrates how the ups and downs of stock value is dependent on myriad people buying and selling based on information, and how susceptible this system is to false information and outright panics. *Money Never Sleeps*, however, seems to insist on a qualitative difference. In *Wall Street*, the rumor was more directly managed by Bud with a montage of shots always showing him with another party on the phone, and him convincing the fellow brokers in his company in person to invest their clients' money one way or the other, culminating in a sequence showing the trading floor at the stock exchange in uproar and chaos. Bud remains in full control of the story he spins to the market.

In *Money Never Sleeps*, the rumor Jake spreads seems to take on a life of its own more quickly and dramatically, as the camera abandons Jake after he emails only his immediate clients, and shots show him talking briefly to a handful of investors. Further, in 2008, the trading floor is a thing of the past, and the sheer intensity, reach and availability of information everywhere in the digital age is made dramatically visual with double and quadruple split-screens and cuts between restrooms, streets, trading firms and TV shows around the globe (e.g. some of the sound bites are in German). This visual explosion of Jake's rumor is pushed to the limits of representation, i.e. in the final sequence, when the camera roams an abstract and frenzied space of screens and stock tickers. As part of the story, Jake's rumor of nationalization hurts the company owning the oilfield HYDRA, and

the market causes Churchill Schwartz, as a main investor, to join its nosedive. Even though Jake had presumably calculated this effect, *Money Never Sleeps* also illustrates a contagious effect of stock values reacting to movements in other stock values.

Throughout the movie, the stock and news tickers, TV screens and multi-screen trading setups of the above sequence form the backdrop of the financial and family drama. While these props help to set the nervous, information-driven mood of the film, apart from the sequence discussed above, the many screens remain a colorful, attention-absorbing, but ultimately opaque, surface. The phenomena behind the numbers, charts and headlines displayed are not further investigated in the film.

Similarly, the financial crisis itself is shown as a montage of ominous dominoes falling, stock prices speeding by, numbers turning red, clips of traders in distress, close-ups of headlines and snippets of news broadcasts. The sequence ends back in the plot of the movie, in an emergency, closed-door meeting between the Federal Reserve and the heads of major investment banks. For the rest of the sequence, the camera remains in the room where the government reaction to the crisis, in the form of seven- to eight-hundred-billion-dollar bailouts, will be engineered by the bankers, with Bretton taking the lead, remarking: "This isn't Keller Zabel. This is too big to fail. There are 70 trillion in Credit Default Swaps out there and we don't know where the bottom is." Holding the head of the federal bank at gun point, the closed society of bankers suggest scaring congress into compliance, and Bretton's business associate Julie narrates with a frail, eerie voice:

1929. It will be worse now because it will be faster. Money markets will dry up around the world by the end of the week. ATMs will stop spitting bills. Federal

Deposit Insurance will collapse. Banks will close. Mobs, panic [Julie leans forward and solemnly announces]: It's going to be the end of the world, Bill.

Between the real and fabricated footage of the montage and the fictionalized Fedmeeting, the imagery, buzzwords and specialized terminology pile up, with little information value for the spectator. Yet, the conclusive scene, taking place behind that what was visible to the general audience, provides a familiar and suggestive setting: a gathering of important-looking men, sitting in a dim, heavily-decorated room, making a deal. Since the moral quality of Bretton has already been introduced, and Julie positioned as a guiding force behind him, the scene is easily understood by the spectator: the government is either in on a shady deal or is being had by corrupt and greedy bankers, as Keller Zabel was.

Critic Daniel A. Nixon testifies to the confusion the financial events and terms might invoke for viewers: *Money Never Sleeps* "has a visual style as intricate and disorientating as the various financial TLAs (Three Letter Acronyms to you and me) it seeks to represent on screen. For every ARM there is an unnecessary split screen; next to every MBS a series of graphs fly up and down, or stock numbers rush in from all angles (...). Stone's standout qualities as a filmmaker are his convincing overreaching arguments and interesting visual style, yet here both seemed to have failed him, and the resulting movie is something of a mess" (Nixon). While many have remarked on the visual style as cumbersome and even "gimmicky" (Stevens), reviewers were generally less confused about the message of the movie: Bernhard Frankel suggests, in comparing both *Wall Street* movies, that *Money Never Sleeps* is "even more entrenched in power, money lust for the sake of entertainment and voyeurism" and understands both films as "morality tales in which the guilty ultimately get punished" (179, 181). Compressing the Global Financial Crisis into a conflict between the two rivaling banks, and a questionable bailout deal with the Feds, the clarity of the message derive from visualizing and illustrating the critical financial events, but by way of paralleling, doubling and allegorizing the economic issues the film raises in the central family drama. Gekko himself, reminiscing about the bond with Winnie before his daughter decided to cut all communication, offers the following comparison: "Relationships, they are like bubbles. They are fragile." From there Gekko jumps to referencing the Dutch tulip crisis from the sixteen century that he dubs "the greatest bubble story of all time."

Yet, if Gordon indeed pops the bubbles he creates in his relationships with Jake and Winnie, a more central example in the allegorizing of family relations is the economic concept of moral hazard that keeps reappearing in the film. The term generally refers to a situation in which one party bears the (usually financial) risk of another party. Moral hazard suggests that if someone doesn't suffer the negative consequences for his decisions, he is incentivized to riskier behavior. This notion is first referenced in its economic context by Bretton who bases his refusal to bail out Zabel Keller on this idea (and instead successfully manages to buy and takeover the company at a ridiculously low price). In the family context, moral hazard is referenced in a side plot concerning Jake's relationship to his mother. The former nurse keeps asking her son for more and more money, to float her constantly-failing real estate endeavors, until Jake cuts her off. Within the central family drama, moral hazard is most prominent in Gekko's betrayal of both his daughter and Jake. Winnie, having been disappointed before, keeps warning against reuniting with Gekko ("he will destroy us"). When she finally does give her father a second chance, he indeed betrays her. Finally, when Bretton and all the other banks press for the bailout that they had refused to give to Keller Zabel, moral hazard also comes to neatly encompass the critical stance of the movie: the bailout from 2008 is an example of moral hazard. If we assume the responsibility of the bankers for the crisis, then the bailouts have indeed resulted in the public bearing the cost of the risky and reckless behavior of the bankers. Moreover, since the bankers are not suffering the consequences of their behavior, not only will the bailouts not save the financial system, they will create further incentive for amoral behavior. Just like Gekko, Wall Street never changes; the bubbles keep rising, and both the next Gekko and the next crisis are certain.

Considering the critical message of *Money Never Sleeps*, Gekko's role has somewhat shifted from the original. Having spent time in prison and lost all his fortune, the crisis represents an opportunity for Gekko to reestablish himself. Having been an insider, he immediately recognizes what he sees on Wall Street. He uses the opportunity to successfully promote a book and explain what is supposedly wrong with Wall Street. However, in doing so he makes clear from the outset that he intends to benefit from the expected collapse ("There is fortunes to be made by betting against this bubble. Hundreds of millions of dollars. Just wish I had a million").

Gekko's successful return to the market is simply a proof of concept for his doubters and the viewer, validating his analysis of Wall Street and the bubble. Gekko understood as an allegorical figure explains the malaise of high finance that led to the crisis: the spirit of the 80s is still with us and has not been dealt with; what made the icon of greed successful back in the day defines success in 2008. As a result, the ingredients of the Global Financial Crisis—overleveraged investment banks, toxic assets, opaque derivatives and ill-advised government bailouts—are only referenced to illustrate the persistence of a culture of amorality, greed and reckless risk taking, while the dramatic arc of the fabula, the same shady back room deals and power plays dominate financial events also relevant in the original *Wall Street*.

The original *Wall Street* offered a more easily digestible moral lesson: Gekko is persecuted and punished. In Money Never Sleeps he returns to fame and fortune and goes scot-free. One can see this as another proof of concept: if the memorable line from Wall Street never sleeps was "greed is good", in Money Never Sleeps the line returns as "I once said greed was good, now it seems it is legal." Gekko is still around, only now he cannot longer be persecuted for what he does. What got him in 1987 was insider trading and stock manipulation; things, as Jake alludes to (when called on his oilfield scheme by Gekko) which are still illegal but have become "hard to prove." Yet, more decisively, these explicitly illegal practices appear to be things Gekko no longer needs in order to reap astronomical returns in a crashing market and widening recession. Not surprisingly, the contentious practice of short selling, to speculate on falling stock prices, is the defining strategy of the entire movie (Zabel Keller crashes because Bretton shorted the stock on a massive scale, Hydra and Churchill Schwartz depreciate because Jake's rumor suggests shorting their stocks). As the final shot and Gekko's return suggest, the problem persists, whether those who can be had, like Bretton, are brought to justice and those who can't, like Gekko, are not; so long as greed is legal, bubbles will continue to rise and pop.

In sum, the visuals and narrative of *Money Never Sleeps* seem to struggle to come to terms with the central events of 2008 depicted in the film, and it falls short of the qualitative difference between financial scandals of the 1980s and the Global Financial Crisis of the early millennium. The result is a strained attempt to preserve the moral clarity of the first movie, which focused on the schemes of insider information, corporate takeovers, and dramatized the detrimental social role of finance in a conflict between labor and financial capital. The representative struggle of *Money Never Sleeps* concerns the evolution of finance, and financial instruments, prompting Oliver Stone to say, perhaps with resignation: "I don't know how you show a credit default swap on screen" (qtd in Toscano A and Kinkle J 44). While "toxic debt" and the underlying financial instruments are referenced in dialogue and imagery in the movie, the film makes little effort to make them part of the central conflict or message, or to engage with them more deeply, visually or narratively.

Yet, apart from the more general and technical difficulty in visualizing the age of cyber-capital and its crises, there is a more decisive representational issue at stake. If Gekko, in his speech at Fordham University, presents the Global Financial Crisis as "systemic and malignant," Oliver Stone's film is unable to bring this to the screen. Rather than taking up systemic issues, *Money Never Sleeps* focuses on narrative and visual representation and condemnation of the same schemes that dominated the original *Wall Street*, i.e. stock manipulation and insider trading. Compared to its predecessor, the film simply updates the aesthetics with more computer screens, visually evoking the digital space and the speed and multi-directionality of messages in the information age. Tellingly, Bretton is ultimately persecuted for the exact crime as Gekko in 1987. Granted, in 2008 Bretton must testify in front of Congress for irregularities concerning his company's bailout. Yet, the film mentions this almost in passing, and in absence of a

dramatization of any larger social conflict that *Wall Street* had evoked with the hostile takeover of a unionized airline. To preserve its moral message, *Money Never Sleeps*, simply refurbishes its own stereotype (Gekko as an allegory, Bretton as Gekko) and narrative patterns from the first film. If the format of a family drama had been overstretched in trying to capture the scope and role of finance of the 1980s, the format visibly falls apart when engaging with the intricacies of present-day hyper-digital finance, and the film confuses more than it clarifies in its attempt to make sense of the Global Financial Crisis.

Yet, the shortcomings of cinematic representation of finance, rather than being a "cinematic failure" (Nixon), are revealing for the discussion of the dominant imaginary in many ways. Given the prominent place that Gekko holds in the popular imagination of finance since the first *Wall Street*, his cinematic return holds striking parallels with the way he was deployed as a signifier in the socio-economic discourse on the Global Financial Crisis (see e.g. Rudd; Bratone qtd in Doyle). The strategies that maintain the moral message correspond to the discursive effects of the dominant imaginary that preserve the status quo. Both film and imaginary forward and participate in a moral legibility of crisis, where threatening systemic questions and analysis are forfeit in trying to find those responsible for the crisis.

Further, the reluctance or inability expressed in *Money Never Sleeps* to engage more directly with finance, is not simply owned to the non-telegenic nature of abstract financial issues. Certainly, the technical complexity of the Global Financial Crisis poses an initial set of representational issues for narrative cinema, namely the prohibitive mathematical and legal complexity of the financial instruments at the heart of the crisis. Yet, this holds similarly true with documentaries about the Global Financial Crisis that seek a more systemic perspective. In the words of Kinkle and Toscano, "if they are not conduits for the explanations (or refutations) of economists, they often struggle to find forms that can effectively span the complexity of economic phenomena and their individual and collective repercussions" (44). More fundamentally, the epistemological difficulties that those technical complexities are embedded in, regarding e.g. the diffusion of causality and accountability in financialization, and the destabilization of conventional economic thought, emerge at the same time as representational problems of the narrative and cinematic form and point to a larger crisis of representation.

2.2.2 The Wolf of Wall Street

Arguably the most visually excessive study of the supposedly corrupt and debauched world of investment bankers in recent years is *The Wolf of Wall Street* (2013), directed by Martin Scorsese. The script was written by Terence Winter and is based on the memoir of Jordan Belfort, a former stockbroker who made a fortune in the 1980s and 1990s and who spent 22 months in jail for fraudulent investment schemes. In the following reading, I argue that *The Wolf of Wall Street* is a paradigmatic example for the strategies of avoidance, in terms of representing financial abstraction, that have emerged for both the socio-economic and aesthetic-cultural representation of the current crisis. Though set in the past and not directly representing the Global Financial Crisis (or attempting to represent economic matters at all) the film achieves a pure cultural-aesthetic instantiation of the imaginary of blame that emerged after 2007/2008.

The film tells the story of the rise and fall of Jordan Belfort (played by Leonardo DiCaprio) from his perspective, covering his career in investment, his personal life, and his company Stratton Oakmont in Long Island, New York. While the movie opens in the middle of an excessive floor party at Stratton Oakmont (a dwarf tossing contest), Belfort takes us back to his first job on Wall Street as a junior broker. He is soon initiated into a world of drugs, hookers and strong language. His first boss Mark Hanna (Matthew McConaughey) tells him the secret of success: frequent masturbation, cocaine, and never letting a client cash out. On Black Monday, October 19th, 1987, Hanna's company, L.F. Rothschild, goes out of business and Belfort is out of a job.

Since no one on Wall Street is hiring stockbrokers, Belfort starts working for a penny stocks operation out of Long Island. Belfort thrives in an environment where pink slips—under-regulated, cheap, and often worthless stocks—are sold to small investors with aggressive sales tactics ("I was selling garbage to garbage men"). A slick and cunning salesperson, Belfort manages to quickly amass a lot of money, taking a 50% commission. Soon, he meets Donnie Azoff (Jonah Hill), who, as soon as he learns how much money Belfort makes in a single month, immediately quits his job to join Belfort working penny stocks.

Azoff and Belfort team up to start their own penny stock boiler room. In order to attract richer clientele, Belfort writes a sales script for his gang of misfit salesmen and reinvents the company as Stratton Oakmont, a supposedly old and trustworthy company. As the business grows and starts to attract a significant market share from Wall Street, Forbes Magazine writes an article, calling Belfort the "*The Wolf of Wall Street*." None of this stops Stratton Oakmont from celebrating their successes with wild, drug-fueled

parties, including a naked marching band, hookers, and a scene where a female employee gets her head shaven if Jordan pays her \$10,000 (that she promised to use for new breast implants.)

Around the same time, the FBI becomes interested in Stratton Oakmont and starts investigating Belfort. Meanwhile, Belfort divorces his first wife for a new, blonde trophy wife, Naomi Lapaglia (Margot Robbie). He expands his company further and finds new, questionable ways to make money, including pump-and-dump schemes, money laundering, tax evasion to Switzerland and dubious IPOs. Around the same time that Belfort's company takes the shoe designer Steve Madden public, the FBI demands the wedding tape of Belfort's second wedding. Belfort, who hires a private investigator, eventually invites agent Denham (Kyle Chandler) and his partner to his yacht. He shows them the list of everybody in attendance to the wedding. When Belfort tells Denham about an employee he helped financially, by paying for his mother's triple bypass surgery, Denham interprets this as an attempted bribe. Belfort laughs the idea off and sends the agents off his yacht, mockingly throwing money at them as they walk away.

Another few months later, Belfort gives a speech on his floor to announce that he is stepping down from the company to pass the operation on to his partner Donnie, as part of a deal with the federal authorities. However, he changes his mind mid-speech, decides to stay and with a heroic gesture he proclaims that "they will need a fucking wrecking ball to get me out of here." Two years later, after an eventful trip to Europe, Belfort has sobered up. However, his legal problems and his domestic problems with his wife, who is threatening to take away their daughter, worsen. He is seen in an infomercial advertising his sales seminar, Straight Line. During the taping of the infomercial, Denham

arrests Belfort after one of his partners was arrested, incriminating him. Belfort makes another deal with the FBI, that he breaks once more, is left by his wife, arrested and brought to jail. The movie ends with Belfort out of jail and holding a sales seminar.

The narrative is presented in episodes and in mostly chronological order. The fabula is interrupted by music-driven montages, with frequent changes in film speed when depicting wild parties, and the sex and drug excesses of Belfort and his co-conspirators. The movie maintains Belfort's point-of-view, as he narrates from off-screen, over freeze-frames, or by suddenly addressing the camera in the middle of a scene. Some of these techniques set Belfort up as an unreliable narrator (in an early sequence his Ferrari changes color, when his off-screen voice insists that it was red and not white; later, Belfort explains how he managed to drive his Lamborghini home safely during a drug binge, but the camera later reveals his wrecked car.)

While this character setup establishes caution about the truthfulness of Belfort's seductive and self-glorified account of the events, the film at large offers few moral anchors for the amoral behaviors depicted on the screen. Rather, the performance of the actors, the writing, dazzling cinematography, editing and sound all come together to amplify and showcase the vulgarities and excesses Belfort described in his memoir.

As a number of commentators have noticed, the parallels between Scorsese's older films and *The Wolf of Wall Street* are an apparent critical comment on the contents of his newest picture: "[...] the movie's subject is the Wall Street mentality, which is just a clean-scrubbed version of the gangster mentality showcased in Scorsese's 'Mean Streets,' 'Good Fellas' and 'Casino' (one could make a case that guys like Belfort are the ones who pushed the Vegas mob out of Vegas)" (Zoller Seitz). Certainly, rather than

being a drama, the exuberance for debauchery the film displays has dark comical effects. While the critics condemned and celebrated the crass depiction of the crimes and excesses of *The Wolf of Wall Street*, the film struck an obvious chord with the popular imaginary that sees the amorality of investment bankers as responsible for the current crisis. That is to say, while the disagreement over the style and narrative choices of the movie persists (does the film secretly condone Belfort's behavior, or is it a cautionary tale?) and while the narrative itself is mostly set in the 80s and 90s and takes place before the onset of the Global Financial Crisis, *The Wolf of Wall Street* has nevertheless been received as a timely movie. In the popular imagination of Wall Street, Belfort easily enters the ranks of the "Masters of the Universe" (as he declares himself to be on the day he gets his license) or as Belfort's private investigator explains to him why the FBI agent is after him: "He thinks you are fucking Gordon Gekko."

The Wolf of Wall Street is linked to the Global Financial Crisis by more than its release date and by its portrait of yet another master of the universe. Belfort acts as an imagination of everything that is wrong with Wall Street and as a kind of picaro figure. As the film alludes in many ways, the bad boy of Wall Street (an outsider who runs his business out of Long Island rather than New York and trades penny stocks) is simply unmasking what was there all along. One of the more explicit references to the Global Financial Crisis occurs in the scene where Jordan invites agent Denham on his yacht. Belfort explains why he feels that it is unfair that "the new kid on the block" gets investigated:

'You should see what's going on at the bigger firms, I mean, I know all the information, it's true. Goldman, Lehman Brothers, Merrill... collateralized debt

obligations, listen to that stock bullshit, isn't it a fucking travesty? I mean, I could take you step by step to what exactly is occurring. All you have to do is ask.'

When Belfort mentions collateralized debt obligations (CDOs) it is an obvious gesture towards the movie's 2013 post-Lehman audience. While it is true that the earliest CDOs were constructed in 1987, they "remained a niche product until 2003-04" ("Collateralized Debt Obligation"). CDOs were hardly relevant for the "bigger firms" Belfort references in the time frame of the narrative. However, Scorsese's average viewer is likely to know or be at least familiar with the contentious, devastating role that the massive trading of CDOs played in the making of the Global Financial Crisis, and in the fate of Lehman Brothers and other institutions that either went bankrupt or were bailed out by the government. The comparison that Belfort offers to the spectator is twofold: one, his excesses are nothing different to what is going on Wall Street itself. Two, his more overtly ill-intended, or illegal deeds, are small compared to the perfectly legal schemes dreamed up at respectable firms, that banks which would ultimately bring the world economy to its knees.

While bankers and their schemes are the obvious target of satire, a second, more fundamental critique is at play in the film that points at the audience rather than those supposedly immediately in charge of the Global Financial Crisis. Granted, DiCaprio's interpretation of Belfort has all the seductive and sympathetic qualities of a picaro. Nevertheless, the three-hour, over-the-top cinematic depiction of debauchery drains the goodwill the viewer might have for a hedonistic scam-artist. As David Denby from the *New Yorker* has described, "satire presented this broadly ceases to have any instructive or cleansing effect. It becomes burlesque—lewd, vaunting, and self-promoting—and you

can get excited by it and feel slightly soiled at the same time." Denby concludes negatively that "Hysteria is not a very productive dramatic mode" and that:

The Wolf of Wall Street is a fake. It's meant to be an exposé of disgusting, immoral, corrupt, obscene behavior, but it's made in such an exultant style that it becomes an example of disgusting, obscene filmmaking.

However, the tension at the heart of the controversy about the film, whether the style is self-serving and repulsive (a kind of financial capitalism pornography) or a grand, thrilling cinematic achievement, diverts from the critique the film offers in this exaggerated fascination with itself. In a key sequence depicting Belfort's rise to questionable stardom, he is interviewed by Forbes Magazine. When the article is published, Belfort is outraged: "The Wolf of Wall Street" reads the headline above his picture. While his wife dismisses the bad news and compliments him on his hair in the picture, he is disconcerted with the text, which depicts him as a "twisted Robin Hood, who takes from the rich and gives to himself and his merry band of brokers."

The film cuts from Belfort's home to his office, and a tracking shot centers on Belfort as he walks in. In the middle of this movement, the camera suddenly pans to Belfort's right and towards some tumultuous noises. The camera reveals a large group of young men in suits, frantically waving their résumés as they try to get past Belfort's secretary and to their new idol. "It's the Forbes article," the secretary announces as the camera tracks Belfort once more, who now tries to escape a steadily increasing crowd of wannabe stockbrokers, "They all want to work for you." While the camera enacts the surprise for both Belfort and the viewer that a negative article caused "dozens of young men" to apply for a job with the Wolf, by the end of the movie, this fascination and lure of what *The Wolf* of Wall Street represents is taken for granted and pushed onto the audience. The movie does not close with Belfort's conviction, and (as other critics have bemoaned) it does not talk about the victims of Belfort's scams. Rather, the final sequence shows Belfort released from prison (where everything was "for sale"), walking into a sales seminar to loud applause (DiCaprio's character is introduced by the real Jordan Belfort, in a cameo). Belfort asks individuals in the first row to sell him his own pen. Just before the film cuts to the final credits and a version of Vince Guaraldi's "Cast your Faith to the Wind," the camera pans up and lingers for 15 seconds in silence on the faces of the audience with their eyes glued to the stage, anxious to learn the secret knowledge of how to become as rich as Belfort.

This final visual acts as the ultimate comment made by the film about viewers' fascination with characters like Belfort (that led them to sit through a three-hour movie in which Belfort neither learns nor changes). By figuratively seating the viewer in the seminar room, more than the distance between screen and audience is dissolved. Rather, this positioning of the viewer is an attempt to annihilate the very distance that satire and a moral judgment establish, between those people over there and ourselves, between a toxic culture on Wall Street and culture as a whole. As Belfort explains to the first crew of prospective employees at his boiler room, "Everybody wants to get rich." This is what ultimately drives him (Belfort, who is not a stranger to substances, describes money as his "favorite drug"). However, more decisively, it is also what enables his sales pitches to the garbage men that buy his pink slips and to the rich, in his more elaborate scams. The greed of the investment broker simply feeds of the greed of investors. Similarly, his initial Wall Street mentor, Mark Hanna, explains why stockbrokers (although "[they] don't

produce anything") are able to take home "cold hard cash": the clients always reinvest the winnings they have on paper, and never make it real, "because they are fucking addicted."

The Wolf of Wall Street is strangely pure in showing the larger fascination and addiction with money and the promise of what money might enable one to do. While Oliver Stone's *Wall Street: Money Never Sleeps* grapples with how to narratively and visually represent the workings of finance, Scorsese's film does little to show the viewer what Belfort's sales seminar audience might want to learn. In representing financial dealings in *The Wolf of Wall Street*, the film almost exclusively focuses on the (dishonest) sales pitch, and the spectator is left with practically nothing in excess of the initial business advice Belfort learns from Mark Hanna ("Cocaine and hookers, how else can one do this job?"). At one point, the film shows Belfort interrupting his own sentence in the middle of explaining a complicated financial scheme to the camera, to say: "But who gives fuck. The point is 22 million dollars in three hours!" This neatly summarizes the bigger picture of the movie that abandons any didactical impulses, in order to show, celebrate and condemn the supposed mentality of Wall Street, all at the same time.

The result is a film that is not directly about the Global Financial Crisis, yet mostly about the prevailing narrative that the crisis produced. *The Wolf of Wall Street* represents a strangely pure version of the dominant imaginary of blame. The film refrains from actual dramatization of finance and crisis and avoids analytical gestures, in favor of a relentless spectacle that shows the supposed immorality of individuals working in finance. However, the film ultimately attempts to explode the moral-cultural component of the imaginary, by seducing the viewer, daring the viewer to laugh, and holding a mirror to the real audience, in an effect similar to Lüscher's metaphorical character Preising: the spectator is held complicit in a world that enables people like Belfort to thrive. Yet, if both the *Wolf of Wall Street* and *Money Never Sleeps* are held together by a forced moral order over the dearth of real representation of finance, both films make these representative inadequacies dramatically visible. If these moments soothe the audience with the comfort of the dominant narrative of the imaginary of blame, they also express a heightened sense of unease that, without characters like Belfort and Gekko, both in fiction and in real life, we would glimpse into the abyss underneath the frail moral order, into to the illegibility and incalculability of modern finance.

2.3. Playing the Crisis

"Games are growing up," Suzanne Seggerman, president of the progressive game design community Games for Change stated in a *Time Magazine* article titled "Can Video Games Save the World?" (Faris 1). And she explains: "People are realizing that [video games] can do a lot more than entertain" (1). At first, Seggerman's statement seems bold when considering the current video game market and its popular reputation. Rather, to extend economist Richard Wolff's assessment of the contemporary popularity of catastrophe and monster movies in cinema, video games and their obsession with zombies, war and apocalypse seem in line with the idea that these tropes are nothing but a subconscious expressions of a culture that cannot face its own daemons (Wolff). An explicit negative connection between video games and the supposed cause of the Global Financial Crisis has been suggested by neuroscientist *Susan Greenfield* in a *Wired Magazine* article entitled "Did video games make bankers more reckless?" The

researcher who specializes in the study of "abnormal neurological situations" speculates that "the recent wave of recklessness among bankers was due, in part, to the younger generation having been brought up in two dimensions—subjected to prolonged time in front of a screen, immersed in the world of computer games" (Greenfield). According to Greenfield, since video games teach that actions have no consequences (death is followed by a restart), the games supposedly contributed to the irresponsibility of bankers, who viewed their field as a game.

However, on the sidelines of the ever prominent military-shooters and bestselling games of the crisis years (*Call of Duty*; *Battlefield*), promising developments regarding video games and a process of coming of age and reason can be observed. Already over the past 10-15 years a steadily growing number of fan-, artist- and activist-driven video games have emerged under such different categories as "serious games," "activist games," "subversive gaming," "gaming activism," or the aforementioned "games for change." As the labels suggest, what unites them is that these gaming movements are no longer interested in mere technologically-enhanced escape fantasies (whose purported inconsequence marks the danger that Greenfield speculates on). Rather, the movements try to use the potential of video games to take reality, its social and political and indeed economic issues head on.

It is prominent to observe, that many of these movements arise directly from a new wave of progressive video game theorists that double as video game designers. Names that stand out are people like Gonzalo Frasca and Ian Bogost and their (now defunct) initiative, *Watercooler Games*, as well as Tiltfactor Labratories, founded and led by Mary Flanagan (http://www.tiltfactor.org).⁵⁰

As the TIMES article testifies, even the media can tentatively be included in Seggerman's category of "people," who realize the change. All of this suggests a slow, yet remarkable, shift in the serious media's traditional role towards video games, i.e. from harsh cultural critics (that link video games to anything from school shootings to the Global Financial Crisis), to enthusiastic witnesses of what, in their account, might be the dawn of a small media revolution. However, the movements and alternative ways of deploying the media of video games are part of an independent avant-garde that does not necessary converge with mainstream of video gaming (regarding both sales numbers and style). As Mary Flanagan wrote in her book Critical Play: Radical Game Design (2009), "many social impact games use video game technology in innovative and novel ways in order to convey their messages, but in the end bear little resemblance to existing mainstream video games" (Critical Play 244). Hence, while Market Meltdown, a satirical British board game about the Global Financial Crisis, made international news (Geddie and Pal) a small handful of video games with an agenda such as Tiltfactor's Layoff (2009) and Subaltern Games' Neocolonialism (2013) were published more guietly online. In the following, I offer a brief discussion on how video games can be theorized and have been deployed as more than just entertainment. In doing so, I first introduce some key ides of classic Ludology and its critics such as Ian Bogost and his theory of procedural rhetoric. Second, this conceptual debate lays groundwork to analyze Tiltfactor's serious game Layoff, in

⁵⁰ See also Gonzalo Frasca "Video Games of the Oppressed" stating as early as 2001 that the intention of his work is to show that " videogames are not a trivial medium sentenced to merely serve as entertainment, but that they could also be a powerful representational form that encourages critical thinking, personal empowerment and social change" (124).

contrast with the educational simulation *The Stock Market Game*, by the SIFMA foundation.

2.3.1. From Ludic Theory to Critical Play

Similar to cinema in its early stages, video games struggled to find recognition and met a lot of cultural opposition. At the same time, scholars were struggling to establish video games (simultaneously popular yet despised) as objects worthy of study. For this task, various strategies had been set up. Video Game scholar Steven Poole sets gaming up as an "aesthetic experience," and thus video games as an "art." He suggests that an art form dependent on new technology always has had the quality to "make some people uneasy" (Poole 11, 13). If the common mode for the newly-established object of study initially was to compare or equate the new "art" to the old and known arts, and even approach games with the theoretical devices established for literature and film (namely narrative theory or film theory), there is a crucial difference, that Poole puts as follows: "It is this. What do you do with a videogame? You play it" (Poole 13).

With a focus on "play," the so-called turn to "ludology" in video game studies, in which Poole participates, is trying to establish video games as something radically different than film or literature. This is done mainly by focusing on a specific idea of "play" and playing as a dynamic interaction with a system of rules. Game studies occupied with this rather universalistic (formal or structural) exercise of describing videogames as interactive systems often neglected to address ethical, or ideological, questions surrounding their objects, let alone their potential to address larger social or cultural issues. The effects of realism on the player, so called "immersion" in classical ludology, is perceived as a first and necessary step and the result of good design. Yet, once immersed, the player is in control and free to do what he wants, while his actions have no consequences in an extra-ludic reality (Shapiro et al.). This assumption is maybe most vividly articulated in Martti Lahti's essay "As We Become Machines" from 2003. Following Lahti's argument, the push of the game industry towards immersion and identification with the (increasingly customizable) screen-avatar becomes a positively experienced, bodily escape fantasy. This is further described as a cyborg utopia where it is "safe" to try out different "races" or "sexes" for the player (167). Lahti concludes that the importance of games lies "in the fact that they challenge us to rethink audiovisual theories that have regularly articulated media spectatorship as a passive process". Active gaming, according to him, enables "carnal pleasures" that are "being mobilized by producers and sought out by consumers" (169).

Ludology, in its positive vision of realism, seems often to reject ethical or political questions as well as denying any relationship between the virtual and the actual world. The problem, however, with the formalist enterprise of merely considering games as interactive structures is not that this theoretical take ignores the questions. However, the celebration of player control, as a fully active imaginative activity, enhanced by the system of the video game rather than limited or controlled by it, entails a number of consequences. The totalizing notion of play invites the idea of opening infinite numbers of possibilities for the player, thereby rejecting the idea that the video game itself could contain a message or forward an agenda. That these questions are not at stake, seems to be the result of a theoretical premise, that refuses to theorize its subjects as positioned

by its system, or to recognize that their subjectivity is at least partly created rather than achieved.

Given the above, games studies seem lately to have moved from the "celebratory" into a "critical" stance (Dyer-Witheford and Peuter xxiv). A new interest in questions of ethics and ideology can be observed, and such an approach is not necessarily at odds with the achievements of ludology. Ian Bogost gave a keynote speech on at the 2009 Digital Games Research Association Conference, entitled "Video Games are a Mess" in which he stated, "So much of videogame studies has been marked by a single question: 'What is a game?' For a while now, our community has understood that "mark" as a curse or a blight—a scourge of formalism that drew, or perhaps still draws, our attention away from more important matters of meaning, reception, and use" (Bogost, *Videogames Are a Mess*). Treating this very question as "ontological" however, Bogost introduces the idea of a "flat ontology" in which studying games as ludic systems does not need to conflict with discussing social, political or ideological issues, thus rejecting the notion of video games as neutral and autonomous systems (Bogost, *Videogames Are a Mess*).

Certainly, we find relatively early examples of work in game studies, concerned progressively with ludology and realism as ideology. Gonzalo Frasca's 2003 essay "Simulation vs Narrative," for example, is a compelling attempt to join a systemic understanding of video games with the study of its built-in ideology and the possibilities for players (Frasca). Yet, in the last years, important work has been done in reconsidering the seemingly "neutral" form of video games, and there has been much discussion regarding the issues of ideology and social impact of games from a new perspective. Nick Dyer-Whiteford's and Greig de Peuter's book *Games of Empire* (2009) is a convincing example how video games can be approached critically, with an extension of Hardt and Negri's theory in *Empire*. The book offers an eye-opening argument on the politics of video games as one of the most important media in the age of global capitalism, with the concepts of ludocapitalism and militainment. Yet, rather than simply criticizing how video games are recreating and reinforcing militaristic and capitalistic values in their players, the authors devote a second half of their book to critical, alternative, or subversive uses of the medium.

Mary Flanagan in her book *Critical Play: Radical Game Design* (2009) offers the concept of "critical play" as a counter-notion to escapism often associated with play. In doing so, she discusses various activist and artist movements that deploy play and games (not limited to video games) as radical political practices. According to Flanagan's broader notion of "critical play" it means "to create or occupy play environments and activities that represent one or more questions about aspects of human life," a practice that aims to "questioning the status quo" (*Critical Play* 6).

As discussed above, along with Mary Flanagan, Ian Bogost is one of the theorists and game designers pushing for a critical practice of studying and creating games. In his book *Persuasive Games* (2007), Bogost develops a concept of how video games are both an expressive and a persuasive medium. Bogost, in studying video games' unique function of a representational mode of procedurality, argues that video games forward a new form of "procedural rhetoric." He describes this rhetoric as "the practice of using processes persuasively, just as verbal rhetoric is the practice of using oratory persuasively and visual rhetoric is the practice of using images persuasively" (*Persuasive Games* 28). Bogost emphasizes that, despite the modern connotation of rhetoric as empty of meaning or pointless, he uses it in the Aristotelian sense of forwarding an argument with a persuasive aim.

The rhetorical figures of the syllogism and enthymeme are central to Bogost's formulation of procedural rhetoric. The syllogism is a deductive conclusion following from an initial proposition, such as "Politicians are untrustworthy; John is a politician, therefore we cannot trust John," while the enthymeme hides the premise, instead implying it, as in "John is a politician and therefore untrustworthy" (Persuasive Games 18). Bogost relates these figures to procedural rhetoric by saying that "a procedural model like a videogame could be seen as a system of nested enthymemes, individual procedural claims that the player literally completes through interaction" (Persuasive Games 43). By way of analyzing a game from the Grand Theft Auto series, he examines the player activity of eating as a system of rules in the video game. Over time, the player's character gets hungry and must eat or lose health points. Though, the only food available in Vice City (for the kind of lower-class individual the player experiences the world through) is fast food, which is cheap but fattening. According to Bogost, implicit in this restriction is a statement about the relationship of class to health (Persuasive Games 113). This demonstrates that, in Bogost's words, "the games we create can support, interrogate, or oppose [the] cultural contexts [in which they are experienced]" (Persuasive Games 54). The player grows to understand the implied premise of the procedural enthymeme by way of learning to play the game and discovering the constraints imposed upon him by the game mechanics.

The idea of a procedural rhetoric suggests a significant departure from classic ludic theory. The strength of Bogost's concept is to acknowledge that game systems can contain arguments, and that they are forwarded by the game's mechanics (its media specificity) rather than by its mere content. Conversely, as Bogost demonstrates in individual examinations of games throughout the book, an individual game can have progressive content while being hopelessly conservative and vice versa. How video games can thus become a means of indoctrination (what Dyer-Whiteford and de Peuter have linked to a social reproduction of subjectivities), and how games can also escape their intended meaning and produce surprising outcomes for its makers and players, will be discussed in the subsequent analysis of two ludic examples of aesthetic-cultural production.

2.3.2. Layoff and The Stock Market Game

When Tiltfactor Laboratory released the casual game *Layoff* in March 2009, it reached a million players within a week (Flanagan, "Creating Critical Play" 51). Part of its success was unquestionably owed to the nationwide press a supposedly fun game about the Global Financial Crisis had gotten immediately after its release. In a news segment, NBC interviewed people on the street asking them what they thought of a video game that lets players to "layoff" workers during the Global Financial Crisis. The leading question, overwhelmingly prompted people (who had never seen, let alone played the game) to criticize the very idea of a video game about the Global Financial Crisis: one should not play with the sorrow of people. This illustrates that the cultural perception towards play and video games remains (games are fun, cannot be serious and thus should refrain from engaging serious issues). While the NBC segment, without getting into the actual critical content of the game itself, compared making light of a depressing

situation to the 1930s and Charlie Chaplin's *Modern Times*, people who played what they perceived to be a light satirical game, were in for a surprise.

Layoff's visuals and game mechanics are indeed inspired by a merely fun and popular game, *Bejeweled* (by *Popcap Games*, 2007), in which a player scores points by swapping adjacent jewel tokens on a playing board with each other to create horizontal or vertical lines of identical tokens. As soon as such a line is created, it disappears from the board, causing the jewels on top to fall down. The board is then refilled by new, randomly chosen tokens falling in from the top. This causes desired chain reactions with new lines created, adding to and multiplying the score.

In *Layoff*, the player engages with a similar board except that each tile represents a category of workers (e.g. mechanics, construction workers, secretaries, etc.) instead of gems. One plays as "corporate management" for the fictional company "Brachovia," (a name reminiscent of former financial service provider Wachovia) and is tasked with cutting jobs during the Global Financial Crisis. When a player matches a set of three or more workers, they do not simply disappear, but fall off the bottom and into an "unemployment office" where they stay indefinitely. This space becomes more and more populated as the game progresses. Instead of a score the game keeps track of how much money a player saves by eliminating jobs. The game gets more and more difficult as more banker tokens are added to the board that, unlike the workers, cannot be "laid off" (i.e. swapped, matched and disappeared.) Should a player get stuck with a situation where no more lines are possible, he can simply press a button labeled "bank bailout" to reset the entire board (while the unemployed, the number of bankers on the board, and amassed savings stay the same).

As this basic mechanic suggests, from management's perspective, workers are interchangeable abstract tokens that can be swapped and terminated to save money. In addition, in cases of mismanagement, a government bailout is an easy option that does not have negative consequences for the corporation (nor does it improve the situation of the unemployed.) However, the game is designed to challenge these uncritical perspectives. Once the game board becomes more and more obstructed by banker tokens, the player is bound to linger with his mouse cursor over individual workers as he plans his next move and makes choices. When he does, a background story of each worker token pops up. Opposed to the schematic and identical appearance of the tokens, these micro bios are individual. They tell of the workers attitudes towards their work, their strengths and weaknesses, their positive and negative threads, their hobbies, dreams, fears and aspirations, for example:

K.D., 37, is a construction worker who likes night jobs and can tolerate extreme weather conditions. A subsidiary of Finnegan Contractors that usually hires K.D. is on the verge of bankruptcy, however, K.D. just found this out and is now nervous to propose marriage to a sweetheart.

Tony, 36, is a communications manager always on the lookout for new strategies to please the clientele of Brachovia. Tony is not happy with the web designers and really wants to fire Gus and Bobbie. Even though it is against the law, Tony believes Bobbie is too old to work in digital design and that Gus should be let go due to living a lifestyle that Tony does not like. Satish, 27, works as teller at Brachovia. Satish is an amazing tango dancer and cares for a sibling's child, Tasha, three nights a week while the sibling works. Brachovia cut hours to 30 hours a week and Satish has to find a new second job to pay the car payments.

The banker tokens, on the other hand, address the player directly, often with overtly cynical statements. They give buzzword investment advice ("diversion is key"), rant against financial regulation, or brag about their "bonuses" that, as the bankers happily seem to admit, either came from a colleague that "got canned" or "the American public." Other examples read:

A typical investment banker making \$200000 might get a \$700000 to \$750000 bonus this year. That is a conservatively reduced figure to support our commitment to modest costs during troubling financial times.

or:

Mortgage bankers have been unfairly focused upon as the primary cause of the problem with a result that some potential homeowners are reluctant to apply for loan to purchase or build a new home.

In contrast to these texts, a news ticker runs underneath the playing board that reports astounding numbers of real job losses during the Global Financial Crisis and about the US bailout, such as: "In 2008, Home Depot fired 500 workers to offset financial losses. The CEO Robert Nardelli received a \$210 million retirement package." In another example, the player learns that "adjusted for inflation" the US bailout to date (\$8.5 trillion in 2009) has cost more "than every war the US has ever fought, the Louisiana Purchase, the Marshall Plan, the New Deal, and the NASA Space Program combined."

While the statements of the bankers underscores the dark satirical nature of the game setting and game scenario (where the goal is to save money by terminating workers), the news ticker ensures the embedding of the game in a serious context. The individual biographies of the employees give an emotional counterpoint to the strategic cognitive activity of trying to play the game successfully. Consequently, the core enthymeme of the game lays in the rationality of the task of making the labor force more efficient, to which the emotionally-charged biographical information on the workers is strikingly irrelevant. Rather than the discovery of a restriction for the player, it is the absence of one that forwards the game's message. However, when the player learns this against the backdrop of the ceaseless stream of numbers of real Layoffs during the Global Financial Crisis, the biographies have a double function. First, they create a sense of the real people behind the statistics (or the tokens in the unemployment office space). Second, this impression and information is likely to change a player's in-game behavior. Suddenly, what appears to be the most logical choice for the next move, is embedded in a moral dilemma: should I lay off Satish, who takes care of his siblings' child, or Kas, the depressed divorcee? Of course, this is irrelevant, or even a hindrance if one is trying to achieve a high score in savings. Yet, the game seeks to inspire empathetic restrictions within the player himself (rather than in the game system).

Flanagan has analyzed *Layoff* (released by Flanagan's own studio) as part of an inquiry into a series of games that "foster empathy" in players (Belman and Flanagan; Flanagan and Nissenbaum 135–36). Flanagan and her coauthors concluded that while "players probably don't feel anything approximating what a worker might feel when s/he loses his or her job" they "feel reactive empathy," a sense of indignation at the

"callousness of management," or "sorrow for the plight of people who've lost their jobs" during the Global Financial Crisis (Belman and Flanagan 15). In this sense, the game that first appears as casual game and satire about the Global Financial Crisis, tricks the player into a kind of empathy experiment in which he is asked to play the bad guy.

While *Layoff* uses its minimalistic design and its game mechanisms effectively to communicate a message (workers are interchangeable, bankers are not, and this should make one empathetic towards workers and angry at corporate management) the game is also highly abstract. *Layoff* is in no way an accurate representation or simulation of how human resource decisions are/were made during the crisis referenced by the game. In this regard, the game represents the intended message more than it represents the aspects of the Global Financial Crisis it professes to be interested in.

The representational problematic is certainly different in more mimetic games about financial capitalism such as *The Stock Market Game*, deployed as part of the curriculum in annual cycles by high-schools in North America to teach students lessons in finance. *SIFMA Foundation*'s game is an online simulation, sponsored by Wall Street, that lets players virtually trade fictive money on actual global capital markets. According to SIFMA's website, the game "has prepared 15 million students for financially independent futures" ("www.stockmarketgame.org"). However, in the 2008 cycle, when some "700,000 students from grades 4 through 12 got a hypothetical \$100,000 to invest" in a nation-wide scholarly competition, the simulation and the reality it depended upon took some unexpected turns (Levitz).

The collapsing markets did put some of *The Stock Market Game*'s sponsors out of business (Wachovia among them) and made it uncertain whether their "financial experts"

would return for classroom visits the next spring. Consequently, many students learned a very different lesson "than the one intended" (Levitz). Several students thrived in short selling stocks, almost doubling their portfolio and making the teacher uneasy (reportedly one of the teams made "a killing" in short selling Wachovia just before it got swallowed). However, the majority, disillusioned by their losses despite the work they put into trying to pick winners, reported that the students intended to stay away from investment and markets in their future. Thus, the open world simulation of *The Stock Market Game* produced both little Gordon Gekkos (short selling the market) and his estranged daughters (distraught in seeing the stock of their favorite companies such as "Domino's Pizza Inc., Hershey Co. and Gap Inc." failing via forces the students could not grasp). Teachers that felt uneasy about the outcome might fare better in the future by deploying *Layoff* instead of *The Stock Market Game* in their classrooms. Granted, the students might not learn much about finance, but would walk away with a less mixed message.

On a more serious note, the abstract restrictedness of the game design in *Layoff* and the "realistic" openness of the *Stock Market Game* allows for a return to the earlier discussion about classic ludic theory. The freedom that players assume within virtual realties is unique to the medium of video games. However, this freedom has conceptually allowed for excluding questions of morality or ideology from games themselves, positioning the games as neutral systems of rules and mechanics. In turn, even if play is never absolute and unrestricted, as some ludic theorists imply, the more a player is empowered, the less a system can control its own content, message and meaning, and vice versa. The "unregulated play" in the virtual stock market has certainly produced unintended outcomes for the Wall Street sponsors of the game (looking to inspire the next

generation of investors, "to prepare the future subjects of financialization" (Dyer-Witheford and Peuter 227), and for the teachers (distraught about ethically dubious sales tactics some students learned to enjoy). In contrast, the absence of genuine player freedom in *Layoff* produces a procedurally convincing, yet one-sided, even ideological, message.

Another perspective is that while *Layoff* compellingly insists on the human dimension beneath the statistics, The Stock Market Game withholds this emotional and social dimension under the charts a player interacts with and analyses. As experiments, both games are rigged: the game that promises players will become "financially independent," lets them play freely, shows too little of the real-world impact, and counts on the fascination of its players with abstract markets, money, numbers and their multiplication. The game that promises to "inspire empathy," limits your play, tells you too little about markets, overemphasizes the real-world impact and counts on players' condemnation of markets. To make this more poignant, the real-life dimension that Layoff attempts to sensitize the player to in order to inspire an empathetic restriction on his/her play as corporate management, would similarly change or even hinder successful play as an investor in The Stock Market Game. For example, the "bet" in a "game" for both the virtual and real investor, speculates on a company going out of business and thus puts downward pressure on a stock, and produces the kind of Layoffs that inspired Tiltfactor's game. When Wells Fargo swallowed Wachovia, they terminated 548 employees in Wachovia's "hometown," Charlotte, N.C. alone, in a promise to "cut the company's combined expenses by 10 percent" (Rothacker).

However, *Layoff*'s emotional, and ultimately moral, critique of layoffs during the Global Financial Crisis, does little to address the systemic and specific nature of the

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events since 2007/2008. Again, the game is highly abstract, and in its abstraction avoids any of the critical, epistemological, and ethical questions exposed by the crisis that cannot be captured in terms of black vs white, us vs them. While *Layoff* convinces its players through its mechanics, the necessary choices and restrictions the game makes in how and what to represent, are choices made for, rather than by the player. That *Layoff* was already in design before the Global Financial Crisis hit and was originally intended to be about "mass job losses of the 1970s" is revealing (Elder). The timely release came with a change of the game setting, that enabled the relative success of a small serious game and heightened the message and emotional impact of the game (as many players might find similarities in the short biographies of the workers with people they know or even with themselves). As a result, the stories in the game appear both more germane, and they establish a link between the fictional biographies and a factual lifeworld. However, this also presupposes the same financial imaginary at work in the literary and filmic examples: an imaginary that looks to the past rather than to the future.

Embedded into the game's procedural rhetoric, the imaginary of blame is mobilized to effectively train the player in a moral legibility produced by the layoffs of the crisis. In this sense, the presupposed and procedurally enforced moral legibility via fictional play, acts as the crucial semantic link between the factual and seemingly disparate numbers of people laid off and numbers of dollars paid in bonuses and retirement packages that the news ticker displays. *Layoff*, in carefully controlling its message, allows the player to participate in the imaginary of blame, that precisely insists on the selfishness of bankers, with supposedly no regard for the impact of their dealings in the real world, suggested as both cause of and solution to the crisis. While moral outrage is justified in many of the real-world cases the game cites or alludes to, the imaginary of blame it communicates and attempts to convince its players of, is also an invitation to forgo the kind of analysis the crisis necessitates. Perhaps, it is telling that *Layoff* ultimately asks players to abandon the cognitive, rational task of playing the game (a literal restructuring of the labor force) and to empathically participate in a moral condemnation of a corrupt business elite that is "playing" with people's lives.

To conclude, the procedural effect of the video game *Layoff*, other than the texts and films discussed in this chapter, does not rely on representing the crisis in a closed, ordered narrative; rather many fractured micro-narratives, news snippets and visuals provide a counterpoint to the more abstract and logical experience of playing the game. *Layoff* effectively communicates a message about crisis, by letting the player participate in a kind of simplistic psychological experiment. However, the game does not only train players in empathy as its makers proclaimed, but also in a strongly suggestive moral reading of the crisis. *Layoff*, analyzed in contrast with *The Stock Market Game*, exposes at once the representational potential and limitation of video games. The interactivity of the medium allows for an exploration of the things a game system attempts to represent that does not rely on a passive consumer but an active participant in the representation itself. However, the tension between the openness and restrictedness of this experience poses a fundamental representational issue and potential in its own right, which will become clearer in the subsequent chapters.

3. Conclusion - The Representation of Crisis as a Crisis of Representation

The dominant political response to the events since 2007 has produced its own imagined recovery, which found broad popular support. Fueled by scandals involving unscrupulous bankers and questionable investment practices, the narrative of a criminogenic elite of bankers that supposedly caused the crisis reverberated in a new/old economic imaginary. Framed as crisis *in* finance and *in* financial governance, the status quo was retained, with a promise that ridding the economy of an abnormal, external (cultural) factor would leave the system as a whole intact. The moral legibility this suggested, as the narrative was embraced in public discourse and popular sentiment, substituted anonymous market forces with a seemingly finite number of personalized human perpetrators. This narrative integrated with the fundamental axioms of the dominant pre-crisis imaginary. As shown in this chapter, the narrative agreed with a popular perception of finance, reaching far back into its cultural production that helped this (re)imagination of the world of finance and bankers.

However, the objectification of crisis that this imagined recovery achieves, furthers a disenfranchisement of the general public and cements the separation of the economy from everything else. The dominant imaginary also distracts from the epistemological shock. This shock designates a larger crisis that led to a fundamental destabilization of the economic knowledge and wisdom that informed the pre-crisis imaginary. Joseph Vogl has called the test of economic wisdom in times of crisis (in neoliberal financialized capitalism) and, the continued insistence on the belief in an equilibrium and the rationality
of markets, an "Oikodizee" (14). According to Vogl, just as the quake of Lisbon unsettled the fundamentals of modern theodicy, the financial "quakes" of the last two decades pose a "precarious indistinguishability between rationality and irrationality, chaos and order, between a foreseeable course of the world and an unleashed contingency" (29). As a result, the crises question "the consistency of those economic doctrines, according to which the contrarieties, evils and mishaps within the system seem reconcilable with its wise composition; or not" (29). For Vogl, the crisis is not merely a crisis of finance and credit, let alone a crisis of governance or morality. Rather, the "semiotic events" on the seemingly autonomous markets, pose fundamental hermeneutic problems, a loss of referents, and a crisis of representation that extends beyond the academic discipline of economics.

The examples of aesthetic-cultural production discussed in this chapter all communicate the dominant imaginary and participate in what I have described as a process of complexity reduction. Bankers are greedy, ruthless, asocial and corrupt, and it is them who we have to look out for to understand how the global economic order suspicion vis-à-vis finance, become unraveled. The and the stereotypical characterizations of financiers, taps into a longer tradition of the communicative function of aesthetic-cultural production. The tradition refers back to the nineteenth-century novel (Finel-Honigman; Shonkwiler), and the arrival of film in the twentieth century (Lyons), as means for a wider public to come to terms with the increased scope and reach of financial crises—as well as the fundamental and dramatic economic changes associated with a sense of the annihilation of borders, space, and time by financial movements across the globe. The efforts of the examples of aesthetic-cultural production to adapt these

traditions, in order make sense of a critically-evolved finance, has both exposed representative inaccuracies and deliberately or subconsciously expressed a sense of uneasiness towards the radical economic abstraction of finance.

Similar to what Shonkwiler has observed in her study of twentieth-century American fiction, it is the "visible breakdown or overextensions of the narrative form" that, also at the beginning of the 21st century, leads to an understanding of the challenges that literature as well as other artistic media confront in engaging with the elusive and highly abstract sphere of financial capital and its crises (20). To recapitulate: Lüscher, while engaging with the dominant imaginary of blame, maybe most explicitly relates the problem of narrative representation with the issue of financial abstraction, insofar that his panoptic vision of finance seems to dissolve the category of responsibility altogether; in The Chef, the need to create moral order, which Suter's characters insist on, offers a moment of conscious reflection on the narrative inadequacies and a need to compensate for them; both Money Never Sleeps and Wolf of Wall Street in their inability (and overt refusal) to formally and normatively engage with financial abstraction, strain this compensatory effect into plain visibility; finally, seemingly independent of the narrative form, the abstraction of the video game Layoff, fails to capture financial abstraction and reproduces the imaginary of blame procedurally.

However, in general terms, these inadequacies are not a shortcoming of a fictional discourse that has unduly ventured into a realm that should be left to professional economists. Rather, as expressive and at times self-reflexive forms of representation, these works of fiction offer a space to come to terms with the representational issues at stake in the imaginary of blame, and approach a larger epistemological crisis which the

Global Financial Crisis has brought into focus. The inadequacies, as Shonkwiler has proposed for the twentieth century, show how the "illegibility of an increasingly abstract, intricate, and global capitalism has conditioned and limited the twentieth-century historical imagination" (20). The limits of this imagination, after the period that Shonkwiler considered, has indeed found, in the words of Haiven, a symptomatic expression in the restricted answers the crisis produced and reached "a crisis of imagination" (1).

To conclude, while critics of the dominant political efforts and conventional economic theory have bemoaned a lack of alternatives and a lack of innovative thinking, the representational issues displayed by the imaginary of blame serve as a critique of the dominant imagined recovery and as a mark for the epistemological impasse of crisis. To repeat the words of Priestly, crises come as a "shock" to the unsuspecting majority: "What had become normal and reliable is disrupted, often suddenly, and crisis is the label we give to the ensuing struggle between one order and another" (456). Yet the difficulty in going from one order to another is not its impossibility. If the dominant imagined recovery has managed to install itself as without alternative, and if the new/old imaginary is occupied with the "Oikodizee" in reintegrating the cataclysmic events and continuous shocks into conventional wisdom, policy, and beliefs, and if the economic sciences have displayed the signs of struggle but thus far failed to provide any true alternatives, the space for observing discursive innovation might lay elsewhere.

The German entrepreneur and author of novels Ernst-Wilhelm Händler observes a lack of a "stylistic examination " (stilistische Auseinandersetzung) of capitalism in contemporary fiction. What Händler notices instead are "strategies of avoidance" (Vermeidungsstrategien), or mere representations of the negative consequences of contemporary capitalism (320).⁵¹ Yet, Händler an avantgardistic writer in his own right, does see potential for innovation. Careful about prescribing tasks to "literature" as a whole (it "cannot be the main concern of literature to examine capitalism," he insists that "literature should strive to be at eyelevel with its conditions" (302). Händler concludes his essay with a warning and a proposition:

Literature is not an alternative for capitalism. Only if it is pursued as a mental illness. Literature is more independent from capitalism than other comparable undertakings.⁵²

The conditional independence of art is central to the critical potential of aesthetic-cultural production discussed in these chapters: Indeed, neither of the examples above should be seen as inaccurate economic models, one-sided political speeches, or poorly researched news reports; they are fictions that do not pose an alternative to other modes of engaging with an economic reality; fiction that is mixed up with this reality, yet cannot be reduced to it; finally, fiction that, in its inaccuracies and limitations, points not only to the troubled relationship between the aesthetic and the economic, but also to a larger crisis of representation. If the condition for all of this is the relative independence of capitalism that Händler invokes for literature, it also designates the possibility of transcending the limitations of a current financial imagination that remains oriented to the past, and indeed art might play a decisive role if our crisis is—as *Adbusters*, the conspiratorial force behind the Occupy Wall Street movement has boldly declared—"a crisis of aesthetics." Thus, if

⁵¹ All translations by Kaipainen.

⁵² "Die Literatur ist keine Alternative zum Kapitalismus. Nur dann, wenn sie als Geisteskrankheit betrieben wird. Die Literatur ist unabhängiger vom Kapitalismus als andere vergleichbare Unternehmungen" (318).

this chapter scrutinized the dominant imaginary of blame as part of an imagined recovery, and read the representation of crisis in examples of cultural production as a crisis of representation, the next chapter turns this relationship on its head: I explore a crisis of aesthetics in the aesthetics of crisis of cultural production—not to suggest that the more avantgardistic formal strategies conceived in reaction to the crisis ever manage to achieve adequacy, are "at eyelevel" with their conditions, or that they reach a financial form superior to economics that keeps pace with the ongoing transformations of finance—but they help us have a better sense of what supposedly resists representation and opens a way for the utopian potential of cultural production.

Chapter III

Confronting Financial Abstraction - The Critical Function of Cultural Production

"Please, speak as you might to a young child or a golden retriever," John Told encourages Peter Sullivan. Told is a high-powered finance CE and Sullivan is one of his low-tier employees. The young analyst has just tried unsuccessfully to explain the complex technical reasons for the impending collapse of both Told's bank and the entire international financial system. Told's insistence on simpler words and explanations is a kind of recurring joke, that runs like a red thread through JC Chandor's 2011 film, Margin *Call.* The financial drama follows the struggles of an investment bank in the early hours of the unfolding crisis. Working late one night, Sullivan, a brilliant math whiz with a physics PhD, discovers a deeply-buried risk among the numbers, formulas, and charts, flashing over a battery of screens. As the news of incalculable toxic debt out-leveraging the entire bank's market capitalization travels up the corporate ladder, the managers and superiors seem increasingly dumbfounded and less in touch with the technical concepts and inner workings of finance. The viewer, presumably left with a sense of unmanageable complexity, gazes into a parallel universe of equally unimaginable and powerful abstractions. At one point, Sullivan absentmindedly stares through the windows of a car and, looking straight at the camera, declares: "Look at these people wandering around with no idea what is about to happen." Indeed, to many the financial crisis came as a surprise but also: what makes it so difficult to describe what happened in 2007/2008 in layman's terms? What is it that turns not just the head of banks but the general public into golden retrievers or children when faced with descriptions of financial abstraction? What role do abstraction and complexity play in justifying or critiquing finance?

In the past two chapters many of the terms and tropes that surround the difficulties in coming to terms with financial phenomena have come up: abstraction, complexity, immateriality, self-referentiality, etc. In news reports, and academic discourse critical of finance, these are commonly used as adjectives (e.g. finance is abstract), often followed with an intensifier (e.g. financial markets are too complex), to describe qualities of an object of knowledge that seems to challenge or limit ways of knowing about it. However, before the events of 2007/2008 made abstraction and complexity (once more and however briefly) into the somewhat helpless descriptors for the inexplicability of critical events, and before the alleged immateriality of finance and self-referentiality of money became an emblem for an existential threat and the fundamental ungovernability of markets, these very qualities had been (and are) part of finance's self-concept. Financial sciences and services have routinely invoked a vocabulary containing abstractions to validate claims to truth, to demonstrate the scientific character of their efforts, and to invoke the indispensability and larger utility of finance.

Within a dominant imaginary of finance, abstraction is contrary to the description of a perilous lack of knowledge or loss of control combined with uncertainty and contingency. Rather, abstraction and complexity describe a methodology through which financial markets can be understood, and uncertainty transformed, into mathematically calculable risk and investment opportunities. In addition, immateriality and selfreferentiality purportedly refer to a higher form of economic activity in financial markets, as they indicate an increased efficiency in determining prices, and designate an extension of the neo-classical promise of equilibrium, stability and a larger social good.

This chapter further interrogates the dual image of abstraction and complexity, and the metaphors and narratives of the immateriality and self-determination of financial markets as part of a dominant financial imaginary where abstraction, rather than a natural or objective quality of finance, designates an unstable and problematic category. First, in examining critical scholarship on finance that challenges financial abstraction, the selfconception of finance, and the status of financial markets as self-determined and immaterial, I forward the claim that finance is not a strictly ontological field. In other words, finance cannot be separated from its representation. Instead, I insist that claims to financial abstraction and the trope of the unrepresentability of financial phenomena are themselves representations and part of larger cultural, social and political discourses and practices of financial imaginaries. Further, I discuss how abstraction works to separate itself from its embeddings in social, cultural and political contexts, and in doing so enacts a *depoliticization* of finance. That is, within the discourse on crisis, the various claims to financial abstraction are performative, effect a disenfranchisement of actors, and work to deny their stakes and claims in imagined recoveries.

In the second part of the chapter, in my analysis of texts, a film and a video game, I show how cultural production can contest the limits of representability that these abstractions pose and reveal or even interrupt the exclusive operation inherent in invoking financial abstraction. The examples discussed in this chapter no longer give a unified, convincing, or satisfying narrative, let alone offer a coherent description, or a better legibility of finance. Rather, they produce formally and discursively-achieved estranging effects that undermine the normality and stability of dominant financial imaginaries. It is in this context, when the all-encompassing claims of financial abstraction are placed alongside a cultural production that points to the absurdity or impossibility of these claims, that I argue how cultural production can participate in a process of repoliticizing finance and help to imagine critical practices that seek to resist the logic of dominant imaginaries and to disturb and disrupt the image of finance as neutral, objective and invariable.

1. The Financial Imaginary of Abstraction

In order to come to terms with financial abstraction and cultural production, I present a dual perspective: one that positions finance as weightless, timeless and self-determinate, surrounded by metaphors of natural order, assurances of efficiency, stability and controllability. This view is contrasted with a perspective that insists on finance's inescapable ties to the material, political and cultural world and questions the naturalness and objectivity of finance as an object. I unfold this double description, beginning with an art installation that plunges viewers into the dazzling, blinding, virtual world of modern financial markets and arrive at an initial description of how cultural production can contest claims to abstraction.

1.1. Claims to Financial Abstraction

Spectators stand under a domed ceiling in a darkened room. They gaze from below on a mysterious night sky of financial data. Each star above them is linked to the trading activity of a publicly-listed stock. Their brightness is determined by the volume and volatility in real time market activity:

The stars slowly drift in response to the complex currents of the market, while outlining shapes of different industries and the huge multinational conglomerates like the signs of the zodiac. [...][O]ver time the stars clot together and drift into slowly changing constellations, nebulae and clusters. Through this technique different industries naturally start to emerge as galaxies. Any general disturbance in a section of the market will have a visible effect on the sky – the collapse of Enron, for instance, would have caused a sort of black hole - all the companies affected would glow very brightly due to the level of trading and would be pulled in to a single point in a very powerful vortex. ("Black Shoals: The Project")

Both before and after the cataclysmic financial vortices that where yet to come in 2007/2008, many commentators on modern financial markets have turned to *Black Shoals*, an art installation by Lise Autogena and Joshua Portway that was first shown at the Tate Britain in 2001 (see e.g. Mitchell; de Goede; Raley; Aitken, "Performing the Limits of Finance"). The exhibit that has been traveling since its inception has come to serve as a kind of artistically realized metaphor for those who sought to elucidate the multifarious and evocative amalgam of economic activity, technology, models, beliefs and science that constitute the realm of financial markets. As political scientist Rob Aitken writes in response to a number of commentators, "the project evokes the various languages which imagine the market as a natural artifact – metaphors of the market as a self-regulating organism or the economy as a self-contained biological system" ("Performing the Limits of Finance" 1).

The often invoked organic metaphor for the market is present in the title as a word play on the Nobel-winning Black-Scholes model that, as discussed later, has become emblematic for the increasing mathematization of finance and its promises of controllability of risk. By replacing Scholes with shoals, the creators suggest that stars/stocks behave and move like swarms of fishes. These shoals form natural patterns, based on laws not immediately apparent to the spectator, and related to events not rendered in the representation itself.

In addition, this biotope based on a visualization of financial data is home to strange, amoeba-like creatures. Among the stars exist programmed artificial intelligences that respond to the trading activity: they feed on, evolve, procreate, grow, or die together with the markets. "For these creatures," the artists write, "the heaves and surges of the world economy are like Earths' tectonic plates. Just as humans are only aware of the constantly shifting and unstable plates that make up the earth's crust under our feet when there's an earthquake or volcanic eruption, the creatures have no way of knowing what lies 'underneath' their world – they only know that sometimes there are explosions of money and sometimes there are famines" ("Black Shoals: The Project"). The addition of these creatures to *Black Shoals* serve to further literalize the idea of financial markets as distant, self-contained, naturally evolving systems that imply a kind of internal, natural order. The "heaves and surges" likened to the unpredictability of volcanic eruptions suggest that disturbance of such a system can only be understood as external events.

The naturalistic images that Black Shoals conjures are not coincidental. Rather, the biological metaphor of the market stands at the beginning of economic theory as a guiding image for the concept of equilibrium in classical and present-day liberalism.

1.1.1. Control and Order: Organic Metaphors of Self-Determined Markets

The slippages between ecosystem and economy connect the organic metaphors with the historical genesis of the economic concepts of circulation and of a natural equilibrium of markets (as discussed in Chapter I). The attempt to understand aggregated economic concepts through biological models has a long history that coincides with the beginning of modern economics and reaches back to the French Physiocrats of the seventeenth century. This group of thinkers around Francois Quesnay (a medical doctor by training) was among the first to systematize macroeconomic ideas. The Physiocrats likened the economic system in their *Tableau Economique* to a biological organism, where e.g. the circulation of wealth was akin to the flows of blood in the body. Notably, according to the Physiocrats these flows should not be hindered, or disturbed (Christensen 256–57). Thus, rather than being a neutral metaphor, economy as organism already contains a set of political obligations.

The association of economy with biology demarcates the origins of laissez-faire, or of what Adam Smith would later put on a rational foundation: the idea that markets left undisturbed would, by virtue of the rational self-interest of its participants, self-organize, leading to an optimal distribution of goods and prices (see e.g. Mattick 32). The lingering connotation of economy as nature, and nature as equilibrium and self-contained order carried forth through Say's Theorem and into the 20th century neo-classical and neo-liberal economics that built on the idea of rational principles inherent in social behavior.⁵³ Thus, the metaphor encouraged by Physiocrats' protest against mercantilist policies of

⁵³ To appreciate the neo-classical underpinnings of contemporary main stream economics see also in this chapter, my longer discussion of neo-classical economics, rationality and abstraction on the example of Robinson Crusoe Economies in my analysis of *Offworld Trading Company*.

pre-revolutionary France became a guiding figure for economic liberalism. By the twentieth century, proponents of the free market saw a political imperative in the natural self-determination of the market, where classical economists had seen a moral imperative (e.g. Smith and Ricardo). If we parallel the history of the metaphor of markets as natural order with the continuous development and increasingly global expansion of markets, the organic metaphor became a figure that promised stability, a single image that intuitively organized a chaotic variety of phenomena which could less and less be grasped empirically, whose totality would increasingly escape imagination and straightforward representation (see e.g. Stapelton).

1.1.2. Increasing abstraction: the separation from finance of everything else

The expansion of the credit-economy and rise of purely financial- and increasingly globalized markets has intensified the description of markets in metaphorical and abstract terms, as the pressure on representation increased. The evolution of financial instruments, together with the development of new technologies—from the telegraph and stock ticker to computers, digital media and fiber-optic cables—led to a (sometimes threatening) sense of an annihilation of space and time (see e.g. Lyons).⁵⁴ As a result, a perception of markets emerged as increasingly virtual, i.e. detached from the sensed immediacy of every day economic activity, the material, or real economy. The notion of an immateriality of markets concerns the progression from money to complex financial instruments, a "story of money" that is "repeatedly told as an evolutionary tale (...) of

⁵⁴ See also my discussion of financial modernity and film in Chapter 2 under "2.2. Screening Finance, Watching the Crisis."

greater dematerialization, in a linear trajectory from barter, to metal coin, to paper backed by metal, to paper declared valuable by fiat, and, finally, to complex financial entities like derivatives, with future, not anterior, backing' (Maurer qtd in: Aitken, "Performing the Limits of Finance" 5). Finance has become increasingly abstract. An abstraction that today, as Aitken suggests, "is most emblematically bound up in financial innovations related to derivatives" (Aitken, "Performing the Limits of Finance" 5). Even if derivatives "derive" from some set of underlying assets, or tangible objects (e.g. derivatives derived from mortgage debt relate to physical houses), these financial products represent virtual claims on future values of assets that can be claimed no longer, or are rarely claimed, in their physical form. Rather, derivatives are traded and speculated on in global markets as abstractions.

Just like the creatures in *Black Shoals*, derivative financial products seem no longer in contact with the rest of the economy or with real and material things. Rather, financial markets and their metaphorical descriptions take on a life of their own, where money appears to be concerned with money and information reacts to more information. The way *Black Shoals* positions its spectators in front of a dazzling sea of information gives the sense of unbridgeable distance between the real, material world and the sphere of finance. What the spectator is confronted with is a kind of data sublime: an overload of information visually brought into a single plane that shows everything and nothing at the same time. That is, if the two are linked, related, or even dependent, the physical world and finance are radically separated by the seemingly non-systematizable, nonrepresentable complexities bound up in those links, the materiality of the first and the abstractness of the latter.

1.1.3. Self-Referentiality and Mathematical Promises of Control

The various abstractions of markets, coupled with a sense of self-determination, pose fundamental questions of uncertainty, of appropriately understanding and predicting market dynamics, especially in times of crisis. In this regard, the increasing importance of mathematical models of finance represents an attempt to tame the contingencies of markets. Modern financial theory, built on the neo-classical foundation of a general equilibrium, efficiency hypothesis, and rational agents (themselves abstract principles rather than empirical categories), sought to demonstrate that financial markets—like their counterparts in the real economy—behaved according to rational laws that could be mathematically described.

Furthermore, compared to other markets, e.g. for goods or services, financial markets were theorized in the last century as a kind of market of markets. The Chicago school coined "the efficient market hypothesis" and identified financial markets as "the purest distillation of market activity" (Vogl 11). This assessment of an alleged purity of financial markets was predicated on number of assumptions. First, technological innovations provided that information was more immediately and completely available and trades more frequently and freely executed. Second, financial transactions were almost free from transaction costs, such as physical production and transportation of goods. As a result, financial markets not only seemed to become a metaphor in themselves, i.e. to idealistically fulfill the theoretical prerequisites for neo-classical hypotheses, but markets were also increasingly understood as heightening the efficiency of underlying markets. Thus, according to this understanding, as much as financial markets had the crucial function of providing liquidity for economic activity, they would

also have positive, corrective effects on markets for goods, labor, services, etc., and their prices.

From the 1950s onwards, various scientific efforts, such as mathematical models of general equilibrium theory, or modern portfolio theory, intensified and accompanied the expansion of financial markets and instruments with the promise to do away with uncertainty and reduce it to calculable risk and lead to more efficient behavior and market stability (see e.g. Beckert 12; Dembinski 59-61). What became known as the Black-Scholes-Model was first published as a formula by Fischer Black and Merton Scholes in their 1973 paper on "The Pricing of Options and Corporate Liabilities." Black and Scholes introduced a formula that allowed mathematically calculating the value of options over time.⁵⁵ The formula was later adopted into a pricing model, for which Black and Scholes received the Nobel Memorial Prize for Economic Sciences in 1997. The underlying promise of the model was that it would allow for precise determination of the "fair" price for an option on an asset, and also introduced a portfolio strategy that would allow for risk to be calculated, if not eliminated altogether. The authors suggested that investment guided by this formula would allow investors for making "sure profit" by both holding and trading in the underlying asset and options at the same time (Black and Scholes 637).

⁵⁵ An option in its most basic form is a time contract, e.g. an agreement between a manufacturer of cars and a steel producer, in which both parties agree that the manufacturer can buy steel at a fixed price over a fixed period of time. The basic idea is to reduce the risk of market volatility on both ends. For the manufacturer, this risk would be rising steel price; for the producer, falling steel prices. However, the option itself is a tradable asset (a derivative) and it's price fluctuates in relation to the underlying asset itself (e.g. when steel prices drop under the agreed price it becomes virtually worthless, when the prices rise above it becomes more valuable) and other market factors such as its initial offering price, the availability of the option, the likeliness of its usage, it's expiring time, etc. Outside of this basic example, options are used in a variety of ways, such as options on stocks, options on currencies, etc. While the basic principle applies in all its variations, financial markets also allow for them to be used purely speculatively, i.e. traded with no interest in ever fulfilling the option, or thus in the underlying assets.

Originally intended to calculate a very specific kind of option, Black and Scholes' formula was soon generalized as a technique to calculate prices and manage risk for a variety of derivative financial products. Black-Scholes and the innumerous successors triggered a quantitative revolution in finance, in which trading was based less on intuition and common sense, or real-world information and analysis, but was instead guided by computerized mathematical models that processed the information of financial markets themselves. The quantification of risk has not only led to an explosion in the trading of options (and other formerly seen as more speculative financial instruments), but has also amplified forms of self-referentiality in financial markets (prices calculated on the basis of other prices). This self-referentiality, however, has (at least not initially) not been perceived as a risk, but in the spirit of the Chicago School, as producing higher efficiency and long-term stability while eliminating social risk (see e.g. de Goede 130–31; Vogl 55–58).

With regards to the Global Financial Crisis since 2007/2008, mathematization in finance, and the intricate models for risk it produced, have provided a false sense of security. What returned with the collapse of the probability these models were supposed to provide, was the dark mirror image of the market, not as self-contained, manageable order but of, unpredictable, uncontrollable and pernicious chaos.

1.2. Contesting Financial Abstraction: Discourse, Performance and

Representation

If we take a last critical look at *Black Shoals* and push past the awe-inspiring double image of distant galaxies (cosmological order and fate) and organic life (self-containment and natural equilibrium), the installation also speaks to the difficulties of how to adequately represent and understand finance. Black Shoals questions how vast numbers of data are meaningfully turned into images, and how manifold economic activities, expectations and speculations are compacted into graspable numbers. More decisively, by displacing and estranging the conventional visualizations of finance as graphs and stock tickers, the artists point to the dependence of financial markets on conventions, processes and technologies of representation and interpretation in the first place. The most common representations of finance, financial indices such as the German DAX or the American Dow Jones, and their data, are what Black Shoals guite literally "represents." However, as much as these graphs texture everyday reality and as routinely as their upwards and downwards curves are offered as a measure of the state of the economy as a whole, indices are not simply providing disinterested, objective information about a particular market. For example, as Marieke De Goede has argued, indices themselves are performative: "rather than a more or less accurate representation of the market, financial indices (...) create the financial market as a unified, observable, and measurable phenomenon" (de Goede 118). The data that underlies these representations is not neutral information about an ontologically fixed object. Rather, what is included and what is left out of an index—how something is measured and valuated, calculated and compacted, etc.--reflects not mere technicalities but reveals fundamental contingencies of financial phenomena.

As I argue in the following discussion, it is not (only) that finance is so abstract that it cannot be represented, but that finance is always already a representation. Further, not only is finance inseparable from its representations, but financial abstraction itself is not an objective, naturally-evolved quality, but rather a naturalized, or at least conventionalized part of the discourses and practices that go into the representation and reproduction of finance. From the perspective of CPE, these discourses, technologies and practices create, shape and reproduce a financial imaginary. Granted, contemporary finance is complex, and critical financial events seem to resist representation in straightforward ways; certainly both challenge, even threaten conventional modes of representations, i.e. subvert a linearity of cause and effect and resist narrative descriptions, and in times of crisis question the validity of mathematical descriptions and models. However, as I suggest in the following, abstraction as part of the discourse on representation, abstraction as part of the historical genesis and self-conception of contemporary finance, and abstraction as part of the epistemological crisis and its function as a signifier in competing imaginaries of reconstruction position abstraction not simply as that which makes finance hard to understand or difficult to represent, but as a problematic and ideologically effective category.

1.2.1 Reembedding Finance: Abstraction and Financial Discourse

The collapse of 2007 triggered what I have already called an epistemological crisis; the sudden loss of certainty once placed in theories and models reliant on mathematical descriptions of finance also shook the underlying assumptions of a general equilibrium and of rational agents. In short, the crisis called into question the validity of the fundamental abstractions of modern economics themselves (see e.g. Kirman, "The Economic Crisis Is a Crisis for Economic Theory"; Colander et al.). In relation to shifts observed in the economic sciences (away from hyper-rational, abstract agents and models, toward re-introducing crisis- and long-cycle-theories, behavioral finance, and new behavioral macro-economics), a new scholarship on finance has developed. These critical studies, often done by those outside the field (sociology, anthropology, cultural studies, and political science, for example), do not engage with finance on its own terms as rational, culture- or even history-free space that exist independently from its historically- and culturally-contingent representations. Rather, parallel to proposals of a Cultural Political Economy, the multi-disciplinary critiques attempt to unveil Finance's embeddings in historical processes and larger cultural, social and political contexts (see e.g. de Goede; Finel-Honigman; Mackenzie; La Berge, *Scandals and Abstraction*; Aitken, "Performing the Limits of Finance").

For scholars like Robert Aitken and Marieke de Goede, financial abstraction is part and parcel with historical self-representation of finance that seeks to efface both its history and its indispensable ties to other discourses and contexts. Aitken has referred to the numerous claims on financial abstraction as "a longstanding critical lexicon" that sought to bring into focus a divide between the material and immaterial: "This lexicon has (sometimes usefully, sometimes unproductively) framed finance as a practice situated in a series of binary divides – 'fictitious' v. 'productive' capital, 'imaginary' v. 'real' value – which map onto a longer set of distinctions common to traditions of critical political economy." (3) However, Aitken and other scholars (see e.g. Davies; de Goede; Finel-Honigman; La Berge, *Scandals and Abstraction*; Mackenzie) have come to cautiously contest the claim that finance is somehow immaterial in nature, i.e. "distant from (or parasitic on) the world of real or material objects" and challenge critiques that "narrate the history of finance as a story of increased detachment from concrete or productive economies" (Aitken, "Performing the Limits of Finance" 5). Suggesting a disembedding function of financial abstraction itself, Aitken differentiates between two meanings of abstraction. The first refers to "a mode of representation in which real objects are literally re-presented in abstract forms: as prices made real in ticker displays, as calculations generated through algorithmic trading" ("Performing the Limits of Finance" 5). This designates a layer of meaning in which finance is abstract, as in highly compounded: the object and result of complex calculations, valuations, and technologically-enhanced transactions, whose representations are difficult to grasp and retrace. The second meaning of abstraction concerns a more general relationship to "separation":

a process designed to sever, to abstract, objects from their context. In this broadest sense, growing forms of financial abstraction are part of a much longer process through which finance has been separated from the social, cultural, and political context from which it was originally enmeshed. (5)

The first and second meaning are related insofar that these representations also create the separations, Aitken underlines. However, the second meaning also relates to a selflegitimization of finance, that in its claims of scientific character and assertion of rational laws and equilibrium, seeks to neutralize and overcome the contingencies of financial markets. In other words, the disembeddings that are reproduced in claims of abstraction in practices and discourses of finance, relate to a history of finance that has only more recently become the object of critical study.

(2005) has laid the foundational stone to trace the process of the separation of finance

as a set of historical discourses routed in moral, political and religious history. Through these discourses finance has managed to legitimize itself against historical preconceptions as morally justified, socially useful, scientific, different from gambling etc. Reaching back to the eighteenth and nineteenth century, de Goede details a genealogy of financial markets that emphasizes the discursive partitioning of practices and their naturalizing effects. This perspective challenges the scientific image and authority of contemporary finance, and reveals how it is based on historical processes of abstraction, e.g. mathematical abstraction, that seeks to situate finance in a technocratic space where risk and uncertainty can be managed. Rather than an external reality that can be studied and analyzed in a disinterested way, de Goede forwards an understanding of finance "as a discursive domain made possible through performative practices, which have to be articulated and rearticulated on a daily basis" (7). Similarly, as Donald MacKenzie has argued in An Engine Not a Camera (2008), it was not so much that financial economists produced models that represented financial markets, but that the models shaped and produced a specific financial world. MacKenzie argues for a performative function of mathematization and financial theory and suggests that financial economics "did more than analyze markets; it altered them" (12).

What unites these critical perspectives on finance is not solely that they often (and maybe necessarily) originate outside economy departments, but that these alternative takes on finance, even before the financial crisis, started articulating the need for a multi-disciplinary reevaluation of financial phenomena—one which would no longer accept finance's increasingly problematic self-description.

1.2.2. The Cultural (Re)production of Abstraction: Representation and Ideology

If we follow the kind of historical critiques laid out above, we can reconstruct how the seemingly genuine, all-determining quality of finance as abstract and independent. rests on a dense network of theoretical and technological innovations, cultural interpretations and political interventions, which are contingent and performative. These critiques also show how such an imaginary does not exist in a vacuum. Rather, financial abstraction, no matter how effective and determinative it has seemingly become, is constantly formed and reproduced. While this financial imaginary rests heavily on specialized financial labour, expert economic discourse, and technical policy debates, for the imaginary to become effective and naturalized, it needs to work across societies and cultures. Rather than unidirectionally dictated from above, the representations of finance involve cultural mediation through media discourses and cultural expressions. For example, as Claire La Berge has shown in her study on the genesis of contemporary representations of finance in "the long 1980s," a veritable collaborative effort of cultural forces and financial print culture emerges in shaping and creating a collective, popular understanding of finance. More specifically, La Berge argues that:

As descriptions and representations of finance circulated through financial print culture, and as financial print culture was represented in different aesthetic modes and remediated back into itself through reviews, author/director features, investigations of mergers and acquisition culture, and so on, both finance and the

spaces of its representation were transformed. (*Scandals and Abstraction* 14) Considering this description of transformation, in the formative period of contemporary finance, and financialization from the late 1970s onwards, the exchange between culture (novels, films, feuilleton pieces) and financial publications (financial newspapers and advertisement materials) established the defining aesthetic modes, themes and tropes of the latest stage of finance. These sought at the same time to make finance legible for the general public and positioned it as unrepresentable. As the title Scandals and Abstractions suggests, La Berge, identifies "two financial problematics" that organize these conflicting representation and descriptions of finance: "the scandal with its dramatic presence and personality and the abstraction with its refraction of temporality and refusal of representation" (Scandals and Abstraction 14). If the scandal is highly conducive to narrative representation, isolates actors and provides for clear causalities, then abstraction designates the interruption of narrative, and obscures agents and causality. I have pointed to a longer cultural history of scandalizing finance and understanding crises through questions of morality (see Chapter II and e.g. my discussion of Finel-Honigman; Shonkwiler) and discussed a re-emergence of the scandal in cultural production after 2007/2008 as a larger imaginary of blame. In relation, "abstraction," as hinted at in this popular imagination of finance, and as part of the epistemological difficulties obscured by the imaginary of blame, seems to designate a similarly problematic category.

First, as argued above and as La Berge insists, "abstraction is not a property of finance" (*Scandals and Abstraction* 15). Rather than an objective, ontological quality, abstraction itself it is an unstable and discursively established category. Just as much as the effects of these enacted abstractions are real, they cannot be separated from the discourses and practices that shape, enable and reproduce them.

Second, rather than a natural result of technological innovation, economic developments, theoretical advances and cultural and social changes, these abstractions

also serve an ideological role within a larger neo-liberal imaginary. That is, what becomes evident in times of crisis (when self-determination becomes ungovernability; when existential threats emerge in place of manageable risks; when not equilibrium, rationality and social good but contingency, chaos and inequality prevail) is the self-legitimization of normative belief rather than of objective observations. Both the discursiveness of abstraction and its ideological efficiency are critical aspects in coming to terms with the Global Financial Crisis as a crisis of liberal economics.

Vogl, in studying the discursive history of a liberal political economy argues forcefully that the "Oikodizee," the test of economic wisdom in times of crisis, and the continued insistence on equilibrium, rationality and the social good of markets, has become less and less plausible—increasingly revealing its program is prescriptive rather than analytic, ideological rather than scientific. If in the second half of the last century financial markets once more became the testing ground for the self-fulfilling prophecies embedded in neo-classical economics' most fundamental assumptions, if the mathematical models inaugurated by Black Scholes yet again held the promise of scientifically ascertainable, self-determined and self-stabilizing markets, then the financial crisis was neither the result of an incomplete implementation of liberal doctrines, nor has the crisis simply exposed a technical inaccuracy of these economic theories and models, but rather fundamentally questioned neo-classical claims to scientific abstraction and empirical accuracy. What emerges from Vogl's investigation is a system of belief, with its origins in moral philosophy and cosmology, a "free-floating, self-founding theoretical construct held together solely by the presumption of self-regulating, self-optimizing, and smoothly functioning market dynamics," or the claim that the "pure theory of economics"

is a "physic-mathematical science." (127) As Vogl maintains these beliefs "inspire" to this day:

some of the hoary legends lurking at the heart of political-economic knowledge: that there are 'pure' economic facts, that they form a consistent system, that this system functions efficiently, and that all this follows an evolutionary process which leads from situations of simple necessity, via marketplaces, trade networks, and the monetary economy, all the way up to a global financial 'order.' (128)

The difficulty in coming to terms with these "legends" for what they are, lays indeed in the performative nature of the liberal economic project: "Such legends could be identified without difficulty as ideological were it not for the fact that political economy has actually created the very economic conditions it feels called on to analyze- from the ubiquitous hubbub of competition to the present-day financial system." (128) The double structure of modern economic knowledge not only describes its object based on abstract foundational concepts but has managed to shape and creates its very object through these concepts (e.g. in the form of deregulated, derivative financial markets) with far-reaching consequences. It is in this performativity that the two initial descriptions of financial abstraction are related: since financial markets were created and shaped with a belief in their inherent rationality, counting on their assumed efficiency and tendencies of equilibrium, then critical financial events not only question the validity of these assumptions, but are in many regards their results. Further, the prescriptive and prospective quality of this program enforces its own naturalization in times of financial stability, and so these claims go uncontested in times of crisis. As a result, the

abstractions at the heart of this "system of belief" become ideologically effective such that no other system is imaginable.

Moreover, whether one is critical of ideas of equilibrium and spontaneous order or not, when abstraction is simply accepted as an ontological or natural quality of finance, even to critically describe its contingencies, ungovernability and dangers, abstraction serves a more immediate, exclusionary function in crisis discourse. As La Berge argues in "The Rules of Abstraction," abstraction can have a "obfuscating" use, which runs the risk of simply "designating that something cannot be designated" ("Rules of Abstraction" 95). More precisely, La Berge warns against an overuse of "abstraction" and maintains that "in humanities-oriented academic discourse, 'abstraction' is perhaps the most commonly employed category used to describe finance and *abstract* the most common adjective" ("Rules of Abstraction" 95). While we cannot do without the concept to describe finance, and "if many abstractions are necessary to think through finance" then "we must also ask what abstraction itself might represent" ("Rules of Abstraction" 107). Exploring the vocabulary necessary to describe finance, La Berge proposes to study how abstraction might function "ideologically within our ever-expanding moment of financialization" ("Rules of Abstraction" 95). As a starting point, La Berge observes that "complexity" in financial journalism might be the corresponding term to abstraction in academia, where it similarly performs a function of designating and non-designating the object. Tracking the use of the term "complex deal" in American financial publications between 1980 and 2012, La Berge notes:

Complex deal is the term used in financial journalism to engage and simultaneously to refuse the representation of financial transactions. Its use marks

that something has transpired, namely, a deal, and that it has had real effects. Yet the term's use also communicates that the contents of the deal cannot be fully explained. That is, it's a term that obfuscates rather than provides understanding. In times of crisis, the repetition of *complex deal* markedly increases. ("Rules of Abstraction" 105)

As a result, abstraction/complexity takes on an "exculpatory role" suggesting that the crisis happened, "because finance is so complex that no one can understand it" and a "representational role" insisting that "whatever you are reading/viewing/hearing cannot be rendered sensible enough to explain the financial crisis's causes because finance is so complex that is beyond representation" ("Rules of Abstraction" 105).

Considering Berge's speculations La on an ideological function of abstraction/complexity, I posit that abstraction of finance assumes a similar role in crisis discourse to what Chalozin-Dovrat observed regarding the increasing abstraction of the concept of crisis (Chalozin-Dovrat 93), namely, a process of scientification with its beginnings in the 19th century, which parallels the discursive history and genealogy of finance that De Goede and Vogl described as a self-legitimization of liberal economic ideas of finance. To describe finance as an abstract, unrepresentable, self-determinate entity has immediate political utility, as it designates an abstraction from human agency. To position finance as abstract also makes abstract the agents of finance and the possibility of individual responsibility for crisis. As a result, abstraction corresponds with a stabilization of the status quo, predicated on a disenfranchisement of the general public. The loss of agency works across competing imaginaries to the effect that individuals can

no longer acquire faith in their power to bring about change, or even imagine that change is possible.

Bearing in mind this description of the problematic of financial abstraction, aesthetic-cultural production has not simply been a site of complicity providing stock figures of greed or parroting an uncritical fascination with abstraction. Rather, the artistic confrontation of the very problem of abstraction, has provided some of the most exposing portraits of finance, of its ideological working and its mechanisms of self-justification. This brings a function of cultural production into play in interacting with the political and economic, that interrupts the uncritical naturalization of finance as objective and unchangeable.

2. Financial Abstraction and Cultural Production

The critiques of a dominant financial imaginary (as self-determinate, objective, abstract and not representable) question the naturalness of its underlying assumptions and its unstable separation of a real economy, but also of culture, society and politics, of man-made and operated technologies, discourses and practices. The alternative descriptions point to the performative and ideological functions of claims of abstraction. Since all of these functions operate within (rather than outside) culture, this warrants a discussion of a critical role of aesthetic-cultural production.

The following objects of analysis all reflect different aspects of the problematic of abstraction: Kathrin Röggla's *alarmbereiten* interrogates the discursive mechanisms of

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crisis and catastrophe discourse, and formally performs the exclusive effects of claims to abstraction; David Cronenberg's film adaptation of Don DeLillo's novel *Cosmopolis* challenges fantasies of immateriality after the Global Financial Crisis and makes abstraction audio-visually experienceable as irritation and disconnection; The Video Game *Offworld Trading Company* brings the fundamental abstractions of neo-classical economics into play, and procedurally tests the promises of efficiency and equilibrium of markets.

What also comes into focus in these examples are the formal and discursive innovations required by such interrogations into the financial imaginary, pointing to a role of aesthetic-cultural production that exceeds its communicative function. If Chapter II discussed the complicity of aesthetic cultural production in a dominant imaginary of blame, while simultaneously carrying a critical potential in its general representative form, the examples discussed in this chapter more directly rely on, experiment with and explore these formal critical potentials. As a result, the examples no longer offer a compensation for the problem they confront, which is a threatening sense of increasingly intangible, immaterial and uncontrollable financial phenomena. But if the texts, films and video games resist making finance legible, neither do they simply reproduce financial abstractions as a fait accompli, nor insist on the self-determined, self-organizing and socially beneficial effects of abstraction. Rather, as I show in the following, these examples aim to disrupt the working of naturalizing effects in the production and reproduction of financial imaginaries. I suggest that while the examples do not offer radical re-imaginations of finance, they work to expose the imagined quality of the seemingly objective. In other words, if Haiven submits that social imagination is both

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constitutive for and determined by economic systems, these literary, filmic and ludic examples work across this dialectic: they make visible the "colonization of the imagination" while attempting to resist (even if not always successfully) contributing to and empowering "financialized capitalism" as natural and unchangeable (1–2). In many ways, these distinctly fictional and artistic treatments of the problematic of financial abstraction make urgent and culturally virulent the more academic critiques such as Vogl's appeal to denaturalize economic knowledge and De Goede's call for a repolitization of finance.

2.1. Performing Crisis Discourse - Kathrin Röggla's die alarmbereiten

Austrian writer and playwright Kathrin Röggla's work has routinely been informed by the interplay of social and economic issues and some of her plays and novels have explored how certain economic knowledge formations translate into the everyday. Her plays and prose often draw on documentary sources, such as the literary montage of interviews with interns, consultants, life coaches, etc., in her New-Economy novel *wir schlafen nicht*, published in 2004.⁵⁶ Just as distinct as her method of writing based on extensive research, is her often experimental and unusual use of language marked by her trademark lowercase spelling of everything, defying linguistic convention. As an example, *wir schlafen nicht* is told almost entirely in the subjunctive mood, using indirect speech to create an unsettling, highly distanced and accusing portrait of the everyday reality of work in the New Economy. Röggla's prose, as for example Hester Bear has observed, recalls "the style of the Vienna School" and shares it's "deep-seated skepticism

⁵⁶ English: *we never sleep*, translated by Rebecca S. Thomas and published by Ariadne Press in 2009.

of language's representational possibilities" (Baer 64).

In 2010, Röggla published a collection of seven texts entitled *die alarmbereiten* (a neologism, roughly "the vigilant," more literally "those who are on the alert"). The short texts take the form of conversations that all revolve around crises and catastrophes, from climate change, to disaster tourism, to kidnappings, to fears of social collapse and indeed to the Global Financial Crisis. Some of the texts in the collection are a re-compilation of a radio-play that was broadcast by the Bayerischer Rundfunk in 2009. However, the experimental prose of *die alarmbereiten*, both in its 2009 and 2010 versions, immediately departs from a more conventional radio-play format: the texts or conversations are not dialogues but exclusively presented by a single narrator in indirect speech, thus sharing the stylistic of *wir schlafen nicht*.

In the following, I first discuss the particular narrative situation, the content, and general structure of the stories in the collection. I argue that Röggla has created a mode of narrating crises and catastrophes that focuses on the discourse rather than the events themselves. In doing so the author continues the critical ambition inherent to most of her writing, to "expand readers' perception of the way language constructs social reality, systematically unmasking the violence of both" (Baer 64). The formal and narrative strategies establish a critical distance towards the various crises and catastrophes that the texts reference, and reveal a prevalent discourse of catastrophe that, independent of specific critical events, affirms itself as what Röggla has dubbed "a grammar of catastrophe" (Röggla in: Rinas). Second, I look more closely at the third text in the collection, "der übersetzer," about a continuing education seminar on the Global Financial Crisis. I argue that the text's focus on the language of finance and crisis forwards a critique

of its discursive elements. Namely, the formal strategies of the text make observable and tangible how financial complexity and abstraction assume an ideological role that works to exclude the individual from political discourses and practices.

The seven short texts included in *die alarmbereiten* encompass a variety of situations. Namely, they feature a crisis-meeting of managers of an agency for disaster tourism ("die zuseher"), a phone conversation between two people about climate warming ("die ansprechbare"), a seminar about the Global Financial Crisis ("der übersetzer"), a teacher-parent conference ("die erwachsenen"), a conversation with a reporter traveling to crisis regions around the globe("das recherchegespenst"), a kidnapping victim beleaguered by strangers ("wilde jagd"), and a call-in-radio-program about an unknown catastrophic event("deutschlandfunk"). The cast of characters consist of crisis managers, journalists, experts, concerned citizens, victims, radio moderators, and others. Yet, apart from a loose correspondence of themes, cast and tone, what holds the collection together is the particular use of language. If the lowercase spelling of everything (already present in the title) immediately draws attention to the form of the text, here she has created a distinct and rigid mode of narration for the general theme. The prose is void of narrative descriptions or more traditional plot elements. Rather, the collection consists of short scenes with people talking in various locations and times. However, these conversations are mostly composed of one-sided monologues, and they are mediated through firstperson-narrators (typically a silent recipient of the speech) that exclusively reports the enunciations of others in indirect speech. What a text's narrator might say or do in return, is only present in the wordy reaction of others, the ceaseless stream of language directed at him or her.

The experimental and somewhat stylized, overly constructed-seeming prose that results from the rigid narrative situation, instills a sense of powerlessness and oppression, of being talked to and talked about without being able to respond. This effect is heightened by the alarmed and accusatory tone in which the narrators are addressed, or different speakers talk to each other. For example, in the first text a character inquires if he is not speaking "loudly enough," and charges "that some here are not reacting at all. but that well, maybe one wants to ignore all of this;"⁵⁷ In the second text, the silent narrator is blamed by a caller for not listening and for spreading theories and causing panic; in the sixth text, the narrator, a kidnapping and abuse victim is potentially driven to suicide by the continuous charge of others; etc.

In addition to the formal and tonal subjection of the narrators, the indirect speech (marked by the conjunctive mood in German) also conveys a sense of distance. If this distance is immediately established between the enunciations of the texts' characters and the narrator, it is also a distance that further removes the reader from the catastrophic and critical events that are talked about. The steady mode of "he said that/she said that," or even "she said that he said that he read that" make the underlying events highly mediated, removed by multiple degrees to the point that any factual reality becomes unattainable. In fact, it often remains utterly unclear what the specific crisis or catastrophe is that drives a conversation and the fears and anger of the speakers. The course of events, their origins, consequences, main actors, etc. remain murky even if a reader might try to put the few hints and details in between together like puzzle pieces in an attempt to

⁵⁷ "spreche er etwa nicht laut genug, liege es daran? er habe den eindruck, als gebe es hier einige, die überhaupt nicht reagierten. aber gut, vielleicht wolle man das hier auch ignorieren" (13).

match them with real world issues (e.g. the Natasha Kampusch kidnapping with "wilde jagd" or maybe most obviously the Global Financial Crisis since 2007/2008 with "der übersetzer.") On first sight, this blurriness adds to a tangible sense of a general anxiousness and impending disaster. In absence of hard facts, the threats perceived by the protagonists seem to enlarge. Further, both the seriality and disparity of events in the collection, in terms of scope and magnitude (from a teacher-parent meetings to a global financial crisis) seem to suggest, as one critic noted, "[a] society that rushes breathlessly from crisis to crisis" (Rinas).

Furthermore, none of the crises are resolved, and the stories often conclude ambiguously. "Have we survived?" one character asks regarding events and threats unknown to the reader, in a text entitled "deutschlandfunk" and a radio moderator suggests "that a general all-clear has not been given," and that "this is now the situation one has to life with."⁵⁸ Meanwhile, the seminar on the Global Financial Crisis is "ongoing since september 2008," with no end in sight (55); the protocol of a meeting of the "disaster-tourism-agency" ends with many issues addressed, none of them resolved and with everyone leaving (26); in "das recherchegespenst" the narrator traveling from crisis to crisis mysteriously vanishes "at the middle of the airport of taschkent" (119); the kidnapping victim is left to a unspecified but suggestive end while those who were professing to help move on to "this new case that has occurred" (173); etc. As a result of these unresolved crises and ongoing catastrophes, the collection as a whole presents a

⁵⁸ "die anruferin von vorhin möchte sich noch einmal zu wort melden und fragen: hat man jetzt überlebt" (Röggla 180).

[&]quot;doch vollständige entwarnung kann auch gar nicht gegeben werden. das ist eben die situation, mit der man leben muss. In erwartung, dass so etwas noch mal passiert" (Röggla 178).

society in a perpetual crisis mode, and a world in a permanent state of exception.

However, the prose of *die alarmbereiten*—its rigid concern with language rather than plot—connect these textual effects (the sense of oppression and powerlessness, the feeling of permanent exception and being in crisis) less to the many crises and catastrophes themselves, but with the very way they are talked about. The texts do not attempt to represent, reconstruct or illuminate particular crises and catastrophes that the reader only learns about partially and indirectly, i.e. by being two or more degrees removed. Whether the characters talk about an allegedly problematic child or an ongoing financial disaster does not seem to matter. In fact, the critical or catastrophic events of the last text in the collection remain completely unknown to the reader. The narrative form of *die alarmbereiten* does not only make the events less important than the language in which they are represented, but the collection renders the various catastrophes and crises interchangeable. What emerges is a literary investigation of a discursive mode of approaching everything in the register of the catastrophic.

In an interview, Kathrin Röggla called the perpetual presence of the catastrophic "a grammar of catastrophe" (Katastrophengrammatik) that has come to determine our everyday life (Röggla in: Rinas). In reference to economist Kathleen Sutcliff (Weick and Sutcliffe), Röggla claims that the mode of working through crises is no longer bound to a true state of exception. Rather, crisis and catastrophe management have become a kind of economic imperative of the everyday that applies to "confectionary manufacturers" as well as to "hostage negotiation teams" (Röggla in: Rinas). What Röggla professes to study is a kind of "dramaturgy of catastrophes" (Katastrophendramaturgie) that transcends the specific events and that has come to replace any rational or goal-oriented discourse on
crisis. The idea of a dramaturgy suggests that the discourses all run through "distinct stages that are always the same" while the content of a particular crisis is soon forgotten ("whether it is the weakness of the Euro, climate change or volcanic ashes"). For Röggla's narrators in *die alarmbereiten* the grammar of catastrophe characteristically produces the inability to act or even speak. The resulting sense of irresolvability, that confuses crisis and catastrophe in favor of the latter, becomes especially virulent, when taking a closer look at the text "der übersetzer."

The third text in the collection with the title "der übersetzer" (the translator) opens with a one sentence introduction in cursive letters: "seminar room of the continuing education institute 'WCR' (chances and risks) in a former factory building in oberschöneweide, ongoing since September 2008."⁵⁹ This introduction to the location and approximate and (well noted, open-ended) time of the scene is followed by the distinctive first-person narrator reporting a conversation in indirect speech. As the reader learns in the course of the text, the conversation happens between two seminar participants, presumably coincidentally seated next to each other: the silent narrator and her conversation partner, "the translator." Neither of the two have names, the pronouns merely identify the translator as male, and the narrator as female. The translator professes to have comprehension of economic matters and complains about having to explain them to the narrator, accusing her of ignorance. The asymmetry of knowledge is established in the very first sentences of the story as much in medias res as it will end

⁵⁹ All trans. by Kaipainen "seminarraum des weiterbildungsinstitutes 'WCR' (chancen und risiken) in einem ehemaligen fabrikgebäude in oberschöneweide, fortlaufend seit september 2008" (Röggla 55).

without closure: "that I would not understand the whole thing anyway. That one would certainly not explain this to me and especially not explain it through and through." ⁶⁰

The title of the story "the translator" appears in the text when the character in question suggests "that he had to translate what was coming from the front" to the narrator.⁶¹ That is, in the always condescending and increasingly aggressive tone of the translator, a veritable flood of technical terms and concepts presumably brought up in the seminar and by the narrator are mentioned: "crisis of confidence," "short selling" "subprime" "domino recession", "toxic assets" "regime of accumulation," etc. Rather than explaining, the translator charges: "that I would stumble over the simplest concepts! as if the credit crunch was a foreign word! as if the oil price was an abstraction! as if loss-expectancies were a complicated language game!"⁶²

Since the narrator does not speak directly but merely reports the translator's enunciations (what he says about the seminar, what he claims about himself and what he purports about her), the reader is limited to a single perspective. All information is channeled through him, and often in opposition, or contrast to him: according to the translator he is dressed nicely while he accuses the narrator of having a "grubby look." He scolds her for looking out of the window, reprimands her for supposedly "pretending to be of bad hearing" and when she offers him her sandwich he diagnoses that "[she]

⁶⁰ "die ganze sache werde ich doch nicht richtig verstehen. Das werde man mir jetzt sich nicht erklären und schon gar nicht durch und durch erklären" (55).

⁶¹ "(…) er müsse mir alles übersetzen, was von vorne komme. übersetzen oder wiederholen, weil ich es angeblich nicht ganz verstanden habe" (59).

⁶²"aber ich stolperte ja schon über die einfachsten begriffe! Als wäre die kreditklemme ein fremdwort! als wäre der ölpreis ein abstraktum! Als wären minuserwartungen ein kompliziertes sprachspiel" (57)!

must have become depressed to offer him [her] lunch in times like these."63 Further, while the translator imposes his views on the narrator he also attacks and insults everyone else around him, of being clueless, shabby, stupid, losers, etc. and repeatedly expresses disbelief that he, out of all people, is stuck in this seminar, in this run-down industrial neighborhood that "one would better only enter in a helicopter."⁶⁴ However, the translator also guickly announces that he does not attend the seminar voluntarily, but "has been told" that he "needed these extra lessons" and repeatedly states that he had been "demoted" (56, 63).⁶⁵ The reader never learns who told him, or what the translator's actual job is or was. At some point towards the half point of the text, the translator interrupts his stream of accusation and insults regarding the supposed ignorance of the narrator to admit that lately, he too has "trouble remembering things" and that he has developed a kind of "professional Alzheimer's". However, the translator is fast to subsume this condition under a "rampant global professional Alzheimer's" where he and everyone else keeps forgetting that "all banks are essentially broke" and that our everyday life is merely "propped up" by "stimulus billions" that would "run out in no time."⁶⁶ While he is stuck in the seminar, the translator remains optimistic and seems to be waiting to be relieved by

⁶³ "ich hätte selbst ein pausenbrot und biete es ihm an? Ich müsse wohl depressiv geworden sein, wenn ich in zeiten wie diesen mein pausenbrot hergebe" (56).

⁶⁴ "natürlich würde ich das nicht kapieren, was das bedeutet, wenn jemand wie er auf einmal in einem raum wie diesem sitze und sich erstmal die augen reiben müsse .(...) Dies sei (...) immobilien-schrott bzw. eine gegend, die man besser nur per helikopter betrete (57–58).

⁶⁵ "man habe ihn zurückgestuft, müsse ich wissen. Man habe gesagt, auch er habe diese nachhilfestunden in sachen wirtschaft nötig, die wir jetzt alle zu überstehen hätten" (56).

⁶⁶ "er müsse zugeben, er könne selbst nicht gut im kopf behalten, dass irgendwann schluss sei. Ja, er habe richtige gedächtnislücken entwickelt. das beispielsweise sämtliche banken im grunde pleite seien, vergesse er täglich von neuem, dass wir nur noch von konjunkturhilfemiliarden umgeben seien, die unseren alltag stützten, dass unser alltag zusammenkrache, wenn diese einmal aufgebraucht seinen, was in kürzester zeit der fall sein werde, ebenfalls. Er wisse auch nicht, wann er diesen betriebsalzheimer entwickelt habe, sein ureigenster betriebsalzheimer, der teil des globalen betriebsalzheimers sei, der im augenblick grassiere" (59–60).

those in power and "at any moment now" to be admitted to a "VIP" part of the seminar (64). He refuses to conclude that "the world is coming to an end" and states that he will not "give in to panic" (60, 61).

As the conversation progresses, the tone increasingly slides into the uncanny. At first, the translator mentions the narrator's "predecessor," an unnamed women that has suddenly and inexplicably "disappeared" (62). Then he reprimands the narrator anxiously for getting up and walking to the front:

(...) that he would not understand, how I could have arrived at this idea, to simply get up and walk to the front. what I wanted to do up there? that I would get him into trouble. that one could not simply change one's seat, that one could not simply get up and walk to the front to see who was there. that strictly speaking we were not allowed to move at all, that he would rather not imagine the incalculable domino effects that it would cause, if one of us were to move.⁶⁷

The reader never learns who sets these rules that the translator worriedly invokes. Those running the seminar, or other seminar participants, remain invisible. In fact, the translator repeats an observation of the narrator "that no one is up there," only to refute it. He deflects the observation as part of the narrators purported ignorance, "that this goes to show, how little i understood of contemporary extra lessons in economics" (66–67). He goes on to mock her, that she would probably believe that the seminar would have "final results that one could memorize" and the matter would be resolved:

⁶⁷ "insofern solle ich lieber wieder auf meinen platz zurückkehren, er verstehe gar nicht, wie ich auf diesen gedanken habe kommen können, jetzt aufzustehen und nach vorne zu gehen. was ich denn da vorne wolle? ich würde ihm noch probleme bereiten. man könne nicht einfach aufstehen und nach vorne gehen, um nachzusehen, wer denn dort sei. strenggenommen dürften wir uns überhaupt nicht bewegen, die unüberschaubaren dominoeffekte, die das nach sich zöge, wenn einer von uns sich rühre, möchte er sich lieber gar nicht vorstellen" (66).

but that there would be no final results, that this extra lesson would go on and on. that even if they were to carry me out. that yes, even if none was left. that when all the students would have disappeared, that he was certain, that this extra lesson would not be over. that when all the classrooms would have emptied out, that when the chairs would only be moved by rats and the doors would only slam from the draft, that it would continue.⁶⁸

From this passage follows that if the short introduction of "der übersetzer" had stated that the seminar was "ongoing," here, in this menacing vision the translator insists that is also without an end. After the translator goes on another tangent about a wave of real and staged suicides in the US, the text ends rather abruptly and without any resolution. The translator proposes almost in passing that the narrator should commit suicide herself and that he would be eager to help: "or if I wanted to shirk yet again? but that he could not imagine that, since I would know myself after all, that either way the only way out of this school was through the window and that now it was my turn, but that if I wanted, he could certainly give a hand."⁶⁹

As the final threat towards the narrator reveals the ruthlessness and brutality of the translator, and "der übersetzer" draws a portrait of the translator as overly self-confident, condescending and aggressive, the text plays with similar clichés and stereotypes as the novels, films, and videogames discussed in the last chapter (i.e. the translator's attitude,

⁶⁸ "aber es gäbe keine endergebnisse, diese nachhilfestunde gehe immer weiter. selbst wenn sich mich raustransportiert hätten. ja, selbst wenn niemand mehr da sei. Wenn all nachhilfeschueler verschwunden sein würden, sie er sich sicher, sei diese nachhilfestunde nicht zu ende. Wenn alle klassenraeume sich geleert haetten, wenn die stühle nur noch von den ratten bewegt werden würden und die türen einzig vom luftzug zuknallten, gehe sie weiter" (67).

⁶⁹ "(...) oder wolle ich mich doch wieder einmal drücken? Aber das koenne er sich nicht vorstellen, schliesslich wuesste ich doch selbst, diese schule könne man so oder so nur durch das fenster verlassen und jetzt sei ich an der reihe, aber wenn ich wolle, könne er gerne etwas nachhelfen" (69).

sense of superiority, and use of jargon are reminiscent of a master of the universe). However, the translator's self-characterization is also exaggerated and unspecific; who or what he is has to remain as blurry and unclear as the crises and catastrophes in the entire collection. Rather than portraying a specific actor, let alone an alleged perpetrator of the Global Financial Crisis, the text seems to emphasize his language, a discourse that he more represents than embodies. The permanent exaggerations and occasionally satirical tone in "der übersetzer" at first seem to feed into the stereotype of bankers are not exclusive to this particular text. Whether the teacher-parent meeting of "die erwachsenen" escalates from the concern about a student's obsession with catastrophes until the text ends with the teacher's proposal to protect the rest of society and "quarantine" the child as an "enemy within" (90), or if in "wilde jagd," the abuse and kidnapping victim is pushed to suicide by the increasingly absurd, intrusive and demeaning behavior of a self-professed care team, the language of the characters (whether neighbor or banker, psychologist or radio-moderator) is defined by hyperboles and extremes.

The exaggerations are not part of a specific characterization but aim to bring out the typical and the general of catastrophe discourses. The hyperboles strain them into visibility and by pushing the characterizations to the extreme and satirical they establish a critical distance. This disproportionality between the language and the events (as far as they are known to the reader) further decouples the discourse from the crises and catastrophes. Yet, from the perspective of the narrators within the texts, these effects produce a sense of powerlessness towards crisis and discourse. That is to say, the narrators merely report or witness a discourse independent of the critical events and separate from themselves. The exaggerations and alarmed aggressions of the speakers reveal a violence of the discourse: as mere recipients of speech, the narrators are silenced rather than silent.

The formality of the text, and its narrative situation, enact the effects of a catastrophe discourse: the I, the individual, is no longer present as an active, decisive subject.⁷⁰ Confronted with the crisis, the subject is rendered powerless, unable to speak or act. In "der übersetzer," the indirect speech effaces the narrator from her conversation with the translator. In her report of his words, she no longer has a voice. Rather, he imposes his view and qualifies everything she supposedly says or does (or rather, attempts to say or do). Within the narrative that transpires from his words, she is unable to participate in the seminar and, as the end suggests, unable to leave it.

While Röggla aims at a general grammar of catastrophe, there is also something specific about the discourse on Global Financial Crisis featured in "der übersetzer." The dichotomy of purported knowledge and alleged ignorance that defines the relationship between the two characters paints a picture of the Global Financial Crisis as a highly complicated matter, seemingly unfathomable for the uninitiated, only understandable by experts, or by those who speak the language that the translator professes to know. To the narrator, as the translator purports, the economic concepts that come up "are abstractions," "complicated language games" that she fails to make sense of in her own language (Röggla 57). If the translator represents part of the discourse on the Global

⁷⁰ See also Röggla: "Die Menschen erleben sich nicht mehr als Bürger, die politisch handeln können, sondern als Figuren, die dem Geschehen ohnmächtig gegenüberstehen: als Zuschauer oder als Opfer. Man fühlt sich immer klein im Angesicht der Katastrophe, zu klein, um selbst handeln zu können. Deshalb habe ich meine Erzählungen auch alle in indirekter Rede gehalten: Der Icherzähler kommt als direkt Handelnder nicht mehr vor" (Röggla in: Rinas).

Financial Crisis rather than a specific actor within it, the silencing and disenfranchisement of the narrator is the effect of a discursive mechanism that separates those who know and those who don't. More precisely, this separation designates a mechanism of exclusion that strips those who are not literate in the language of finance from their right to speak and participate in the discourse. If on the flip side, the translator insists that to him these matters are too simple and obvious to bother explaining, and if he belittles the narrator in her attempts to understand, the text makes tangible an ideological function of these claims to the complexity/simplicity of the matter. To put it differently, what the title "the translator" suggests as a distance between two languages is undercut by the irony of a translator that never translates. Rather, it is a discursively reproduced distance between a supposedly intangible and abstract financial sphere whose critical events appear to be too abstract to be understood, and the everyday reality that is affected by those critical events.

Of course, the irony of Röggla's story is that ultimately both the translator and the narrator are helpless, regardless of their real or professed expertise in financial and economic matters: both are trapped in a kind of purgatory that is the perpetually continuing seminar on a perpetually continuing crisis. But there is more to examine. For one, the invocations of a never-ending seminar, of suicide, or even murder, are part of a routine unrealism in Röggla's texts. The fantastic, surreal, and absurd, together with the prose's formality, underline the symbolical function of the language and the narratives in the collection. In both in "wilde jagd" and "der übersetzer" the narrators are driven to suicide by a constant barrage of accusations and demeaning language; here the texts work to surreally heighten and expose a figurative violence of the discursive mechanisms

of catastrophe discourse. In "die ansprechbare" the speaker fails to listen to the warnings of the narrator that her own house is on fire, until she burns alive, and in "die zuseher" everyone accuses everyone of not listening, until the meeting falls apart; here the texts illustrate how these discursive mechanisms disable any genuine conversation. Thus, as none of the crises are resolved, and none of the victims/narrators are better off at the end, *die alarmbereiten* seems to insist that the catastrophe discourses fail to treat them as a crisis in the proper sense of the word. Rather, as much as the grammar of catastrophe effaces the underlying events (that become interchangeable), it also registers everything as a catastrophe. As Röggla notes:

The financial crisis was not a financial crisis, but a finance-tsunami, a financial meltdown. A rational discourse on crisis rarely takes place, instead we experience again and again the classical dramaturgy of catastrophe that runs through distinct stages until the finale – and that is always the same.⁷¹

If the texts leave all the crises unresolved, this also symbolically hints at the reason for their missing resolvability: the catastrophe discourse that comes to replace a genuine crisis discourse produces a foreseeable dramaturgy of public discourses that results in a momentous disenfranchisement of actors, predicated on the confusion of crisis and catastrophe: a crisis presents one with the need to act to avoid a development for the worse but also gives an opportunity for change. However, a catastrophe merely gives the possibility to help and address harm that has occurred, at best the prospect to be better prepared for the next time. Indeed, to describe the events since 2007/2008 as catastrophe

⁷¹ "Die Finanzkrise war keine Finanzkrise, sondern ein Finanztsunami, eine Finanzkernschmelze. Ein rationaler Diskurs über Krisen findet kaum statt, stattdessen erleben wir immer wieder die klassische Katastrophendramaturgie, die verschiedene Phasen bis zum Finale durchläuft – und die immer gleich ist" (Röggla in: Rinas).

rather than a crisis precludes the possibility of change, and the policy maker as catastrophe helper is merely bound to mitigate damages (e.g. bailouts), while the public is left to prepare for the next time the unpreventable and inevitable strikes again.

As I observed in my discussion of the lingering presence of medical language in public crisis discourse, the language and images of catastrophes in the discourse on crisis heighten a sense of exigency and recall Chalorin-Dovrat's notion of an "objectivation" of crisis (as "abstraction" and "de-politicization"). If an objectivated crisis (per Chalorin-Dovrat) is a use of the term that seeks to "abstract crisis from the realm of human action and transform it in an objective, quasi-natural phenomenon" (Chalozin-Dovrat 79) such a crisis reverberates with the various processes of abstracting finance from its embeddings (Aitken, "Performing the Limits of Finance"; de Goede). Further, the disenfranchisement of the larger public poses a certain indistinguishability between crisis and catastrophe. That is, the slippage of crisis into catastrophe discourse also reveals that the practices and discourses of abstraction and de-politicization of finance establish an exclusionary financial imaginary, in which a majority of those affected had little stakes in profitable futures, but as bearers of the risks are excluded from the discourses and political efforts that ensued. As a result, the larger public experienced the Global Financial Crisis as a financial catastrophe that struck suddenly, and with distant origins, like an earthquake. Vogl has characterized this "quirk" of the capitalist economy as follows: "Since risk differs from dangers in that the latter cannot be ascribed to our actions or inactions, it is clear that the systemic economic risks and calculable damages have been transformed into elemental dangers for the dependent majority who are powerless to make decisions" (129).

To conclude, Röggla's "der übersetzer" makes visible the discursive reproduction of financial abstraction, as a mechanism of exclusion. Considered in the context of the entire collection of *die alarmbereiten*, the text reveals the political implications of a catastrophe discourse that has come to replace a genuine discourse on crisis. Taken together, these implications further a disenfranchisement of the public, delegate the process of working through crises to experts and ultimately deny the possibility of change.

The texts expose these traits of crisis discourse and realize a critical function of cultural production by way of a formal, tonal and narrative estrangement of languageone that draws the reader's attention to the way the protagonists talk, and past the protagonists as characters, to a general discourse on catastrophe-the focal point of the entire collection. In "der übersetzer," the narrator is not only unable to act because she is insignificant in relation to the financial crisis (as the translator reminds her), but also due to the discourse on the Global Financial Crisis itself: the highly technical language and permanent suggestion of forbidding complexity of economic matters render the narrator unable to participate in the discourse. Thus, as Röggla's collection presents a critique of crisis discourses, "der übersetzer" also points to an ideological function of financial abstraction, where the to-complex-to-be-understood becomes a kind of impenetrable smokescreen. Like the translator that hides behind vocabulary and concepts, paints colorful metaphors (e.g. of a "global Alzheimer's," or of "financial bombs") but is unable to translate (likewise, trapped in a never-ending seminar), the claims to abstraction paralyze a general audience and deny the possibility of a genuine engagement with both the Global Financial Crisis and the status of finance. Ultimately, the text "der übersetzer" forwards the suspicion that the narrator is overwhelmed not as a result of her ignorance but by empty, unauthentic rhetoric. Röggla's exaggerations and formal estrangement of the discourse on the Global Financial Crisis reveals what la Berge has called an "obfuscating" use of abstraction that simply suggests that the crisis happened because finance is too abstract to be understood ("Rules of Abstraction" 95). Further, if the crisis continues and the discourse is without "final results," the claim to abstraction is also one that makes it impossible to find responsibility for the crisis (an exculpatory role). Ultimately, it is a claim that represents finance as so radically independent and self-determining that downturns must be anticipated and accepted as natural disasters or catastrophes. Röggla's formal estrangement of the (usually invisible) working of this discourse, do not only invoke financial abstraction as a fact to be accepted. Rather she positions her readers at a distance that allows for critically examining the role that language and media discourse on crisis play in constructing finance, not as mere effigy but as politically effective category.

2.2. From the Limits of Representation to the Representation of Limits– Financial Abstraction in Don DeLillo's *Cosmopolis* and David Cronenberg's Film Adaptation.

When Vogl first sets out to investigate the Global Financial Crisis of 2007/2008 and to approach the "riddle of the finance economy," he begins by introducing his readers to a work of fiction, a novel that predates the crisis by several years and that, at the time of Vogl's writing, is already a decade old (Vogl 2). According to Vogl, the "strange story" in Don DeLillo's *Cosmopolis*, published in 2003, does not only "lead into the world of modern financial markets" but touches on the fundamental question of their "narratability" (2). Few novels confront contemporary financial abstraction in a more explicit way; DeLillo uniquely captures and dramatizes the enthusiasm and fears surrounding the discourses on self-determined, immaterial finance. Thus, for Vogl, the author assumes an almost prophetic role, in writing about something which the Global Financial Crisis would spectacularly make visible and problematic about half a decade after its publication. Almost unsurprisingly, like *Wall Street* and the notorious Gordon Gecko, *Cosmopolis* and its enigmatic main character, Eric Packer, had a timely return in 2012, when David Cronenberg adapted the novel as a film. When *Cosmopolis* was published in 2003, rooted in the market frenzy of the nineties and in view of the dot-com bust, the novel was more a philosophical exploration of the future and of intersections between postmodern discourse and the discourse on finance. When the film was released in 2012, it more urgently entered a wider discussion on finance, capturing the sense of disconnection and threatening abstraction that seemed to have suddenly reached from the virtual into the real.

As this chapter compares Cronenberg's film adaptation with DeLillo's novel, in respect to the Global Financial Crisis and the questions it provoked, I will not undertake a complete analysis; the novel that is arguably about much more than finance (see e.g. Bretton who analyses *Cosmopolis* considering the events of 9/11). However, both the faithfulness of the film adaptation and its deviations from the underlying text necessitate carefully reconstructing the main themes and aesthetic forms of DeLillo's novel and examining its difficulties and maybe irresolvable ambiguities towards the supposed self-determination of finance. I do summarize the plot of the novel and characterize its formalities and themes. I then discuss the novel with respect to its characterization of

finance and the financial abstractions and its attempts to represent and redouble these concepts in its formal language.

In doing so, I contrast Vogl's discussion of *Cosmopolis* (at the beginning of his investigation of the liberal political economy) with Shonkwiler's analysis (within her larger study of historical representations of abstract capitalism). Vogl reads the events at the heart of DeLillo's text as an exemplification of a "black swan," i.e. a figure at "the vanishing point of finance-economic knowledge," designating an occurrence that both exceeds expectation and defies explication. Shonkwiler understands the novel as a "formal experiment," in trying to come to terms and represent "increasingly abstract and speculative nature of capital" (Vogl 15; Shonkwiler 160). I argue that just as much as Vogl brushes over the ambiguities and formal complexities of the text, in staging the novel as a stepping stone for a critique of the abstractions of economic theory through history, Shonkwiler seems to have fallen under the spell of Packer in accepting the reality of these descriptions of financial abstractions.

In the second part of this section, I discuss the unique, formally rigid film adaption by Cronenberg, a decade after the first publication of the novel. I argue that both Cronenberg's adaptation and certain critical reactions to the film are inseparable from the virulent discourse around the Global Financial Crisis the film entered at its release. I analyze how the film's formal strategies suggest a decisive change of perspective on financial abstraction since the days of DeLillo's postmodernist reveries on cyber capital. The pronounced artificial quality of the film production works to distance the spectators from the novel's discourse on finance, emerging less as a formal experiment in trying to represent financial abstraction, and more as a critical representation of the problem of abstraction itself. In doing so the film provides a valuable perspective on both DeLillo's novel and the critical discourses on finance after the Global Financial Crisis.

2.2.1. Cosmopolis, the Novel

The plot of Don DeLillo's *Cosmopolis* is set "in the year 2000" on "a day in April" in New York (*DeLillo 1*). The novel describes a single day in the life of Eric Packer, a young, wealthy and high-powered asset manager, and head of multi-billion-dollar investment fund Packer Capital. He wakes in the morning after another sleepless night and decides that he wants a haircut, an endeavor which requires driving across Manhattan and will take most of an exceptionally eventful day. As he sets out on his journey with his bodyguard, traffic is already slow due to a presidential visit. During the rest of the day, incidents such as a threat to the president's life, a funeral procession for a rapper, and anarchist protests will reduce the drive to a crawl. From the outside, Packer's vehicle, a white stretch limousine, is an anonymous sign of power. On the inside, however, the car is a high-tech office that simultaneously shields Packer from the outside world (it is armored and soundproofed) and through its countless screens and consoles, connects Packer to the global, digital flows of capital.

The limousine is Packer's mobile headquarters and is the main locale for the many meetings and conversation Packer has during the day. Here, he first meets with his chief of security who assures him of the impenetrability of Packer Capital's systems. Packer then leaves the car to eat breakfast with his wife of a few weeks, who he will repeatedly and randomly meet to share meals with. He is joined in his car by his currency analyst to discuss the latest developments regarding an unexpected rise of the yen (the Chinese Yuan in the film). Packer leaves the car again to see his art dealer and long-time lover, has sex with her in her apartment and announces his plan to purchase the Rothko Chapel for himself (in the film, this all takes place in the car).

Back in the limousine, Packer is joined by his chief of finance. During the meeting he also receives a prostate exam from his doctor as part of his daily health checkup, at the end of which the doctor announces (to Packer's distress) that Packer has an asymmetrical prostate. Up to this point, through various conversations with Packer's associates, readers learn that he is engaged in currency speculation, betting against the Japanese yen (the "Yuan" in Cronenberg's adaptation), which has been rising against expectations. The rise of the yen is a financial phenomenon that, according to his currency analyst, "does not chart". By the time he meets his art dealer, Packer announces that "he is losing money by the ton," "many millions" (*12*). Later, his chief of finance notes that the yen carry could "crush" the billion-dollar-fund Packer Capital "within hours" (*17*). During all of this, Packer insists that the yen cannot go higher, that it will eventually fall, that it will chart.

While his many advisors are quick to agree with Packer, the yen keeps rising and their increasingly urgent pleas and suggestions to stop "speculating into the void," to readjust and "ease off," go unheard. Instead Packer doubles down, continuously borrowing ever more yen in the markets. After meeting his wife for lunch, he is joined by his chief of theory. During their lengthy philosophical conversation on the future, technology, and capital, an anti-globalization protest erupts in the streets outside the limousine. Packer then sleeps with a female bodyguard, has her electrocute him with a stun gun, only to meet up moments later with his wife for dinner. When he announces his losses, she insists on divorce but promises to help with her family wealth. Packer quickly gambles away her fortune in the markets, making it impossible for her to help.

After a visit to a techno rave and a funeral procession for a "Sufi rapper" during which Packer weeps, he is assaulted by a "pastry assassin" that throws a cake in his face. Moments later, Packer suddenly and seemingly without motivation, shoots his bodyguard. The limousine finally takes him to the barber shop, a place of Packer's childhood. However, Packer leaves suddenly, with only half a haircut. *After* meeting his wife once more on a film set in Manhattan, having sex with her, and leaving his limousine and driver behind, Packer is all alone. When someone shoots at him from a ruined building, he tracks down a man that has been making anonymous threats to his life during the day. The final scene is a lengthy confrontation in an abandoned house in which his assassin, Benno Levin, a former employee of Packer, has taken shelter. The two men speak, both holding guns, discussing Levin's motives and why Packer "engineer[s] his own downfall." Eventually, Packer shoots his own hand, throws away his gun and the novel ends with Levin pointing a gun at his counterpart's head, with Packer "waiting for the shot to sound" (209).

The novel is told by a personal third-person narrator who tells Packer's story in past tense. While DeLillo's writing is rich in dialogue, the text surrounding conversations between Packer and other characters consists mostly of Packer's internal monologues. Packer's thoughts and digressions often blend seamlessly into third-person descriptions and narration of his actions. As a result, little distance is perceptible between the narrator and Packer. However, broken into chapters, the Packer-narrative is interrupted twice by "The Confessions of Benno Levin." These short texts, bearing the name of Packer's future assassin, are in the form of a first-person memoir. When this happens for the first time, Levine reports Packer's death in the past tense, well before the final showdown between Packer and his assassin takes place. Revealing Packer's eventual faith to the reader, the confession titled "Evening" opens with "He is dead. Word for word. I turned him over and looked at him" and the confession ends with "(...) all the thinking and writing in the world will not describe what I felt in the awful moment when I fired the gun and saw him fall. So what is left that's worth the telling?" (DeLillo 24, 27).

In the second disruption of the Packer-timeline, still before Packer and Levin meet, Levin speculates on killing Packer. In this memoir titled "Morning," Levin asks: "And how will I find him to kill, much less actually aim and shoot" (67)? From this second memoir the reader understands that the first was written after Packer's narrative ends, or as its title suggests, at "Night," while the second is written sometime in the "Morning," around the time that the Packer-narrative begins, with him awake in his apartment. The way the confessions are inserted into the text out of order ("night" before "morning"), and out of synch with the timeline of the Packer-narrative, destabilizes the formal unity of time that an otherwise seemingly coherent day-in-the-life-of-frame suggests.

This temporal framing points to the rich-tapestry of intersexuality DeLillo's novel unfolds. Together with its episodic structure, the novel conjures among others James Joyce's *Ulysses*. Further, given the text's prominence of financial capital, it references Sergei Eisenstein's notes on a plan of making a film out of Karl Marx's *Capital* using the same temporal principle as Joyce.⁷²

⁷² For Eisenstein's influence on DeLillo's writing before *Cosmopolis* in terms of his methodology and techniques see Catherine Morley's Essay on "Don DeLillo's Transatlantic Dialogue with Sergei Eisenstein."

At first, the narrative contained in this temporal unit seems to follow a straight line that chronicles the downfall of a financial speculator. The story begins with Packer in a 48-room, \$104-million-dollar apartment at the height of his wealth and power, and leaves him bankrupt, left by his wife, and dead in an abandoned building. However, Packer's demise is intimately tied to an inversed narrative line, the rise of the yen. Since Packer is betting on the devaluation of the currency, the higher the yen rises, the lower Packer falls. The yen's rise, against all expectations, expert knowledge and probability, does more than drive development of the main plot. Rather, the rise of the yen also becomes the occasion and vehicle that ties together the speculations and reflections on technology and capital that define the conversations and internal monologue of Packer over the day. Moreover, it is through these reflections that we learn what led Packer to this enormous and seemingly erroneous speculation against the yen, and why he ultimately embraces his own downfall. In fact, this development questions the linear progression of the plot, since through Packer, the annihilation of his fortune is less and less experienced as defeat and failure but as liberation, or ascension. The way the story is told and reflected through Packer, who dreams of giving himself over to "the power of predetermined events" (65) suggests that the novel is less (or at last not only) the chronicle of the hubris and downfall of an individual, but the exploration of the beginning of a new stage of finance: a global, all-embracing, radically self-reflexive and self-determined hegemonic regime. By the same token that Vogl has suggested that the unprecedented, unexpected rise of the yen is "the main intrigue of the novel,"(9) finance is in many regards its main object, if not it's protagonist.

Packer inhabits and is defined by the world of what the novel calls "cyber capital," by "the only thing in the world," as he declares to his youthful currency analyst, that is "worth pursuing professionally and intellectually (...), the interaction between technology and capital. The inseparability"(10). The technology is represented by the computers and screens that surround him at any waking moment, constantly relaying streams of information, numbers and charts. These are the digital movements of now immaterial capital that Packer and his team analyze and chart with the help of more technology. Computers break time into fractions of a second, the analysts chase elusive trends and differences in prices. The cyber capital that Packer interacts with works instantaneously and across the globe; currencies, stocks, derivatives, etc. of all parts of the worlds are bought and sold regardless of geography and time. However, in the novel, technology is more than a way of enhancing the representation of finance, more than an increase in its availability or a tool to gain an edge in Packer's line of work. Rather, the "inseparability" that Packer claims of technology and capital effects a fundamental and rapidly advancing transformation of the world. As Packer observes, looking at "the roll and flip of data" on a screen in his limousine:

It was shallow thinking to maintain that numbers and charts were the cold compression of unruly human energies, every sort of yearning and midnight sweat reduced to lucid units in the financial markets. In fact, data itself was soulful and glowing, a dynamic aspect of the life process. Here was the eloquence of alphabets and numeric systems, now fully realized in electronic form, in the zerooneness of the world, the digital imperative that defined every breath of the planet's living billions. Here was the heave of the biosphere. Our bodies and oceans were here, knowable and whole. (24)

The information and numbers are not simply a calculation, a re-presentation of economic activity, or "human energy"; according to Packer, they are "a digital imperative" that defines the entirety of Life. In this sense, as more than an object that Packer analyzes and manipulates, finance is equally immaterial and self-determinate in its digital form, has become a protagonist or, as Shonkwiler argues, "Technocapital is projected in the novel as if it had been liberated both from the illusion of human control and from the older explanations of historical materialism" (129).

The characters in the novel, speculate at length on the enigmatic quality of what they still call "money," many of them expressing, that they no longer understand it. As for example his art dealer declares: "I don't know what money is anymore;" and Packer's "Head of Theory", Vaija Kinski announces: "The glow of the screens. I love the screens. The glow of cyber capital. So radiant and seductive. I understand none of it" (13, 35). Finance (at least for the characters in the novel) has become fully self-referential and as such unimaginable for the individual, and unrepresentable in its totality. As Kinski suggests in a brief history of money, departing from the Greek concept of "Chrimatistikos":

We have to give the word a little leeway. Adapt it to the current situation. Because money has taken a turn. All wealth has become wealth for its own sake. There's no other kind of enormous wealth. Money has lost its narrative quality the way painting did once upon a time. Money is talking to itself (34). All of these descriptions—the inseparability of technology and capital, the digital imperative, the indigestibility of cyber capital, the monologue of money—denote the financial abstractions the novel engages with.

The literary investigation of an immaterial, self-reflexive, post-narrative and hegemonic finance expresses itself along multiple axes that I discuss below: First, Packer and his meandering journey through New York becomes a narrative device, through which DeLillo unfolds a panoptic vision of a world permeated and ruled by the digital streams of capital, forming a system that no longer has an outside. Second, finance operates as a plot device that explains both Packer's success, and as money is "taking a turn," produces his downfall. Packer, a former seer, is no longer able to see; someone who worked to bring about a determinative system is falling prey to it. Third, and taken together, the alleged un-representability of this determining system of finance becomes a formal concern of the novel itself. The narrative and formal strategies of representing the unrepresentable not simply double the theoretical deliberations of the characters in the novel. Rather, these strategies destabilize the chronology of the text, affirm Packer's dream of transcendence, and make up for a fundamental ambivalence of the novel.

As Vogl notes, if Eric Packer expresses the "canonical features" of literary imaginations of "financial and stock market speculators of the last 200 years," (young, powerful, ruthless, fantastically rich), then he enters the text "in disguise" as "a character mask – or rather, a dream figure, an apparition – personifying the most recent form of finance capitalism" (Vogl 3). Rather than a character study, or archetype of the financier and speculator, his features, anxieties, and aspirations condense him into an allegorical figure, a medium through which DeLillo sketches New York as a dystopic "cosmopolis"—

a city as much inhabited by people from all over the world as by the vast global powers of finance, working to change the world at a rapid pace. Thus, as the stretch limousine slowly advances and detours through the street, Packer, hyper-aware of his surroundings, sees and anticipates the effects of this transformation wherever he turns his eyes. He imagines and observes the various forms of now "archaic business," (DeLillo 1) (prostitutes fleeing the daylight, trucks transporting physical goods) and "obsolete forms of money" (the gems in the diamond district). From his car he views the banks in Midtown:

They looked empty from here. He liked that idea. They were made to be the last tall things, made empty, designed to hasten the future. They were the end of the outside world. They weren't here, exactly. They were in the future, a time beyond geography and touchable money and the people who stack and count it. (36)

Considering this description, it is cyber capital that renders things obsolete in anticipation of the future. If the architecture of banks prefigure the future, the street of the diamond district is an "offense to the truth of the future" (29). Packer's kaleidoscopic view of the city through the windows of his car, with its bustling activity, people from all over the world and all walks of life, with their professions and activities are all measured and conflated in relation to an imminent future in which money and technology will form an omnipresent and all-embracing imperative.

Further, if Packer's sensibilities reveal, to the reader in small doses, how finance encompasses the everyday world, the events that accompany his journey also establish how policy, how the state no longer matters: both politics and protest become merely a theatrical side show, an empty ritual outside of time. When Packer's journey is first slowed by a threat to the life of the president, Packer wonders sarcastically: "Do people still shoot at presidents? I thought there were more stimulating targets," (7). Later, Packer studies the President's image on screen, and to Packer he "seemed to exist in some little hollow of noontime (...) he was the undead" (33). More stimulating targets emerge during the day littered with sudden violent outbursts: the managing director of the International Monetary Fund is gruesomely murdered on TV; an acquaintance of Packer's, a billionaire in Russia, is found shot in front of his house. All of this leaves Packer untouched, and if anything, elated and stimulated. Just like the anti-globalization protests that erupt, the deaths seem largely symbolic, unable to alter the course of the world, merely confirming the pace of its transformation. The protesters that appear in the streets and restaurants, men and women flinging rats are "a performance piece", it seems to Packer (16). Later in the evening, he is attacked by a "pastry assassin," a man throwing cakes in the faces of the rich and powerful around the world while taking a beating in return. Even when the still largely performative and symbolic protests turn violent (protesters clash with police, a man sets himself on fire, and a bomb explodes at a bank) in the world of techno-capital the violence strikes into the void. As protesters rock and vandalize the car, inside, Packer's Head of Theory calmly notes:

The market culture is total. It breeds these men and women. They are necessary to the system they despise. They give it energy and definition. They are market driven. They are traded on the markets of the world. This is why they exist, to invigorate and perpetuate the system. (39)

Packer, the reader's only window into this world, agrees: the protests are merely "a form of systemic hygiene, purging and lubricating (...)" attesting to the all absorbing power of "market culture" (43). In a system that has no outside, it is a "protest against the future,"

against the inevitable that Packer more represents than theorizes: a force already "overwhelming the present," transforming the world in anticipation of a new temporality tied to an abstract form of money (39).Together with Packer, Kinski theorizes a historical shift in time:

Money makes time. It used to be the other way around. Clock time accelerated the rise of capitalism. People stopped thinking about eternity. They began to concentrate on hours, measurable hours, man-hours, using labor more efficiently.

(35)

Since then, technology has accelerated this change, breaking time into units so small they are no longer perceptible by humans; this new reality, according to Kinski, demands rigorousness: "Because time is a corporate asset now. It belongs to the free market system. The present is harder to find. It is being sucked out of the world to make way for the future of uncontrolled markets and huge investment potential. The future becomes insistent" (35).

Packer's success and fall are intimately tied to this becoming of the future: the inexplicable rise of the yen comes to simultaneously test Packer's conceptions of the world and signify the arrival of the radically different of the future he anticipated all along. He and his associates operate on the nexus of these two worlds; the heterogeneity of the past and the uniform pull of cyber capital. As his Chief of Security observes, "people eat and sleep in the shadow of what [they] do," this is what gives them "meaning in this world" (5). Indeed, what gives Packer "meaning" is his ability to read cyber capital, i.e. to decipher the streams of information, to be "rigorous" in Kinski's sense, form predictions based on patterns that he perceives with the help of data analysis, charts and other

cutting-edge technology. But more than just predictions, Packer reads the markets like a sacred text, revealing predetermined rather than likely events; he is, as his chief of finance insists, a "seer" (DeLillo 20). Packer studies "figural diagrams that brought organic patterns into play, birdwing and chambered shell" (DeLillo 24). His ability to see these hidden patterns, structures, and balances, in the up and down of markets, are what made him successful, and what brought him from humble beginnings from the west side of New York, from a "little bitty start-up" (4) to be a dominant force on international financial markets. His obsessive analytic skills translate into a need for naming and penetrating everything rationally. Packer is uneasy if he does not remember the correct Latin word for something and relieved when he finally remembers; he studies art and literature as well as physics and biology. In reverse, Packer perceives anything chaotic or uneven as a threat. For one, his prostate is "asymmetric," as his doctor declares on his daily check-ups, a fact that terrifies Packer (24).

It is the inexplicable rise of the yen that throws Packer off balance and sends him down an initial spiral of self-doubt and -destruction. As an event in the markets that "does not chart," Packer seems more concerned with the elusiveness of a pattern, than the fact that he loses his and his investors' money. As "all the mathematics" his analysts have brought to "time cycles and price histories" no longer apply (16), he feverishly starts looking for something deeper:

There were numbers gliding horizontally and bar charts pumping up and down. He knew there was something no one had detected, a pattern latent in nature itself, a leap of pictorial language that went beyond the standard models of technical analysis and out-predicted. (27)

This time around the pattern does not materialize. If money is talking to itself, it is in a language that Packer no longer understands. Indeed, if his past success was dependent on reading the "digital imperative," something seems to have happened, and finance has apparently gone from self-reflexive to truly self-determinate. For Kinski, it is already obvious that markets are ultimately nothing but "random phenomena:"

You apply mathematics and other disciplines, yes. But in the end you're dealing with a system that's out of control. Hysteria at high speeds, day to day, minute to minute. People in free societies don't have to fear the pathology of the state. We create our own frenzy, our own mass convulsions, driven by thinking machines that we have no final authority over. The frenzy is barely noticeable most of the time. It's simply how we live. (37)

Packer, at least for now, resists such nihilism. If up to this point he has always been able to "see", he is unwilling to let go, or to accept that the self-determinate market might no longer need a seer, that his "authority" would have become just as archaic as the practices and things he observed over the day:

There's an order at some deep level (...); A pattern that wants to be seen; (...) my experts have struggled and just about given up. I've been working on it, sleeping on it, not sleeping on it. There's a common surface, an affinity between market movements and the natural world. (37)

As can be seen in the quotes above, the less the yen's behavior is understandable to Packer, the more he insists on and searches for "natural patterns," an assumed, rationally describable natural order in the markets. At the same time, almost comically, the asymmetry of his prostate increasingly worries him. However, it is only in his final confrontation with his assassin, Benno Levin that he puts the two together. Benno reveals that his prostate too, is asymmetrical and explains to Packer, that it means nothing: "It's harmless. A harmless variation. Nothing to worry about. Your age, why worry?" Packer is overwhelmed by relief and Benno, who worked for Packer and studied his victim obsessively in the years leading up to this confrontation, announces that he should have "listened to his prostate":

You tried to predict movements in the yen by drawing on patterns from nature. Yes, of course. The mathematical properties of tree rings, sunflower seeds, the limbs of galactic spirals. I learned this with the baht. I loved the baht. I loved the cross-harmonies between nature and data. You taught me this. The way signals from a pulsar in deepest space follow classical number sequences, which in turn can describe the fluctuations of a given stock or currency. You showed me this. How market cycles can be interchangeable with the time cycles of grasshopper breeding, wheat harvesting. You made this form of analysis horribly and sadistically precise. But you forgot something along the way."

"What?"

"The importance of the lopsided, the thing that's skewed a little. You were looking for balance, beautiful balance, equal parts, equal sides. I know this. I know you. But you should have been tracking the yen in its tics and quirks. The little quirk. The misshape."

"The misweave."

"That's where the answer was, in your body, in your prostate." (86–87)

If Packer accepts Benno's analysis, ("It made hard sense, charting sense. Maybe he was turning out to be a worthy assassin after all") then arguably his blind belief in order, balance and patterns had produced Packer's success and ruin.

In DeLillo's novel both conceptions of financial abstraction are at play (rational order and calculability, and inexplicable events and ungovernability); self-referentiality and self-determination as opportunity and promise and as an existential threat and elemental danger. Since Packer's speculation causes more than his personal ruin, but triggers a financial crisis, it is also the former that results in the latter. His belief in order exponentially amplifies the disorder in the market. If the inexplicable event, the rising yen, causes him to question how to make sense of finance, for VogI, the critical prescience of DeLillo becomes apparent:

DeLillo's protagonist finds himself in the same uncomfortable situation that Alan Greenspan, longtime director of the US Federal Reserve Bank and staunch advocate of unregulated financial markets was to confront eight years later. It was a situation in which he could no longer apply his "world-view," his "ideology," and long-held self-evident truths or interpretations. The "whole intellectual edifice" of the finance economy came crashing down. (Vogl 9)

What Vogl's analysis obscures is that this very moment does not simply spell defeat for the strange hero of DeLillo's story. If the novel can be read to raise the questions at the heart of Vogl's investigation into the scientific character and rationality of the liberal political economy, DeLillo does not articulate a straightforward critique of the market efficiency hypothesis or beliefs in natural equilibrium; rather the novel pushes the idea of self- and all-determining financial markets further, and offers an ambivalent, distinctly postmodern fascination with self-determination as such.

For one, Packer's search for patterns, for harmony between data and natural phenomena, no longer suggests equilibrium--meaning socially beneficial, redistributing mechanisms of markets. Rather, what he imagines is "a future of uncontrolled markets and huge investment potentials," and for Packer's head of theory, Kinski it is without doubt "the force of cyber-capital that will send people into the gutter to retch and die" (39). None of these are concerns for Packer. If Packer's love for clarity of information is already cynical, it presents a parallel trait to Packer's obsession with mastering finance, the dream of completely abandoning his own agency to the determination of finance.

Throughout the day, Packer feels trapped between a sublime digital sphere where things can be analyzed and understood, and the chaos and disorder of the world he physically inhabits. During his prostate examination Packer reflects on his body; the pain makes him simultaneously aware of his own materiality as well as his aspiration to leave it behind: "He was here in his body, the structure he wanted to dismiss in theory even when he was shaping it under the measured effect of barbells and weights. He wanted to judge it redundant and transferable. It was convertible to wave arrays of information" (21). When Packer looks at the screen where a computer displays his vitals, the computer already seems to contain him.

While Packer dreams of becoming data, he is driven by unsatisfiable physical urges. He is constantly hungry (he wants food that is "thick and chewy"), he always craves and has sex, and when that no longer suffices, he has his lover and bodyguard electrocute him with a stun gun. In the final confrontation with Benno, Packer shoots his own hand to

finally feel something. Packer's longing for transcendence and his bodily urges conflict, and in the "insistent future" of cyber capital, Packer sees the promise of leaving everything behind. He welcomes the determining force of finance. To Packer, the inexplicable rise of the yen itself, even if he monetarily fails to understand it, is meaningful: "the yen is making a statement. Read it. Then leap" (9).The more he loses control, the more he accepts his own trajectory, as a predetermined faith, not with resignation but with a sense of liberation and anticipation. In the unfathomable itself, Packer perceives the promise of higher order. Still a maker of history, rather than it's object, he hastens to bring about this future as he borrows increasingly higher amounts of yen, shoots his own bodyguard, destroys his wife's fortune and throws away his own gun, all to "clear the night for deeper confrontation" (64). When he finally realizes the inevitability of his own death (shortly after the conversation with Benno about their asymmetrical prostates), what follows is not despair but the dream of his own immortality, to become one with technology and cyber capital:

He'd always wanted to become quantum dust, transcending his body mass, the soft tissue over the bones, the muscle and fat. The idea was to live outside the given limits, in a chip, on a disk, as data, in whirl, in radiant spin, a consciousness saved from void. The technology was imminent or not. It was semimythical. It was the natural next step. It would never happen. It is happening now, an evolutionary advance that needed only the practical mapping of the nervous system onto digital memory. It would be the master thrust of cyber-capital, to extend the human experience toward infinity as a medium for corporate growth and investment, for the accumulation of profits and vigorous reinvestment (90).

In this vision, Packer's ruin, even his death, are merely a sacrifice for an even more complete self-determination and immateriality of finance no longer dependent on his agency or his corporal existence.

However, Packer's physical urges conflict with his aspirations throughout the day; the pain of the hand he previously shot, and his own body, interfere with his dream of immortality. Packer considers at length how material things matter in what and who he is, all the things that are "untransferable" and "not convertible to some high sublime, the technology of mind-without-end" (90). If this conclusion denies his immortality, as the asymmetry of his prostate denies the possibility of finding a pattern, neither upset Packer. Rather, he embraces both the mystical impenetrability of the "statement" the yen is making, and his own corporal death.

Finally, Packer's knowledge of his imminent death keeps both his and the novel's ending in suspense. The last line reads: "This is not the end. He is dead inside the crystal of his watch but still alive in original space, waiting for the shot to sound" (91). That is, DeLillo has given his hero, more than an almost inhuman analytical mind. Packer experiences premonitions in technology. Something fantastical has entered the text from the beginning that, within the novel, gives reality to Packer's theoretical considerations and seemingly abstract aspirations. If Packer and Kinski theorize an impatient and insistent future, latent in the fusion of technology and capital, Packer and the reader have already experienced brief violations of causality: early on Packer watches himself touch his chin on a screen moments before he touches it in reality; later he recoils from the blast of an explosion, before the bomb detonates; and finally he sees his own dead body in the "crystal," the microcomputer and screen of his watch before he is shot. Packer's

premonitions are a kind of magical realism, an event that both within and outside the story defies rational, physical explanation. Just like the inexplicable rise of the yen, premonition figures as a symbol that stands in for a world in which "money has lost its narrative quality" (DeLillo 34). Within the narrative of the novel, premonition functions as a metaphorical device for showing what cannot be shown in its totality: a small violation standing in for a larger leap in space-time, enacted by self-determinate, self-reflexive techno-capital that Packer and Kinski merely hypothesize about. In addition to these metaphors, DeLillo has deployed formal strategies to explore the abstractions of finance, doubling the theoretical conversations of the characters in the novel.

A first formal strategy concerns the already-discussed use of Packer as an allegorical device rather than distinct character. Through Packer's meandering travels and his countless, small, seemingly random, and associative observations throughout the text, a panoptic vision of a system with no outside emerges. Packer's gaze, through the windows of his limousine, connects the material world and the abstract world of finance. The details stand in for the object, and the object for the all-determining idea. Through Packer the invisible and immaterial forces of cyber capital become visible and real.

Second, with the seemingly random insertion of the memoirs of Benno Levin into Packer's timeline, DeLillo interrupts the temporality of his novel on a structural level. This formal intervention doubles the effect of Packer's premonition for the reader in the experience of reading the physical book. Just like Packer sees his own corpse in his watch, the reader sees Packer's dead body before learning about his eventual death and killer. Packer's inevitable fate is revealed before from a non-place outside of narrativetime before it transpires in the novel. This inter-textual intervention literally breaks the narrative and illustrates the very limits of narratability of the imminent future posited by Kinski.

Third, as Shonkwiler has observed, Packer's and Levin's stories also pose a question of perspective. If the abrupt change between third person and first person draws attention to perspective, rather than to contradict, undermine or give an alternative to Packer (both Benno and Packer are equally shaped by Cyber Capital), but to confuse the narrative point of view. That is, in Packer's knack for narrating his own actions in the thirdperson (e.g. during an encounter with his Chief of Finance), Shonkwiler sees evidence for understanding the third person narrator as "a form of first person once removed—a culmination of Packer's aspiration to dissolve the active self into the determined 'fatedness' he has been seeking all along" (155). Indeed, to that we can add that Benno himself, maddened by the exigencies of modern life under the determinative pressures of Cyber Capital, seems to experience a similar transition from first to the third person. As he notes in his journal: "Sometimes I hear my voice when I am speaking. I am speaking to someone and hear the sound of my voice, third person, filling the air around my head" (DeLillo 25). Hence, the "formal agency lurking beneath the surface of the text," not only reduces omniscience of the narrator, but surfaces in Packer's desire to disperse himself into the universal consciousness of capital, "as a formal rupture of perspective" (Shonkwiler 155). In formally enacting Packer's attempt to relinquish the autonomy of the self (third-person as first person) and staging Benno's agency panic as a (futile) resistance to the third person, DeLillo's text performs what its characters conceive in theoretical language: "the digital imperative" defining "every breath" on the planet, the

totality of "market culture" in which men have no final authority over the "thinking machines" they created (DeLillo 37).

The effect of these formal strategies is what ultimately keeps the novel's ending ambiguous. The conflict between Benno and Levin, is not, as some critics have suggested, a conflict between the rich and poor, or the powerful and the marginalized of financial capitalism (as in the Suter novel). Rather, both men are two sides of the same coin. Packer's failure to find pattern is as much a critique of ideas of order, as it is the lifting of the illusion of human control over the markets, a suggestion of their radical independence of human agency. In the last scene, all of Packer's drives and aspirations collide: the obsession with patterns and the persistence of asymmetry; the dream of transcendence and immateriality and his inescapable corporality. DeLillo leaves his story in suspense. In the crystal of the watch, Packer's body is already dead; Levin's journal confirms ex-ante that there is a body. It remains unresolved if Packer indeed fulfilled his ultimate fantasy, even in his death. Beyond the words and the plot of the novel, the formal strategies of the text seem to validate his views. Taken together, these strategies give a reality effect, to the vast system of cyber-capital DeLillo seems to have in mind.

The result is less critically clear, than what Vogl takes from the novel, and more ambivalent than what Shonkwiler suggests. In Shonkwiler investigation, historical subjectivity and agency becomes the main problem in how novels represent historical forms of capitalism. She examines novels to understand where the I stands in relation to transformations of capitalism. If the rise of market society had demanded an active subjectivity that would inscribe itself into the world as an effect (overcoming religiously and politically predestined subjectivities), the late stages of capitalism threaten to efface the active I, which becomes a mere object of a vast network of determining forces. DeLillo's novel figures as an endpoint into the two extremes of this analysis. Shonkwiler studies DeLillo with great insight into how Packer's fate narratively approaches something that no longer allows for narrative representation. However, as an analytic point of departure, for Shonkwiler it seems that the self-determinate and determining regime of techno-capital is a fait accompli that DeLillo's text merely attempts to register. *Cosmopolis* thus is an investigation into the historically new and abstract forms capitalism has entered:

Cosmopolis suggests that money may no longer be the medium of exchange that allowed the economic novel of the late nineteenth and early twentieth centuries to make a legible range of points about social status and class relations. Instead (...) money becomes (...) the final image of what is unrepresentable within the system as it moves toward greater and greater abstractions. Thus, as capital becomes more abstract, money becomes more urgently direct. The further capital's 'flight' into spectral realms, the more brightly money glows onscreen as a symbol of pure self-referentiality. (167)

Shonkwiler suggest reading the novel as "an experiment in form," a literary investigation into "the adequacy of our representations" of contemporary "abstract forms of capital" (168).However, regardless of the merit of such an investigation, the question if finance, outside of its fictional treatment, has indeed become increasingly abstract (or if abstraction functions on a scale at all) might be misplaced if asked as a kind of ontological question that inquires for specific properties of an object. As I argued at the beginning of this chapter, it is more helpful to understand abstraction as part of discursive, practical and technological processes that establish and reproduce a financial imaginary. Insisting
only on the effects of an assumed abstract finance and their cultural mediation misses the performative function of claims to abstraction. That is, to characterize finance as abstract, to enact abstraction in practices and technologies, is precisely what gives finance the kind of reality that becomes effective. The risk of giving into literary fascination with self-determined systems is that in doing so, an ideological discourse is naturalized and obscured, or at least that ideological effects are merely registered without understanding how they are achieved in the first place. In other words, in a soberer reading of the novel that does not presuppose a reality of self-determinate finance, it is Packer's and his associates' active participation in discourses and practices that reproduces and enables an allegedly self-referential capital.

If Packer has lost control over the markets, this shows that markets might ultimately be uncontrollable, but not that this uncontrollability is a natural occurring, predetermined, post-human and unchangeable quality of finance. If the rise of the yen does not chart, or cannot be understood in terms of the mathematical and technologically-enhanced models Packer deploys, it might well mean that something unrepresentable has occurred, an effect that does not have a probable cause (at least not within Packer's models). However, this neither suggests that finance is fully self-determined and determinative, nor that these kind of effects or self-reflexive tendencies of markets occur truly independent from human agency, or that actors, technologies and structures that are discursively enabled by the very belief in spontaneous order (and hence the absence of regulation) and the mathematically descriptiveness of markets (and thus market activity, guided by imperfect models, resulting in unpredictable results).⁷³ The novel itself certainly keeps such claims

⁷³ One such result is described in the text by Packer, his inability to read the yen causes more than the downfall of his Investment Fund and his personal ruin, but a financial crisis: "But he could think now, well

ambiguous if money talks to itself in a language that Packer no longer understands, it also advances the critique and disillusion of the myth of mathematically describable, selforganizing and self-stabilizing markets. However, self-referentiality as a force of fate is also the condition for the ultimate fantasy of the text, a transcendence of all agency, and the arrival of that which the text can only formally hint at, a self-determinate and determining system, the lifting of agency and causality, the indistinguishability between future, present, and past. If this makes for a set of fundamental ambivalences in DeLillo's text, Shonkwiler (maybe too readily) accepts the question: "What if we view novelizing recent history not as playing theory, but as an experiment in acknowledging - or a whole new round of realization - of the unrealism of money? (272)"

Fundamentally, for Shonkwiler the problem of the novel is how to come to terms with abstraction as a quality of a real, existing system. Even though she is more careful in a later, separate essay—declaring the absolute reality of those abstractions as a naturally given fact—it does not change her analysis of the novel. The text is still measured against how close DeLillo comes to narratively and formally encompassing these abstractions. For DeLillo, sinister determinative systems outside of perceptibility have been a dominant theme throughout his writing, and their radical independence from humans (claimed in *Cosmopolis*) remains ambivalent and contradictory. However, if formal strategies in writings seem to affirm this system's reality, if they suggest a dystopian future; one where space, time and geography will be conflated in the name of

enough to understand what was happening. There were currencies tumbling everywhere. Bank failures were spreading. He found the humidor and lit a cigar. Strategists could not explain the speed and depth of the fall. They opened their mouths and words came out. He knew it was the yen. His actions regarding the yen were causing storms of disorder. He was so leveraged, his firm's portfolio large and sprawling, linked crucially to the affairs of so many key institutions, all reciprocally vulnerable, that the whole system was in danger" (50).

capital, if the formal interventions only serve as gimmick that literalizes Packer's perspective, and if the text performs the performativity of discourses, or if it attempts to literalize them in order to make visible something outside of the novel, all of these remain unclear as they obscure the politics of the text. Without claiming fault by the author or shortcomings in the novel, if these are assumed uncritically in reading the text, it contributes to and corresponds with what La Berge has deemed an "obfuscating" use of abstraction.

Cronenberg's adaptation of DeLillo's novel, a decade and a Global Financial Crisis later, does not literalize a conflation between the virtual and the real; all techno-mysticism remains entirely with Packer. If this might seem to impoverish the text, and take away from its enigma, maybe no reality effects where necessary in an adaption after 2007/2008. In other words, it seems as if the crisis was real enough, not as the promise of technological transcendence, but as a revelation of what it was that these kinds of abstractions and aspirations produced.

If DeLillo's text remains ambivalent, it seems that just as much as Vogl has managed to ignore the mystic ambitions of the novel, that Shonkwiler in her analysis has fallen under the spell of Packer's words and its final desire (and in extension of the postmodern discourses that DeLillo channels in his writings). If money is indeed talking to itself, it is a circle that (at least outside the novel) never fully closes. As Cornel Bonca soberly remarked, when rereading DeLillo on the occasion of watching Cronenberg's film: "the promise of technological transcendence is, of course, bullshit." He continued, "*Cosmopolis* [the novel] gives full voice to a promise of life lived in the hubristic confidence that the human limits of time and death can be eluded through one's ownership and manipulations of technology (...).At the same time, it supplies our literature with the most trenchant critique of the soul-sickness of such a belief (...)" (Bonca). Further, the alleged immateriality of finance is owed to nothing more than "Eric's in-dwelling in the super-rarefied world of abstract finance" that gives him "the illusion that the material realm is irrelevant, archaic." That this critique was not apparent to the reviewer in the time of its original reception might have as much to do with the events since 2007/2008 as well as with the experience of watching the film. However, in retrospect, also for Bonca, DeLillo is an "artist-prophet" that anticipated the nihilistic absurdity of contemporary finance, foreseeing the latest development of "the remorseless momentum of post-Berlin Wall capitalism, of a New World Order that has no symmetrical foe aside from 'terrorism' (Bonca).

2.2.2. Cosmopolis, the Film

The film *Cosmopolis* is not the first time Cronenberg tackled an ostensibly challenging literary work for film adaptation. However, with DeLillo's novel, the filmmaker who adapted William Burrough's *Naked Lunch* and James G. Ballard's *Crash* has provided a quite different script. Rather than radically reworking and rearranging the literary materials for the necessities of film, Cronenberg has opted for a word-by-word-transcription of the dialogue and made few changes to the original manuscript. The result is what he referred to as a "hardcore art film" that made few compromises in bringing the text to the screen (Cronenberg in: Goodsell). Given this faithfulness, the film —as many scholars have observed about the novel, (see e.g. Green; Shonkwiler)— similarly received mixed critical attention. Commentators either celebrated the film "exhilarating

and liberating" (Taubin 65) or dismissed it as "a parade of hollow didactic encounters" (Gleiberman). Roger Ebert's reaction is maybe the most telling. He calls the movie a "flawlessly directed film," referring to "Cronenberg's genius," stating that "Don DeLillo found not only the ideal but perhaps the only director for his novel." However, Ebert also starkly dislikes the experience, awarding it "2 out of 5 stars" and states: "you couldn't pay me to see it again." Over the entire review Ebert struggles to verbalize the reasons for his strong negative reactions to a film whose underling novel he "rather admired," noting, "There is a coldness and abstraction in much of [Cronenberg's] work, a heartlessness" (Ebert).

If abstraction is already a central theme of the novel, it is a defining feature of the film. From the emotionless acting, to the trained, monotone delivery of the text, to the symbolic visuals, non-mimetic sound design and static camera work, to the cold, spheric soundtrack by Howard Shore and Metric, and finally, the credits displayed over Rothko paintings, the film seems to push against the figurative, mimetic, and emotional that defines conventional narrative cinema. In its place, Cronenberg's film establishes a language of distance, separation, estrangement, and cold examination. In the following section, I discuss the formal strategies of the film in comparison with the novel, analyzing the use of dialogue and acting, editing and camera work, as well as sound design. In terms of what Cronenberg omitted, I discuss how the absence of Packer's internal monologue, Benno Levin's memoirs, and the abstention of fantastical elements achieve a departure from DeLillo. I argue that, rather than an intensification of the themes of the novel, or a translation of the formal strategies of the novel into the language of film, Cronenberg intervenes into the text. In refusing to make the abstractions of the novel

effective or believable, the film nudges them into absurdity. Rather than allowing for reveries of transcendence, Cronenberg invites critical reflection. As a result, the film version of *Cosmopolis* seems closer to what Vogl saw in the novel than Shonkwiler. That is, if Shonkwiler measured the novel's relative success in representing abstract finance, Vogl made it a point of departure to question the validity of the abstractions at work in a dominant liberal political economy, an investigation that Cronenberg's film does not perform, seeming instead to ask the audience.

As Cronenberg remarked in an interview, he approached his adaptation of DeLillo's novel by extracting and copying the complete dialogue into an empty document in a word processing program *(Cronenberg in: Goodsell)*. A first, the effect of this move from page to the screen is that lengthy exchanges between Packer and his associates are central in the film, while attaining (or preserving) a highly textual feel. The delivery of lengthy monologues, rather than rapid interactions, draws attention to the text and produces an estrangement that the film's formal language amplifies.

Most notably, the acting increases the unrealistic textuality of the conversations in the film. Prominently, Packer's (Robert Pattinson) emotionless, monotonous mode of speaking is a measured recitation of DeLillo's text, rather than a dramatic interpretation. If this has drawn some negative criticism⁷⁴, Pattinson's speech can be understood to function as a tonic chord among and in contrast to other voices in the film, which range from the overacting, seductive Juliette Binoche as his lover and art dealer, to the haunting, emotional performance of Paul Giamatti as his assassin, Benno Levin, to the strained,

⁷⁴ E.g. Roger Ebert has charged that the "characters are bloodless, their speech monotone" talking about "morose epigrams about vague universal principles they show no sign of understanding."

memorized-seeming speech of his Head of Theory, Vajia Kinski (Samantha Morton). Just as much as the multiple voices with multiple ways of acting and recitation reveal the artifice of film, these inconsistencies estrange the viewer's experience: rather than immersion in natural-sounding dialogue or fast-paced action, the spectator is constantly confronted and made aware of the presence of actors, of words and sentences. Language gains a presence onscreen, somewhat independent of the characters, or as one reviewer wrote, the words "hang" in space "as if they were concrete objects, like words in a dream" (Taubin 56).

This approach brings out the density of DeLillo's prose, in which characters speak in enigmatic, lyrical and abstract ways. Arguably, the speed of film and the sheer amount of dialogue, more than the experience of reading the novel (in which one can pause, reflect and reread passages), makes the transcribed dialogue even more opaque. As Cronenberg hinted, this is an effect he calculated. Rather than "catching every single word" or understanding things like "money is talking to itself," Cronenberg hoped that such potential frustration would lead viewers to seek a better understanding and rewatch the movie, and alternatively to experience it "almost like music, rather than dialogue" (Cronenberg in: Goodsell). As he suggests, the interplay of script and acting produce a sense of independence from the text. This effect allows the viewer not to simply accept the dialogue as part of a fictional universe, or as part of the characterization of a distinct character, but to consider it critically and on its own. If DeLillo has made Packer into an allegorical character, or less elegantly, into a mouthpiece for certain post-modern theories of finance, the film seems to literally separate the mouth and the text. Another distinct formal feature of the film is the use of camera and editing. Since most of the film focuses on the rich dialogue of the novel, it conveys a theatrical sense of static and paralysis. That is, most of the screen time is spent on medium shots and close-ups of two characters engaged in conversation. For the most part, absent dramatic gestures and expressive acting, movement and action are confined to the out-of-focus background of the shot and reverse-shots that cut back and forth between the speakers (e.g. through the window of the slow-moving limousine). Just as the dialogue is never enhanced with flashbacks, or voiceovers, the tumultuous events that accompany Packer's final day are not established in grand overview shots, with cross-cutting, or other traditional narrative editing techniques. The viewer is denied conventional cinematic orientation and confined to Packer's immediate vicinity and words. News of assassinations, the ever-rising Yuan (replacing the yen of the novel), and the dissolution of Packer's fortune, arrive through a kind of digital teichoscopy, barely enhanced or illustrated by the ever-present screens and displays that surround Packer.

Compared to Oliver Stone's *Wall Street*, the contrast in representing financial events could not be more striking. *Cosmopolis* obviates the montages of traders in despair, symbolic domino stones, the bestiary of boom and bust that Stone or another director might have deployed to give clarity, drama or weight to events of the day, such as the ripple effects that the downfall of Packer Capital produces. While a disembodied discourse emerges between Packer and his associates' reporting and representing financial phenomena as abstract events or universal principles, the camera remains close to Packer. If the film perspective is grounded in the narrative perspective of the novel, Cronenberg does not simply emulate DeLillo's third-person personal narrator, with a

camera closely following Packer. *Cosmopolis*' camera is claustrophobic, rather than personal. That is, in absence of the novel's internal monologue (Packer's), his emotionless face is often in the center of the frame, more opaque enigma than medium. If a reader of the novel cannot help but perceive the world and events through Packer and his views and aspirations towards a future of a total financial sphere, the film seems to simultaneously impose and cautiously distance itself from Packer's perspective.

The opaqueness of Packer might seem like the result of generic discrepancy between the different media—the externality of film and internality of a novel. However, Cronenberg's strategies seek to heighten, rather than bridge, the distance between viewer and main character. Rather than allowing identification with the character and his struggles and emotions, the camera observes from close distance, and destabilizes the views and perspective Packer expresses in his dialogue.

A striking example of this destabilization is the use of rear projections in the limousine. It appears that in 2012, Packer's high-tech car, with its multitude of consoles and monitors, has been further updated: in Cronenberg's version of the limousine, the windows themselves are screens. However, this is only made obvious through multiple in-car shots well into the movie's running time (namely when Packer pulls up footage of the Rothko Chapel on every single window of the car, completely obscuring the outside world. Up to this moment, the rear projection in the car contributes to the viewer's disconcerting feeling of unrealism. The view from the car windows (what the windows display rather than show) is always at slightly unnatural angles and strangely lit. Further, the irritating contrast between the image quality of the car interior and what is shown in the window overtly reveal it as a digital projection. The result is a disruption of mimetic

realism, even if the difference in image quality is later motivated intra-diegetically as a feature of the car. If this references an older film technique, a rear projection, producing the illusion of being in a moving car rather than shooting and showing a moving car, the effect is twofold. First, within the film and along with the reveal of the windows as screens, it furthers a sense of separation of Packer and the outside world. Packer is hermetically sealed in by screens; his perspective on the world is always already mediated by technology. Second, it draws the spectator's attention to the film itself as an artificial product and makes the viewer aware and cautious of perspective. Thus, in the novel, Packer's inner monologue and descriptions provide a portrait of the Cosmopolis outside the car, in relation to a financial sphere. His countless observations of a physical world that is co-present with the numbers on his screens, provide a kind of proof of concept, evidence, or naturalization for the grand theories about cyber capital the dialogue lays out. However, in the film and in absence of the inner monologue, Packer literally regards the world as if it was just another screen. Rather than providing support for the claims to abstraction ever present in the dialogue, it is precisely this perspective that the film calls into question. In regards to the Rothko imagery of the opening and closing credits of the film, the moment of showing the reason for the apparent unrealism of the car ride is telling: in a moment not described in the novel, but added in the film, Packer obscures the outside world with stills and videos of the Rothko Chapel. Given the destabilization and distortion of perspective that the rear-projection suggested up to this point, it seems that to Packer the world is another screen, even more a Rothko painting: post-perspective and abstract.

Another core theme of the novel/film is Packer's isolation from the outside world, through technology and various security measures. The film's formal language makes this separation even more literal. This concerns the film's noticeably non-mimetic sound design. The most apparent instance of this is the limousine. Packer's car is eerily quiet on the inside, gliding through the city like a space craft; neither traffic, nor the car's engine are audible, the screens emit no sound, nothing beeps, no phone ever rings. In contrast, whenever a door or window opens, the sounds of the city pours into what appears to be a hermetically-sealed bubble. If this feels somewhat credible, since DeLillo's Packer had his car soundproofed, although in the film this bubble follows Packer outside of his limousine and into public spaces. This is most noticeable in a scene where Packer eats breakfast with his wife. Elise. The location is a lively café that the novel describes as "crowded" and Packer hears "stray words in French and Somali seeping through the ambient noise" (7). However, in the film, Elise and Packer sit surrounded by silence, conversing softly. Meanwhile the background shots that focus on their faces are animated, with Packer's bodyguard sitting in close watch, with packed tables of customers, eating, and talking. Yet, the only ambient sound audible to the viewer, other than the dialogue between Packer and his wife, is Packer's silverware hitting a plate just outside of the shots' frame to the bottom. An almost identical scene occurs over lunch, again in a lively restaurant where the activity in the background is muted, while the conversation between Packer and Elise references the noise of the city. Elise suggests that the city is only "quiet" "the way [they] live: high enough, far enough." In turn, Packer explains how he had his car soundproofed. However, as in the novel, he makes all too clear that the soundproofing did not work; that this was merely a symbolic act ("It's a gesture. It's a thing a man does.") A fact he does not mind: "How could it work? No. This city eats and sleeps noise. Makes noise out of every century (...) but I don't mind the

noise; it energizes me." Of course, in Cronenberg's version, these musings take place in stark contrast with the completely muted background of the scene.

While present in the entire film, this conversation draws attention to the nonmimetic sound design and seems once more to destabilize Packer's perspective while ironically validating Elise's claim: just like wealth and power isolate against the inconvenience of a noisy city, Packer's theories isolate against an inconvenient reality. The film makes this literal (at least for the spectator, the soundproofing of the limo is complete). Again, this contrasts with the novel, where Packer's internal monologue is often guided by the sounds that penetrate the car (e.g. the omnipresent horns of cars).⁷⁵ The silence, a formal abstraction of the film, symbolically keeps Packer in a bubble that both shelters and traps him. In the restaurant scene, this bubble bursts momentarily and sound suddenly pours in, when two protesters storm into the restaurant swinging rats by their tails above their heads. Packer holds his bodyguards back with a hand gesture, as the protesters throw their rats, announcing that "A specter is haunting the world." Finally immersed in sound, and life, Packer's emotionless mask breaks for a brief moment and he smiles before the film cuts to him once more in the silence of his car.

This use of sound as a critical device, revealing and questioning Packer's isolation, is especially striking during the protest scene as Packer and Kinski sit surrounded by silence. Only slightly incommoded by the shaking of the car under vigorous attack by protesters, the characters calmly sip their vodka and deliberate about cyber-capital and the all-absorbing force of market-culture. If the film heightens the absurdity of this scene,

⁷⁵ E.g. during a moment of silence in a conversation with his chief of security: "They sat in the swell of blowing horns. There was something about the noise that he did not choose to wish away. It was the tone of some fundamental ache, a lament so old it sounded aboriginal" (DeLillo 6).

it seems less about how capital has rendered protests useless and ineffective, but with Packer and Kinski rocking back and forth while strenuously reciting (rather than expressively acting) the corresponding passages of the text, the film comically exposes how out of touch their theoretical deliberations seem with the plight of the people outside, a scene which culminates in the self-immolation of a protester.

However, compared to the novel, the film does more than intensifying the abstractions in the dialogue and imposing a sense of distortion and distance with filmic means. Cronenberg's most decisive interventions into the novel concern the disturbances of causality that DeLillo has worked into his text. Cronenberg has omitted all of Packer's premonitions, (touching his chin on a screen before it happens, recoiling from an explosion during the protests, and most notably the final ambiguity at the end of the text, when Packers sees his own death in his watch). In the film, Packer's character absent-minded recites the dialogue, "Why do I see things before they happen?" However, the film does not show any interrupted causality.

The same is true of the scene with the explosion that, in the novel, is shared with his Head of Theory. Kinski, uncertain what to make out of Packers' premonition, prompts Packer to insist, as Kinski had said herself, that "the future was impatient" and "pressing on us" (DeLillo 42). In the film, neither the explosion nor the prefiguration of the blast, take place. Rather, the film picks up the exchange thereafter and Kinski's response: "That was theory. I am your chief of theory. I deal in theory." In the novel, her refusal to accept the prefiguration that she witnessed seems to offer a kind of ironical stab on theory as such. Namely, that the future has arrived already, while theorists are dreaming up lofty ideas, unable to see them if they literally happened in front of their own eyes. However, the film refuses both to show a literal prefiguration and such an ironic reading. Rather, Kinski's insistence on theory seems to insist against Packer's reveries that post-causality is nothing but speculation and ideas.

Finally, at the end of the movie, Packer has no premonition of his own death, and there is no promise of afterlife in technology. Rather, Cronenberg's Packer seems to experience genuine horror and despair. While in the novel the two men face each other sitting on a couch, Cronenberg has rearranged the scene for another effect: Packer sits on the couch and faces the camera with Benno standing behind him, the gun pointed to the back of Packer's head. If Packer's face is an emotionless mask for most of the film, if Pattison as an actor is "stripped" from "forced expressivity," and a sort of "fleshed-out oracle" for theoretical pronouncements, as one reviewer remarked (Brody), the last shot shows Packer as a human being stripped of all his reveries and claims to abstraction: confused, defeated, and in tears, Packer is awaiting the inevitable. Thus, the final ambiguity of the novel is unequivocal in Cronenberg's film, and denies any suggestion of the reality of Packer's aspirations. In the novel, a feverish internal monologue continues Packer's narrative, describes the realization of his own death in the watch, and ends on an ambiguous final line; the film, however, ends with Levin's words, expressing how Packer's search for patterns was in vain.

Second, the formal interruption of the narrative through Benno's memoirs is absent in the film. While in the novel this interruption suggests a disruption of time, and like the technological premonition, enacts the diffusion of cause and effect (Packer is pronounced dead before it happens in the Packer narrative), the film again refuses to perform this interruption. Further, in omitting Benno's diary, the film no longer suggests a predetermination of Packer's fate, i.e. the inevitability of his death. This is significant, insofar as the omission refuses any suggestion that Packer is a seer who follows a path dictated by cyber capital itself. Instead, the emphasis is on Packer's mistake, his delusions, and the improbability of his grand claims to financial abstraction.

Both omissions might seem surprising and all the more noteworthy, considering the rest of Cronenberg's filmography. One might have expected that the diffusion of virtuality and reality, or the breaking down of causality would register well with the director of both *eXistenZ* and *Videodrome*. The later film famously ends with a scene that is more than comparable to the end of the novel: the main character sees his own suicide on a TV screen, moments before he shoots himself.

If Cronenberg resists literalizing the abstractions of finance, his adaptation seems less an attempt to represent the unrepresentability of finance, and more a representation of abstraction itself. In doing so, he sharpens the critique of the claims to order, that have become ever more relevant after the events since 2007/2008, yet he does so not to pronounce the arrival of a system in which individual actors (no matter how powerful) no longer matter (and are thus unaccountable), but to expose the abstractions in regard to such a system. Unlike DeLillo, Cronenberg does not formally enable the abstractions but strains them into visibility, opens them for critique and reconsideration. Flaunting abstraction, the film critiques the promise of stability and avoids abstraction that romanticizes or simply affirms the intangibility of finance.

The system that DeLillo's novel sketches leaves little room for resistance, where neither presidents nor individual bankers are stimulating targets, where protests are part of the system, symbolic and cathartic, rather than effective and change-inducing. In contrast, Cronenberg's adaptation opens a discursive space that allows viewers to question the validity of its underlying assumptions. Both film and text confront the powerful fictions that enable markets. However, to take Shonkwiler's suggestion that DeLillo's text asks how to represent financial abstractions; Cronenberg's question is about how finance is represented: rather his film makes urgent the question, to paraphrase La Berge, "what this representation itself represents." In 2012 and five years into the crisis, the consequences of the beliefs and ambitions expressed through Packer have been dramatically manifested—less the deed of single, equally futuristic and sociopathic agent, but as the systemic, performative belief in certain abstractions, that have enabled, amplified and unleashed a set of determinative and pernicious forces.

2.3. Simulating Neo-Classical Abstraction – *Offworld Trading Company* or Robinson Crusoe on Mars

In recent years, video games might still be contested as a form of art but gained a prominent position in contemporary entertainment. Traditional newspapers (e.g. *New York Times, Spiegel Online*) and other non-specialized media routinely discuss the latest in video gaming and write lengthy game reviews; E-sports events are broadcast on major television networks; more and more movies are based on video games rather than the other way around; finally, video games spawn enthusiastic subcultures of streamers, You-Tubers, modders and fan fiction writers. Tough video games are established as part of popular culture, video game's own mainstream behaves much as if games were somehow outside of the rest of culture. As UK video game journalist Matt Lees charged in reaction to the 2016 E3, the industry largest annual trade fair in Los Angeles:

Culture doesn't exist in a vacuum, and yet video game culture seems adamant that it does. While the world around it fractures and changes, events like E3 simply plod on - willingly blinkered. That a conference this year could showcase a new shooter less than a day after one of the worst recorded acts of firearm terrorism in history? (Lees)

With an overt feeling of uneasiness towards the simultaneity of the 2016 Orlando shooting in the US that left more than 50 people dead, and a marketing effort to promote a violent, macho, gun-enabled escape fantasy, Lees does not repeat older cultural criticism against the medium. His argument is not that violent video games are somehow responsible for violence. He simply expresses a highly symptomatic sense of frustration that so much of video game culture does not seem to engage with the world around it in a meaningful way, let alone evolve with and engage with larger cultural changes and discourses. It is also not that all mainstream games are set in far-removed fantasy universes where elves battle orcs. Instead, the steady technological and aesthetic drive towards audio-visual realism in games and the afore mentioned growing influence of the medium has allowed the industry to at least profess to engage with contemporary issues.

However, as Lees rightfully notes, simply referencing these problematics (i.e. environmental destruction, the human cost of war, etc.) in a game that performs these very issues, more often than not seems like a trick, or distraction that ultimately deflects wider and more complicated conversations: "Triple-A games that are rooted in realism consistently share one key trait: they prominently talk about contentious issues whilst miraculously managing to say absolutely nothing" (Lees). Granted, the discussion around the often-violent content of mainstream video games is a central cultural battle that has

surrounded the medium from the beginning and by the 90s had captured most of the attention that both the media and politicians awarded to video games. Yet, the broad unwillingness of large developers to meaningfully question their own content, engage with real world issues, and the blinkered attitude of publishers, has indeed helped a thriving counter culture of independent games and serious games grow into being (see Chapter 2). The game I analyze in the following, *Offworld Trading Company* is part of this countermovement of games that are independently published, experiment with unusual concepts, and simultaneously aim to advance critical ideas.

Offworld Trading Company (*OTC*) is an economic real-time strategy game, designed by Soren Johnson, about the commercial colonialization of Mars—a game in which markets and money, not military might, are the player's weapons. To realize this unusual project, the former lead designer for Civilization IV (2005) and employee of Firaxis (a subsidiary to industry giant 2K Games) left his industry career behind and founded his own studio, Mohawk Games. After prototyping, the small company took advantage of independent means of financing and distribution, *OTC* was pre-released as an early access game on the Steam platform in February 2015 and released as final version in April 2016.

For my analysis of this indie-game, I expand on Bogost's procedural rhetoric argument, as discussed in the last chapter, by introducing Gonazalo Frasca's differentiation between narrative and simulation and their implications for the study of authorship and ideology in games. I then situate *OTC* and its predecessor game M.U.L.E. in line with narrative economic thought experiments foundational for classical economics. I argue that the limitations and simplifications of *OTC*'s representation or model of liberal

markets and finance are based on several abstractions that they share with neo-classical economics in general, and Robinson-Crusoe economies in particular. However, I demonstrate that the way the game puts these assumptions into dynamic play makes for a compelling case of critically studying economic abstractions through simulation. Countering both cultural criticism of games and video-game's mainstream self-conception as pure entertainment, I conclude by making a case for the critical potential of simulational games within cultural production to study complex systems.

OTC is set in a not-so-distant-future: earth's resources are depleting, and the conquest of space has just begun. The player assumes the role of CEO of a mining and production company on newly-colonized planet Mars, to fulfill the game's motto: "Save humanity. Turn a profit. Preferably both." The colonists have invited multiple private companies to the Red Planet, in hopes that competition and the laws of the free market will provide for the most efficient extraction and refinement of resources for the raw materials and goods eventually destined to be shipped back to earth. Pitched against other companies in a battle over the most profitable mining claims, production facilities, market shares, and stock value, the player primarily relies on supply and demand economics to assert his dominance. A game of OTC ends with one player buying out the stock of all his opponents and taking over the entire competition. The game features several tutorial missions and practice scenarios that teach the core mechanics and develop the setting. Apart from a few single player scenarios the actual game consists of matches played against other human players or computer foes. Up to eight competitors can vie for control of the Red Planet's economy at the same time. Matches are typically played online or in LAN networks and a session last 20 minutes or longer.

With its focus on economy and market forces rather than tanks and soldiers, OTC's premise adds a number of unique twists to the real-time strategy genre that, from its inception (with titles like Dune and Command and Conquer) until today (with E-Sport staples like Starcraft) has primarily been defined by a blend of industrial production and military warfare, with a heavy focus on the latter. Considering the originality of its design, OTC received favorable reviews by players (see e.g. "Offworld Trading Company on Steam") and professional reviewers alike (see e.g. Starkey; Eliott; Vanderwall; Smith), but those routinely came with the warning that it was somewhat "niche" (Smith) and might not appeal to everyone. As one reviewer for Escapist Magazine put it: "If you're scared of math or just hate spreadsheets, steer clear, as OTC is predicated on a quick eye for trending resource prices and on-the-fly cost-benefit analysis" (Vanderwall). However, the limited mass-appeal of the game testifies to the sincerity of its premise as an economic strategy game. Rather than a simple change in presentation, a replacement of military planes with corporate lawyers, and military invasion with corporate raids, OTC's core mechanics rely on a detailed simulation of basic market principles.

For the analysis of *OTC*'s representation of markets, it is helpful to sharpen the media- specific potential of a game to simulate and model its content, in comparison to a novel or film's various modes of narrative representation. The concept of simulation is central to critically appreciate a game like *OTC* that, as a multiplayer and a real-time strategy game, follows a genre-typical, less-narrative-driven approach. While in my analysis of Layoff and the Stock Market Game, I deployed Ian Bogost's argument for a "procedural rhetoric" (suggesting that in video games, players do not simply escape in a fantasy universe, but interact with messages and claims through system mechanics), it

will now be necessary to insist on the distinction underlying Bogost's argument, namely the difference between simulation and narrative.

Gonzalo Frasca's now-classic essay on "Simulation versus Narrative: Introduction to Ludology" carries the historic turf wars between narrativists and ludologists in its title.⁷⁶ However, rather than a one-sided call to formalism, an uncritical celebration of play, or an attack on narrative theory in video game studies, Frasca more carefully proposes not to rule out "the elements that *games do share with stories, such as characters, settings and events" but proposes drawing* a set of formal distinctions between the study of a novel and that of a game (212). Similarly to his long-time collaborator Bogost, Frasca claims that the process of players acquiring a game's rules is what make it possible to understand, or be affected by a game's message, with the result that, "games can express messages in way that narrative cannot and vice versa" (Frasca 225). For Frasca, this is a genuine challenge for scholars, especially those trained in literary or film studies, to come to terms with a different way of representation. In fact, with a "paradigm shift for our culture because [video games] represent the first complex simulational media for the masses" (224).

Following Frasca, the most basic difference between traditional modes of representation (such as novels, films, photographs, etc.) and simulation is that the latter "does not simply retain the-generally audiovisual-characteristics of the object, but it also includes a model of its behaviors. This model reacts to certain stimuli (input data, pushing buttons, joystick movements), according to a set of conditions" (223).⁷⁷ These two traits,

⁷⁶ See Chapter 2 "2.3.1 From Ludic Theory to Critical Play."

⁷⁷ To illustrate this difference, Frasca proposes the following example: "Traditional media are representational, not simulational. They excel at producing both descriptions of traits and sequences of events (narrative). A photograph of a plane will tell us information about its shape and color, but it will not

modeling and interactivity, have implications on authorship, or control over the simulation by its creators, and the different ways in which assumptions, beliefs, and ideologies are expressed or challenged in games. Other than in narrative media, the sequence of signs that a simulation produces is not fixed. Rather, the sequence changes with different inputs and repetition. As a result, "the potential of games" lies not so much in telling convincing or satisfying narratives, but "to create an environment for experimentation" (Frasca 225). If narratives rely on a fixed sequence of semiotic elements to structure their representation, games are structured with rules "that can be manipulated, accepted, rejected, and even contested" (225). Thus, if authors of narratives have executive control over their texts, designers of simulations "behave more like legislators: they are the ones who craft laws" and give some of their control over to players (Frasca 229).

In this regard, simulations seem especially apt to explore larger, complex issues.

Frasca speculates:

It would not be surprising if in the near future politicians tried to explain their plans

on tax or health reform through simulation. As Ted Friedman has pointed out,

Marx's *Capital* would make a much better simulator than a film. (226)

While we will have to return to Friedman's oft-repeated claim (considering Sergei Eisenstein's attempt to make a narrative movie out of Marx's theoretical work), it is important to point out here that Frasca's prediction from 2003 has indeed become a

fly or crash when manipulated. A flight simulator or a simple toy plane are not only signs, but machines that generate signs according to rules that model some of the behaviors of a real plane. A film about a plane landing is a narrative: an observer could interpret it in different ways (i.e., "it's a normal landing" or "it's an emergency landing"), but she cannot manipulate it and influence how the plane will land since film sequences are fixed and unalterable. By contrast, the flight simulator allows the player to perform actions that will modify the behavior of the system in a way that is similar to the behavior of the actual plane. If the player increases the power variable on the simulator, the simulated plane will move faster through the virtual sky on the computer screen. As we will later see, video games are just a particular way of structuring simulation, just like narrative is a form of structuring representation" (Frasca 113–14).

reality—one that he helped along. Granted, political simulation games had been around for much longer⁷⁸, though not to the extent that interactive media accompany political campaigns today and are used persuasively to familiarize players/citizens with policy proposals, funded by political candidates or parties.

Still, in late 2003, Frasca, with Ian Bogost, designed The Howard Dean for lowa Game that sought to playfully model political grassroots efforts to inspire players to campaign for Dean in Iowa both virtually and in real life. In 2004, Bogost was commissioned to design Take Back Illinois, to engage players in several interwoven public policy issues as part of the Republican election effort in the same year. In both cases, the simulation was deployed to allow players to interact with ideas (that by themselves might seem abstract or dry) rather than simply explaining, or representing them (see Bogost, *Persuasive Games* 135–42). However, their persuasive use points to the designer-as-legislator's authorial powers over a simulation, or, if considered less on the level of intention, how assumptions about a reality a system seeks to model, are built into a simulation. How permissive the laws or rules set by a designer are, whether they give possibilities, manipulate or even force players to do something, or what the rules include and leave out— all become part of the message or ideology of a game. On a fundamental level this designates the problem of openness vs. restriction in video game design that I referenced in my discussion of Layoff and the Stock Market Game.

To characterize a similar issue, Frasca proposes two ideal types of games. *He* distinguishes between "paida" and "ludus" that imply different kinds of rules in structuring

⁷⁸ E.g. the first version of the US-Election simulator game *President Elect* came out in 1981 (see e.g. Betha).

a player's experience of a game. Paida designates a more free, and open-ended experience, while ludus describes a more restricted game, with clear winning conditions: "Paida refers to the form of play present in early children (construction kits, games of make-believe, kinetic play) while ludus represents games with social rules (chess, soccer, poker)" (Frasca 230–31).

Departing from this distinction, Frasca identifies three main levels of how ideology is built into a simulation. The first layer, shared with more traditional media, deals with the narrative setting and visual presentation of a game, the characteristics of objects and characters, the background and cut scenes. As an example, whether two mechanicallyidentical games simulate a fight between triangles and circles, or a battle between Palestinians and Israelis, would make for two ideologically different games. This would similarly hold true if OTC transported its setting from the future colonialization of Mars to the historical colonialization of Africa. The second layer of ideology deals with "manipulative rules" associated with paida, i.e. rules that create possibilities rather than restrictions. An example given by Frasca is the possibility for homosexual relationships in a game like The Sims. This possible choice designates a statement by the game because rather than enforcing heterosexuality, homosexuality is indeed an option (but is also strictly optional.) In OTC, the second layer concerns anything—from more neutral options such as the possibility to invest in one resource over another, (e.g. production of food and oxygen over steel and electronics) to the possibility to engage in questionable business practices (such as creating an artificial shortage of food and oxygen for colonists). The third level deals with "goal rules," referring to ludus, as the most common form of games, i.e. rules that determine what is mandatory, or necessary, to win a game. Frasca gives the following example: "while it is possible to have fun in *Super Mario* without rescuing the princess, the player cannot win unless he accomplishes this goal" (232). Similarly, in *OTC*, the player can only win by buying out the competition; if the player does not work towards this goal, the player will very likely will be bought out by others.

If we further explore *OTC* through these categories, then its setting (the colonization of Mars) at first seems relatively neutral (again, the technically entirely possible and relatively small change of the scenario, e.g. to the colonialization of an inhabited extraterrestrial world, would be immediately different in tone). However, *OTC* also posits colonialization as an absolute necessity; the mother world, Earth, is facing severe ecological and economic crisis. This supposedly ennobles the player's endeavor, even if he is not acting out of altruism, but as part of a commercial effort. However, this premise and motto of the game ("Safe humanity. Turn a profit. Preferably both") is, as I will show, radically subverted by the simulation it professes to frame. For now, the promise that free markets would lead to the most efficient allocation of Mars' resources, an open reference to neo-classical economics and laissez-faire liberalism, is immediately undercut by a game that sets the goal of monopolizing the market.

As a competitive game with clearly-stated winning conditions, Frasca's third layer dominates over the second, i.e. goal rules outweigh manipulation rules, *or* the designers "funnel through all the available actions and encourage some that will lead to the winning scenario" (Frasca 232). *OTC* is not a sandbox game of economic exploration and experimentation (such as *SimCity*, which, within certain limitations, lets you build any kind of city), nor is it an open business simulation like *the Stock Market Game*, which closely models real-world-investment based on real-world-information. Even if *OTC* allows for

multiple ways of progressing, and rewards experimentation, the experiments themselves must be goal-oriented to play successfully (i.e. make more money) or fulfill the rule that states: buy out all competition to win the game. From a policy design perspective, this mechanism creates incentives; from the perspective of simulation design, this structures the experience of playing the game and the kind of sequence of signs the simulation is likely to produce. However, the forced binary of winning/losing is also where part of the game's critical message regarding profits and markets resides. To both gain a better understanding of the game's critical potential, and to come to terms with how it is achieved procedurally rather than narratively, makes it worthwhile to look at the game's aspirations and inspirations in the larger context of the history of economic ideas.

An obvious precursor for *OTC* both in theme and mechanics is the 1983 Atari classic *M.U.L.E.* Although different in its level of sophistication and mechanically distinct (i.e. turn- based vs. real-time), the Atari game offers an analogous setting (space colonialization) and makes competition for limited resources and exploitation of market forces at the core of its mechanics. *M.U.L.E.* has kept a following of enthusiasts until today,⁷⁹ and the game was favorably received in its time by both players and critics. Most notably, among its praised qualities was its "educational value," prompting reviewers from both InfoWorld and Hi-Res to suggest, that they "learned more about economics" from *M.U.L.E.* than they did in "college classes" (Mace 112; Laporte 14). In this regard, *OTC* and *M.U.L.E.* seem to share a critical ambition, namely, to provide more than just entertainment, and to offer basic insights into the economics of markets. In both cases,

⁷⁹ Numerous unofficial remakes have appeared over the years and in 2011 *M.U.L.E.* was among the games nominated for the Smithsonian's Art of Video Games exhibition ("Exhibitions: The Art of Video Games").

the secluded, limited setting of the Red Planet makes for the ideal framework for a game that suggests exploring economic concepts. Mars has little to offer except a supply of few basic resources such as water, metal, carbon and silicon. Isolated from the mother planet, the colonists and the player-represented companies must build everything from the ground up.

However, given the parameters of the simulated economy, the connection between *M.U.L.E.* and *OTC* can be extended a century further, back to the narrative thought experiments and didactical allegories of economists. In what is often referred to as a "Robinson Crusoe economy," one or more secluded islands, rather than an extraterrestrial planet, and coconuts and fish, rather than metal and carbon, and a ship-wrecked mariner, rather than corporations, would provide the limitations in location, resources, and agents to isolate and study economic ideas.

The Robinsonades continue to be part of MBA-textbooks today, and originally took their inspiration from Daniels Defoe's novel of 1719. It was only by the second half of the nineteenth century that the novel about Crusoe's survival on an island was reread and rewritten as the story of a rational, utility-maximizing agent, or homo economicus, and over time would become the most famous narrative economic explanation for the foundational concepts of neo-classical and neo-liberal economics and models until today (rational agents and equilibrium).

As William Kern argues in his study of "Robinson Crusoe and the Economists," contrary to Marx's claim that "even Ricardo has his stories a la Robinson" the classical economists Ricardo, Smith and Say did not produce any Robinsonades (Marx qtd in: Kern 64). The isolated, individual-as-example rarely figured into early macroeconomic

considerations, or a political economy concerned with "men gathered in society" (Sismondi qtd in: Kern 65). In contrast, starting in the second half of the nineteenth century, neo-classical economists, in their methodological focus on microeconomics and their desire to establish economics as a scientific discipline, would radically change that: "while Crusoe was rarely mentioned by the leaders of classicism, in contrast, the number of leading neoclassicists is exceedingly long" (65).

The new focus on microeconomics meant that the individual, and his decisions as the smallest economic unit, would become the center of economic investigations.⁸⁰ The parallel drive towards an economic science, independent from other sciences, signified that in addition to generalization, theoretical "isolation" and "idealization" were adapted from the methodology of natural sciences (Kern 66). These two factors made Robinson Crusoe's setting, isolated from social relations, with given resources and needs, an attractive candidate to study abstracted individual economic decisions, demonstrate rationally-deducible laws and advance claims about their universality. Crusoe as producer and consumer in one demonstrated that a single market has optimal prices (i.e. optimal use of resources and amount of labor spent in production to reach optimal level of consumption), which would stabilize supply and demand over time, and lead to a state of equilibrium. If, at the end of the nineteenth century, Walras and Pareto had rejected Crusoe to study a general equilibrium (an equilibrium across multiple markets), the Austrian school (and later, the Chicago school) produced some of the staunchest

⁸⁰ As Kern reconstructs the popularity of Robinsonades among neoclassical economists: "Included amongst the concepts and principles illustrated through the use of Crusoe are the principle of diminishing marginal utility (Marshall, Robertson, Menger, Gossen), capital and interest theory (Fisher, Böhm-Bawerk, Fetter, Knight), the equimarginal principle (Wicksteed, Knight), positive rate of time preference (Robertson, Cannan, Wicksell) and labor supply (Barro). In short, almost any microeconomic problem can be, and has been, examined with the use of Crusoe" (Kern 66–67).

proponents of Robinson Crusoe Economies and wholeheartedly relied on the lessons associated with them, while continuing to expand the original setting (Kern 68–69). Over the course of economic history, the introduction of additional agents (typically Man Friday and similar scenarios) would allow economists to study trade (as mutually beneficial, through comparative advantage), and understand the behavior of individuals in a more involved market environment (e.g. for international trade economists, Crusoe would represent a nation, while Friday would stand in for another).

Decisively, in the tale of economic man, Crusoe the cast-off is not only isolated from social relations, but from government control, cultural differences, and history alike. That is, the choices that Crusoe must make on the island out of necessity (for survival and welfare) would come to serve as an allegory about the benefits of laissez-faire, and simultaneously convey a sense of the naturalness of liberal economics, suggesting a timeless, rationally deducible truth. Vogl situates the "affection of the political economy for Robinsonades" as part of a discursive process that established the market as a place of social harmony and order (Vogl 48). The rational, lawful adjustment of prices towards an equilibrium demonstrated in these thought experiments sought to establish universal economic truths and to demonstrate a lawfulness in all social interaction. The market came to bring individuals together as a society, to discipline human desires and wants, and to cultivate and transform the self-interests of individuals into social goods. Given the largely theoretical and idealistic descriptions of fundamental assumptions, like rational agents and equilibrium, Vogl ascribes a performative function to neo-classical economic discourse, forming a "social imaginary" that "instructs the self-image of a society" and

provides for "intuitively justified images or evidences" for concepts, and options for actions (Vogl 55):

As little as there is certainty about the actual status of this equilibrium in the developing political economy, if it should be understood as an optimum, a principle or a reality, and as little as Smith himself has provided for a precise definition of equilibrium, as much has the theorem of an equilibrium become a lynchpin of economic knowledge and has been transmitted via Ricardo, Walras, Jevons and Pareto into the doctrines of the twentieth century. Economic theory was born as a theory of equilibrium.⁸¹

Thus, the repetition and variation of Crusoe's tale, and the intensification of its use among neo-classical economists, may be part of a discursive effort that has established the universal status and application of its fundamental assumptions, even if standing on contested and epistemologically shaky ground. The Robinsonades provide narrative support and plausibility for a set of abstractions at the core of neo-classical theory, revolving around an idealized agent, an optimizing calculating machine, a being of pure rationality and self-interest. The fiction of Crusoe performs this very abstraction, and the separation of economics from everything else (see Chapter I)—economic man is cast off to a deserted island, cut from social relations, politics, culture and history as both an extreme, but plausible case. That the basic assumptions of a Robinsonade are not simply a historical vestige which has been improved and corrected upon becomes evident in

⁸¹ Trans. by Kaipainen "Sowenig es ausgemacht ist, welchen Status dieses Gleichgewicht in der entstehenden politischen Ökonomie tatsächlich einnimmt, ob es als Optimum, Prinzip oder Realität zu verstehen sei, und sowenig Smith selbst eine exakte begriffliche Fassung des Gleichgewichts bot, sosehr wurde das Gleichgewichtstheorem nun zu einem wesentlichen Angelpunkt ökonomischen Wissens und über Ricardo, Walras, Jevons und Pareto in die Doktrinen des zwanzigsten Jahrhunderts übermittelt. Ökonomische Theorie wurde als Gleichgewichtstheorie geboren" (Vogl 50).

criticism that the economic sciences in general, and mainstream macro-economic theory (built on micro-foundations in particular), have drawn in the wake of the Global Financial Crisis. As economist Alan Kirman argues, the failure of economic models to predict and explain the crisis since 2007/2008 lies precisely in the unchallenged status and the abstraction of these notions. Given all the sophistication and modification of models, Kirman insists that "underlying all of that work is the same basic framework that is the basis for all modern macroeconomic models, that is, an equilibrium notion with isolated optimizing individuals" (Kirman, *The Crisis in Economic Theory* 10).

It is important to note that throughout history, the Crusoe narrative has been adopted by different schools of economics, sometimes turning the myth itself into a battleground to prove one's own ideas, or to disprove one's the assumptions of others.⁸² Regarding the status and form of Crusoe economies within neo-classical discourse, we find varying accounts even among the proponents of Robinsonades. Economists like Robertson and Canan have downplayed their use of Robinsonades as "a childish device," intended for those unfamiliar with the subject matter and students, while others, such as Frank Knight, a founder of the Chicago School, have defended the genre as an "almost indispensable" analytical tool to make sense of individual behavior (Kern 68–69). As such, within neo-classical discourse, the Crusoe case acquires both the status as a didactical tool to demonstrate complex things in a familiar form, as well as that of a genuine narrative

⁸² In fact, as Kern points out, if it's prime use has been to consider individuals in market economies, at the beginning of the twentieth century, we can even find examples of socialist variations of Robinsonades to study collective economies (68). Further, Robinson Crusoe economies have frequently be criticized by those who only opposed neo-classical economics, but contested the "unrealism" of the setting, (e.g. John Hobson, Gustav Cassel), attacking Crusoe's case as "unrepresentative" and generalizations from it of it as "misleading" (Kern 69–72). Following Kern, Marx was the first to criticize the assumptions underlying Crusoe economies, insisting on the social production of the individual who could not be considered outside of society and historical processes (Kern 70–71).

thought experiment. Understood as a rhetorical device, the narrative packing of the Crusoe story simply helps a reader recognize a central purpose, and narrative is then discarded in favor of other ways of displaying the information (such as the use of Robinson Crusoe economies in economic textbooks and lectures that move from narrative detail to mathematical formulas, graphs and curves).⁸³ Understood as an analytical thought experiment, the Crusoe fiction has allowed neo-classical economists to explore concepts and play with and consider isolated factors (e.g. what happens if we introduce a second island, a third resource, or even a tropical storm that wipes out all coconut trees). But what happens if narrative is replaced with simulation? What if Robinson Crusoe goes to Mars and is not alone?

In *OTC*, similar to the choices Crusoe has to make upon arriving on the island, players are immediately faced with decisions: where to place the company's HQ, what resources to prioritize, what goods to produce, etc. Just like economic man Crusoe, the player strives for the most optimal allocation of scarce resources and this (at least at the beginning) seems to force a player down a more or less logical, apparently pre-defined path. And indeed, as a testimony to both Robinsonades' and the game's educational and didactical aspirations, the basic concepts and skills required by the game can be acquired in a few sittings and understood through reasoning (or from the perspective of simulation design, by testing and interrogating the rules of the game-system). In addition, the game's tutorial missions, accompanied by written instructions, assume a role similar to narrative

⁸³ The following examples of contemporary student materials from introductory courses to economics at Tel Aviv University and St. Francis Xavier University are telling of the introductory and illustrative use of the Crusoe narrative:

https://www.tau.ac.il/~spiegel/teaching/inter-micro/Crueso.pdf

http://people.stfx.ca/tleo/microiilecture2.pdf

text, leading a player from a sense of overwhelming details and choice towards the understanding of a few core principles (e.g. basic laws of supply and demand). However, outside the forced choices of a tutorial mission, even with seemingly stable parameters and minor variations in the availability of resources, and as opposed to the logical and linear progression of a Robinsonade (narratively fixed to a sequence of signs), playing the game dramatically varies.

Even if the simulation relies on comparatively reduced factors and simplifications, what critics of neo-liberal economics in general, and Crusoe economics in particular, have called "aggregation fallacies" (Keen 51), are immediately experienced by a player locked into completion with multiple adversaries where not a single game will play out the same way. What hold true as linear and predictable developments for individual consumers and producers considered in isolation becomes "an unholy mess" in real market situation—once we scale from the individual agent to a market with multiple participants not acting in isolation but reacting to and predicting each other's behaviors, "prediction" as a whole becomes difficult if not impossible (Keen 52). If this seems to describe the difference between the dynamic nature of a simulation over a narrative and arguably designates precisely what makes *OTC* an engaging and replayable game, it also encompasses the critical message of *OTC*: the game both faithfully models assumptions of standard neoclassical economics and challenges its promises of equilibrium, efficient allocation, stability, and social good.

In its hardcoded premises, *OTC* embraces a neo-classical model of economics (markets with perfect information, absence of external regulation, supply and demand in absence of any other variable factors on prices, such as labor cost, taste, etc.). Thus,

unlike other economic simulations, the prices are not fixed or dictated by the game system. Rather, the simulation and the small scale of the Martian economy make every move on the market tangible. The player-driven economy dips and surges, depending on actions of companies vying for control of the planet. Just like a neo-classically trained economist would expect, producing and selling large quantities of a particular resource will bring down its price on the market, whereas buying will have an opposite effect; producing ever larger numbers of a single product will result in diminishing returns; etc. However, if prices are not given by the system, but result dynamically from player interaction and according to the neo-classical "laws" of supply and demand, Offworld also has no hardcoded invisible hand. That is, prices do not automatically gravitate towards a stable, preset state of equilibrium; the opposite is true.

Under the conditions of competition, computer adversaries and human players alike are not only fallible in their decisions and predictions, but quite rationally arrive at states of uneven distribution and crisis. The game sometimes artificially creates challenges in the form of randomly triggered and scripted shortages, i.e. crises that are explained as external events such as accidents in the colony, ships from earth arriving late, weather conditions that disable solar arrays, etc. However, most crises are player made or result directly from competition among players. More often than not, these internally occurring crises are less the result of incompetence or irrational behavior (the fact that neither the Al of a computer adversary, nor a player is an idealized Crusoe, i.e. a fully rational optimizing machine) nor do they stem from the chaotic reality of an aggregated market over a clean idealized model. Rather, the crises are the result of perfectly rational behavior: an early lesson to be had for a player is that states of equilibrium (however temporary and fragile) are not desirable; they are detrimental to the return of profits and need to be actively disturbed in the search for new opportunities, better investments and gaining an edge over competitors. In order to play successfully, every move, from strategic hoarding of resources to sudden mass sell-offs, has to be geared towards improving the bottom line, or damaging the competition. As a result, while an unusual real time strategy game that does not allow destroying your adversaries with physical force, in *OTC*, the same market principles that lead to a perfect equilibrium in a neo-classical Crusoe economy, are wielded with a similar destructive potential of tanks and missiles. The free market of the game allows for brutal price hikes and slumps with no mitigation by a regulatory or governing force. If Crusoe's island is a liberal utopia of perfect markets, *OTC*'s Mars is a liberal dystopia of constant market failures. Since winning the game means to weaponize market forces, with hostile takeovers in mind, it reveals sarcasm in the game's motto, i.e. the fundamental incompatibility of "saving humanity" and "turning a profit" in a truly free market.

The satire becomes already visible if we consider the game with the help of Frasca's first layer of ideology, the games setting. The cartoonish graphics of the game, the introduction of different companies ("healthy competition"), and questionable business strategies in the tutorial missions establish a satirical tone that suggests an ironic rereading of the games premise. Unable to learn from what has presumably ruined their home world ("Earth is dying"), the colonists install the same destructive system on the Red Planet. Yet, ultimately it is the interaction of the third layer (winning conditions) with the second (manipulation rules) that enforce this message: while competition and free market do initially generate diversification (a surplus of too much of the same product or

resource will drive markets down and thus encourages specialization), once the market is established for all the available resources and products, the push for additional profits necessarily comes at the cost and disadvantage of others (or from the perspective of economics, competition alone does not create Pareto efficiency). Profits, in other words, are not a happy side effect to an otherwise humanitarian effort, but the main goal that comes at the cost of humanity. The game's ultimate objective of turning one's competitors into subsidiaries and effectively establishing a monopoly is telling. Even if monopolization was not literalized as an actual takeover of the entire market, the games dynamics forward the idea that even simplified and idealized markets do not operate under the premise of a general equilibrium, or find a natural balance over time, but tend to inevitably generate situations in which market power concentrates to the point where companies and corporations, need to exploit (or even create) market inefficiencies, or crises.

Certainly, one could entertain the argument that the game is simply ideologically inflected by design. That is *OTC*'s third layer of ideology, its winning conditions, which encourage this kind of behavior in players and ensure that competition does not become a means of efficient allocation of goods, but one of domination and control. However, even if a different game is imaginable, which similarly builds on neo-classical assumptions but makes equilibrium into the winning condition, either the amount of cooperation of players, or the restriction of possibilities by the designers such a scenario would require to achieve this goal, would still call into question the status of equilibrium in free markets: not as a natural occurring and universal law, and not as one that emerges from the unrestrained pursuit of self-interest of rational agents. Thus, the strength of *OTC*'s simulational critique of neo-liberal economics is in putting its most fundamental
abstractions into play and bringing theoretical models alive for players to interactively explore and test these premises and their promised outcomes.

In addition, that the winning conditions enforce a player's strive for ever larger profits, rather than an arbitrarily set goal, reveals another critical assumption of the designers about the role of finance in a market's need for constant expansion. The first thing a player does when arriving on the red planet is setting up a mining and production industry or establishing a real economy. Thus, it is revealing that the game is won or lost through the means of finance. Ultimately, a player does not gain an edge through advanced chains of production (i.e. by the real economy) but maximizes profits through superior trading of goods and resources and predicting market behavior and prices (i.e. by participating in finance). Although financial instruments are limited in OTC's simulation (e.g. no short selling, no derivatives, no investment funds, etc.) the game takes place in a financialized universe: your company's stock price (permanently displayed with those of your competitors, in the top right corner of the screen) becomes the ultimate measure of your success. The number reflects how well you are doing; how close you are to winning, or being taking over by a competitor. More concretely, the number (affected dynamically by amount of debt, financial success, and trading of the stock by players) represents the exact amount of funds a player can pay at any point during a game to immediately end the game for a competitor by buying a majority in his stock. To keep the value of one's stock up at all costs, and constantly working to increase profit, is certainly a means of winning the game, but also one of survival in a financialized economy. Thus, in positioning financial value as the first and final measure of valuating a company, OTC also advances a comment about the extra-ludic world on how the primacy of finance over production drive the need for maximizing profit over all other considerations. Indeed, finance and access to credit capital, as Jens Beckert. has argued, play a decisive role in the expansive dynamic of economic activity: "The claim to capital must be earned through expansion of economic value." Beckert notes:" the credit system both provides opportunities for growth and enforces that growth. Firms that fail to produce sufficient surplus lose access to capital and are eventually wiped out from the markets" (4).

However, the suspicion remains that *OTC*'s critique of neo-classical economics from within, runs the risk of either becoming a side show to playing the game or remaining on the Red Planet altogether. In other words, the critical message might fail to connect with players and back with the larger cultural, social and political issues that surround not only neo-liberal economics but real market failures. After all, outside of a contextualized analysis like this, it is also, perhaps even primarily, an entertaining, competitive multiplayer game. As one commentator wrote:

It's a bit chilling to think that in *Offworld* you're playing out the same obsessive pursuit of capitalism that led to the fall of its fictional Earth--an event hinted at in tutorial dialogue--yet it's so recklessly entertaining and biting with its satire that I couldn't help but get lost. When combined with truly deep and intricate strategic options, *Offworld* is a revelation. It's almost unparalleled in the genre. Each and every game is thrilling" (Starkey).

Indeed, if the game is played for its "thrilling" qualities, it can be reasonably assumed that a player engages with its mechanics for the mechanics sake, rather than for their critical content. Further, unlike Layoff, which constantly reminds its players of the consequences and human cost of free market efficiency, in *OTC* these consequences are invisible. The only layoff a player is confronted with is his own, if he loses a game. "Game over" comes in the form of a "notice of termination" slapped in the middle of the screen. The text reads: "we regret to inform you that your services are no longer required. Reason: your company has been acquired by [name of competitor]." Further, the player's score is stated in the form of a hefty compensation for his or her "contribution." These checks, in the hundreds of thousands, if not millions, of game currency (depending on a player's performance) represent another satirical stab at the games own setting. The fictional compensations for the player echo the obscene numbers of retirement and severance packages that came up during the first years of the Global Financial Crisis and that are also a central element in Layoff's anti-banker message and grounding of its critique in an extra-ludic reality (discussed in Chapter II).

Yet, in *OTC* the consequences of economic failure and downturns (other than creating favorable or disfavorable conditions for buying up the completion) are not shown. If, for example, a player tears down a factory or mine to replace it with a different structure, or drives up the price for food and energy, the effects on presumed workers who lose their jobs, or the imaginable consequences for colonists or citizens of planet Earth who can no longer afford to eat, remain invisible. In this regard *OTC* might be befallen by a similar blindness of its players to critical messages as one of the most popular board games of all time: *Monopoly*. Though not widely known, the history of the board game (whose true version was not revealed until the 1980s) does not start with the Parker Brothers. Rather, Monopoly has its origins in the early 20th century when Elizabeth Magie Philips, a follower of Henry Georges economic teachings, conceived a precursor version, designed as "a protest against the big monopolists of her time – people like Andrew

Carnegie and John D. Rockefeller" (Pilon). With the core elements of today's version of Monopoly in place, the game of establishing market dominance and bankrupting everyone else until only one winner remains, was meant as a political critique. The game was designed to show the destructive quality of monopolies to its players.⁸⁴ If to this day *Monopoly* passes as harmless family entertainment and its critical message remains hidden in plain sight. Similar to *OTC*, the mechanics themselves are fun; even if they show the brutality of economic activity, the game does not insist on the real-world-consequences of monopolization.

To conclude, while *OTC*'s simulation of markets relies on neo-classical and neoliberal economics, it also challenges the imperturbable status of its truths as mere assumptions and promises. If the model of *OTC* is comparable to the economic genre of Robinson Crusoe economies (isolation, simplification and restriction of factors), the simulational approach offers radically different lessons than conclusions traditionally offered by narrative Robinsonades. Namely, the game subverts the theorem of equilibrium, the assurance that free markets lead to an optimal allocation of resources and as a result to stability and the social good. Even given the faithful modeling of supplyand-demand pricing, the market in *OTC* fails to discipline the self-interest of its participants. Rather, under the conditions of the radically free market on planet Mars, competition leads to systemic market inefficiencies, and monopolization. Thus, whilst the neo-classical premises of *OTC* provide for an educational and interactive experience of

⁸⁴ In fact, Magie had created two separate sets of rules for her game. In addition to the monopolist set with the goal to create monopolies, she conceived an anti-monopolist set of rules based on George's economics, in which wealth was shared. This was meant to demonstrate that the anti-monopolistic set of rules was morally superior. However, "it was the monopolist version of the game that caught on" (Pilon).

supply-and-demand economics (diminishing returns, pricing of compound products, etc.) the game also enacts a critique of their consequences as inevitable market failures. However, I have also argued that placed in a competitively played video-game, this criticism might be rendered invisible by the "thrill" of playing the game.

Last, the critique of the enjoyableness of OTC, in spite of its critical message, downplays the potential of video games to be a voice in cultural production, and underestimates the readiness of players to be more than just entertained by something that involves play. While such a critical stance certainly participates in the suspicions and cultural critique that surround video games to this day, as I have shown in my introduction they are also part of a self-conception of mainstream video game culture that places itself "outside of the rest of culture" (Lees). Maybe more decisively, as Frasca insisted in 2003 when he contested a lack of video game, or simulation, literacy, it is also that "simitiocs," as opposed to semiotics are not simply a challenge to researchers (223), but to a culture more used to established media as a carrier of seriousness and critique, to narrative representation, and conditioned to understand and engage with cultural critique narratively. Yet, maybe more than 10 years after we witnessed the arrival of the first complex simulation mass-media (Frasca 224), and as the Global Financial Crisis has revealed the limits of narrative representation of certain systemic complexities, it might be time to begin to appreciate simulation as a critical mode of engaging with the world, and a potential source of imaginative innovation, a discussion that I continue in the last chapter.

3. Conclusion – Contesting Financial Abstraction and the Means of Cultural Production

In this chapter I have discussed how cultural-aesthetic production engages with the problem of representation of financial markets, in reference to the various descriptions of finance as abstract and/or un-representable. Thus, if the narrative of complexity has found a temporary and politically effective answer in an imaginary of blame (Chapter II) that simply avoided the problematic of financial abstraction, the critique of a financial imaginary (as self-determinate, objective, abstract and un-representable), discussed in the first part of this chapter, meets the challenges of claims to abstraction. Such a critique guestions the naturalness of the underlying assumptions and exposes finance's unstable separation of the real economy but of culture, society and politics, of man-made and manoperated technologies, discourses and practices. As I have shown in my initial discussion, finance is always already part of representative practices that create and recreate its claims to abstraction. It is thus notably the historic development of finance as field of scientific inquiry and the presentation of finance through financial services that has normalized and naturalized a narrow set of financial representation. If these representations have entered and are active in socio-political discourse and cultural perceptions of the crisis, they have exercised ideological effects of paralysis and disenfranchisement.

However, the examples of cultural production discussed in this chapter (as part of larger representative and discursive practices) all engage with these contested claims. Röggla's collection of short texts, *die alarmbereiten*, engages with the language of crisis

and catastrophe discourses. Her formally rigid narratives enlarge, estrange and make visible the performativity of a language that constructs a catastrophic social reality, and exercises a discursive violence. Within this larger literary critique, "der übersetzer" exposes what Claire La Berge has called an ideological function of abstraction. Namely, how abstraction in the discourse on the Global Financial Crisis works to obfuscate its object and functions as mechanism of exclusion. DeLillo's novel *Cosmopolis* deploys a number of formal strategies to represent financial abstraction and, in doing so, pushes the purported limits for narrative representation of financial phenomena.

However, the literary mediation of ideas of a totality of market culture, of a radical self-determination of finance, remains deeply ambivalent towards the reality of its claims. In turn, Cronenberg's adaptation of the novel makes visible and insists on its abstractions as artifice and separation. After the Global Financial Crisis it seems, the pro-market and postmodern fantasies of self-determinate techno-capital no longer allowed for the kind of fascinated ambivalence DeLillo's novel displays. Finally, the video game *Offworld Trading Company* engages with the fundamental economic assumptions that feed into imaginaries of self-determinate financial systems. *OTC* puts these abstractions into play, allowing the player to explore and experience the contingency of markets and the paradoxes they produce. The simulation challenges the promised outcomes and suggests a critique of neo-classical ideas of equilibrium and the efficiency of markets.

Together, all these examples interrupt the performative function of financial and economic abstraction, make tangible the discursive mechanisms of claims to abstraction, undermine the stability of an imaginary that seeks to efface its ties to the material world and bring into the open the ideological beliefs that sustain such an order.

Granted, the fact that claims to abstraction go mostly uncontested, and are part of an everyday rhetoric in politics and in journalism, might indeed (with apologies to Röggla's narrator in "der übersetzer"), be owing to a problematic degree of ignorance among the general public, a widespread illiteracy in financial matters. In 2015, a comprehensive survey in 148 countries revealed that financial literacy concerning the knowledge necessary to make sound personal financial decisions (e.g. personal loans, credit cards, student debt, etc.) was "alarmingly low" in many developed countries (Zumbrun). In Germany the rate of financial literacy was 66% in the US 57%. Given that these numbers strictly reflect questions of personal finance, it is unsurprising that the world of high finance (e.g. derivative financial products), or even questions of monetary policy such as the functions of a central bank, are terra incognita for the vast majority of people. In fact, a survey by the National Public Radio in the same year determined that only 14 percent of all Americans knew who Janet Yellen is. Thus, what transpires from these cultural, literary, filmic and ludic interventions into the discourse could indeed be a first spark to activate the public, or to say it with Kant, to embark on an emergence from man's selfincurred immaturity. Self-inflicted in this and in Kant's case not from a lack of understanding, but from the lack of courage to use one's reason, and wisdom without the gate-keeping and guidance of professors, journalists, politicians and other experts.

If the novels, films, and video games discussed in the previous chapter participated in creating a moral legibility of the crisis, *die alarmbereiten*, *Cosmopolis* and *OTC* no longer offer strategies of avoidance to the systemic complexities the crisis revealed. Rather these examples of cultural production open discursive spaces to critically engage with the issues of complexity. Yet, the novels, film and video game discussed in this chapter not only differ from the examples in Chapter II by their content, or by ascertainable critical intent, but formally. In many ways, as my analyses have shown, their respective abilities to expose and make vulnerable finance's claim to objectivity, self-determination, and equilibrium are inseparable from their formal strategies and discursive innovations. However, these arguably more experimental modes of engaging with their audiences run the risk of placing them if not on the outside, then at the periphery of cultural production. The loss of reach that may result from formal innovation is testified to in the critical reactions that warn against Röggla's "hard to read" prose and her "excesses of the conjunctive mood" in *die alarmbereiten* (Plath), caution the reader of "the metafiction" of DeLillo's *Cosmopolis* (Updike), tell of the incomprehensibility, the "abstraction" and "coldness" of Cronenberg's adaptation (Ebert) and inform on the "complexity" and "niche status" of *Offworld Trading Company* (Smith). This might suggest a small audience for such demanding art works, or the possibly to be catering to an elitist group of readers, viewers, or players, thus voicing a critique that will only be heard by a few.

Last, this kind of peripheral status is not to be separated from the processes of economic calculation and valuation, of the power finance exerts over the conditions of cultural production itself. In other words, if there is an apparent correlation between the conventionality of the tropes and of the formal strategies of a novel by Suter, or a film by Stone, and their status as bestsellers and commercial successes, the opposite holds true as well. In the case of Cronenberg's *Cosmopolis*, the irony of a 20-million-dollar production starring Pattinson (formerly recognized as a teen superstar for his role in the Twilight series) to criticize the self-congratulatory excesses of finance was not lost on some commentators. John Semely voiced the following description for a film that both

sought to condemn financial capitalism while financially capitalizing on Pattinson's star power and luring in a non-likely audience:

Vladimir Lenin famously wrote an opinion on capitalism that's been popularly rendered as, 'The capitalists will sell us the rope with which we will hang them.' That pared-down version of his statement is an apt observation about the sheer voraciousness of the profit motive. Films like these, which disseminate ideas and attitudes that seem to contradict the bottom-line-driven systems that create them, speak to what Lenin was talking about. It's like a commercial for a restaurant that tells you not to eat there. (Semley)

If the use of Pattinson's stardom is indeed subversive, Cronenberg's casting of the actor undoubtedly also serves a more sober purpose of selling the film to investors and audiences. A star cast considerably offsets the risk for the necessary financiers, especially considering a production budget that seems high for a non-mainstream film.

Another vivid example of the economics at play in cultural production is the making of *OTC* in the context of the thoroughly financialized medium of mainstream videogames. In fact, considering the concerns regarding the industry's general reluctance to address contentious issues and the mainstream's assumed position outside of the rest of culture (Lees), it becomes clear that the fact that digital games are "deeply embedded in global capitalism" (Dyer-Witheford and Peuter 222) heavily factors into the lack of critical video games, critics like Lees' bemoan. The conditions of production and consumption of video games allow financial and economic considerations to play a central role in choice of content, creative risk taking and its absence.⁸⁵ Major studios with thousands of workers around the globe, driven by marketing research, burdened with production costs that dwarf *Cosmopolis*' budget and even surpass those of major blockbuster films, find themselves in increasing need for capital.

As one financial journalist has noted on the occasion of a new video game-themed investment fund: "You don't need to ever hold a controller, flip on a console or have your Kinect creepily follow you across the room to appreciate video gaming. All you have to do is love money" (Woodley). The love for money, has made video games into a "rapidgrowth industry" with the perspective that globally "this market is expected to leap into the hundreds of billions of dollars by 2017" (Woodley). Johnson, designer of OTC gave an interview on a podcast, in which he rendered his kind of game as a "risk" that would not have come to fruition with a mainstream developer (Johnson in: Geryk). Interestingly, if he unsuccessfully pitched his idea to both Firaxis and EA games, he attributed this to the "effects of financial crisis on the industry," stating that the crisis created a kind of environment where experiments where no longer possible. Undeniably, the Global Financial Crisis, subsequent recession, and resulting pressure on the stocks of major video game companies, prompted a record number of shutdowns of smaller studios in 2008 and led to cuts and restructuring in the labor force for the remaining developers and publishers. Further, as Dyer-Witheford and de Peuter note in their analysis of "cognitive

⁸⁵ Already in 2003, Frasca shared a similar observation, claiming that a better understanding of games unique properties as simulation may not come through "the game industry that has been quite conservative since the marketing people took over the show, encouraging cloning over originality" (225).

capitalism," this economic downturn had a stifling effect on creative diversity and innovation in video game development (69).⁸⁶

It stands to reason that capital-intensive and heavily-financialized art forms such as digital games are ever more likely to be directly influenced by market pressure and discipline, with notable effects on the content and critical potential of the games produced. As crises intensify these effects, they seem to weaken cultural productions ability to intervene in crisis discourse and strengthen an opposite effect of being a distraction. Dyer-Witheford and De Peuter have shared a similar observation regarding the onset of the Global Financial Crisis: if the numbers of sales of video games had shown to be more or less "recession-proof," the authors conclude that gaming might simply serve as a "enjoyable diversion from the stress of the precarious state of one's finances" (Dyer-Witheford and Peuter 225). In addition to the entertainment-as-escapism argument, the authors also note that it might only be a question of time, before the Global Financial Crisis would exact a cost on the industry and that the credit crunch would make it harder for independent developers to access the necessary capital to prototype and experiment for the kind of games that have served as a motor of critical innovation in the past.

In comparison to film, as a comparably capital-intensive mode of production, similar effects are well documented. Further, regarding literature, if the crisis presumably accelerated the often-invoked and contested "dead of print culture" and perhaps, even

⁸⁶ The authors suggest: "The discipline of the market reinforced a familiar trim-the-fat game plan" and let major studios such as EA to announce that they would "narrow their portfolio" and "focus on hit games" (Dyer-Witheford and Peuter 68). As a result, previously successful game franchises, already established IPs and sequels were not only deemed more likely to capture a bigger share of the consumer market, ensure profit margins and stockholder interests during the recession, but were also likely to be more of the same, a repetition and refinement of proven entertainment formulas that would shy away from creative risk taking and innovation.

that of the novel with it (Self), the closing of publishing houses of high-brow fiction during the crisis years such as the German Suhrkamp Verlag in 2013 are a undeniable reality. However, if film and literature enjoy well-established outlets for the dissemination and publicizing of more specialized, demanding, or alternative art works, similar channels for video games are in the making. This concerns alternative conduits for games e.g. game jams and -game-awards, but also new decentralized ways of distribution.

The successful production of a game like OTC is possible not solely owing to the entrepreneurship and idealism of their designers, but also to new models of crowdsourced financing, like Kickstarter and early access models (e.g. Steam green light), some of which have played a defining role in the development of the title. Not unlike the media reactions to the increasing popularity of crowdsourcing of film (and somewhat comparable to the digital distribution and self-publication of literature) this has been met with a mix of enthusiasm that hailed the democratization of the medium and simultaneous concerns for the quality and curation of the resulting art works. For games, the early access model, in which players pre-purchase and play prototypes, comes with the concern for the influence of the constant feedback of players/testers over games still in development, and threatens to become an increasing loss of creative control over the final content. The perceived risk of crowdfunding is that creators would be catering to consumers (spectators, readers and players) wants rather than they would challenge them critically. The tension between commerce and critique is certainly much older than their latest digital manifestation. In the next chapter, I expand upon this preliminary discussion of finance, dependency and cultural production, digital distribution and

democratization with an eye on video games' media-specific utopian impulse of collectively creating possible worlds.

Both the scholarship and examples of cultural production in this chapter have sought to critically undermine or resist the ambition of finance as an objective and final description of an economic reality. In doing so, they have challenged the underlying promises that the increasing financialization and liberalization of finance would carry out the neo-classical promises of equilibrium and equality. It is becoming increasingly certain, that the repeated disappointment of these promises, calls into question whether we live in the best of all possible worlds. While finance was at the heart of it all, the bitter consequences have reflected on the system as a whole. The crisis of a system that tolerates no alternatives next to it has made urgent the search for answers to questions the system has proven to be unable to answer.

It might seem hopeful, looking ahead to the last chapter, that my analysis can complete a triptych that sees art as part of the problem (Chapter II), art as part of resistance (Chapter III), and finally, art as part of the solution (Chapter IV). However, approaching the idea of art as a solution, the imbalances and ludicrousness of such a proposition seems to increase in view of the Global Financial Crisis and the destruction it has caused. Yet, if my investigation asks for the role of the artistic and fictional within cultural production, within larger economic imaginaries, it is certainly not a shortcoming of the first part of the larger net of cultural, political and economic interconnection that a way out of the crisis has proven elusive. Finally, as I show in the following, during the concurrence of a crisis of capitalism and crisis of imagination, the imaginary practices of the decisively fictional and artistic forms of cultural production might prove to be an exceptional place to come to terms with the conditions of the possibility of much-needed change.

Chapter IV

Creative Destruction - The Imaginative Function of Cultural Production

In early 2016, the London School of Economics (LSE) held its annual literary festival under the title "Utopias." The festival was part of a yearlong effort by British cultural and educational institutions titled "Utopia 2016: A Year of Imagination and Possibility" (www.utopia2016.com). Though this and similar efforts were inspired by the 500th anniversary of Thomas More's influential book, the speakers and audience at the LSE's festival expressed less interest in investigating or celebrating the past, instead proposing an urgent interrogating of imagination and utopian thought in the early twenty-first century. The panels referenced the ongoing Financial and Eurozone crisis, the urgent need for opposing climate change, and other pressing issues. In 2016, the publication of *Utopia* in 1516 simply marked the occasion; Thomas More was merely "the first," as the organizers of Utopia 2016 put it, "to give a name and form to an idea that has captured the human imagination throughout history: that by imagining a better world is possible, we are empowered to create it."

However, the irony that the LSE should be the place of such "empowerment"—the institution the Queen of England had famously asked, how the most formidable economic minds could not see the crisis coming—seemed to escape the commentators. After all, the general perception coming out of the crisis was, as Ebert and Glaeser point out in their introduction to an anthology on Economic Utopias, that "these days, economic thinking appears to act as the enemy of utopian thinking"(xi–xii).⁸⁷ Granted, such a view

⁸⁷ Trans. Kaipainen "Derzeit tritt das ökonomische geradezu als Feind des utopischen Denkens auf"

might not give enough credit to the LSE's innovative and pluralistic tendencies in economic theory today. Utopian thinking indeed played an important role in nascent socialist and capitalistic economic sciences of the 18th and 19th century, before neoclassicist economics established themselves in the last century, and through institutions like the LSE, as a theoretical foundation without an alternative (see Ebert and Glaeser). It does speak to the urgency of the disciplinary crisis, that a school that trained generations of MBA's and theoretical economists in the firm economic laws of a largely mono-cultural science would be one of the places where the need for imagination and the radically new would be discussed. Yet, the occasion itself (a literary festival) and the disciplinary background of the speakers, mainly demonstrated that while the study of utopia was pushed out of economics when it became a discipline allegedly concerned with measuring and calculating an objective reality based on presupposed ideas, utopia has survived in the arts, and its study has been revived in the sister discipline of economics, sociology, as well as in literary and cultural studies.

The new interest in utopia inside and outside of academia stands somewhat opposed to the rhetoric of the political regimes initially faced with the crisis. The political response urging a return to business as usual, as fast as possible, while resisting any larger policy experiments, is neatly captured in the language emerging from Angela Merkel's cabinet, assuring the constituents of the absence of any alternatives (see e.g. Baumgarten; "Unwörter Ab 2010"). Simultaneously, the rise to power of populist parties and nationalistic policies on both sides of the Atlantic, testify to a backlash against the supposed non-negotiability of certain neo-liberal doctrines and policies. The success of

⁽Ebert and Glaeser xi-xii).

these parties and messages insinuate that *any* alternative, even overtly dystopian ones, might initially seem better than the older regimes, at least to large segments of a lastingly disillusioned and frustrated public.

In this chapter I return to the notion that the crisis since 2007/2008 has been "a crisis of neo-liberalism," rather than a limited crisis *in* finance (Jessop, "Recovered Imaginaries" 17). I question how the epistemological shock of the crisis continues to reverberate and continues to make urgent the need for radical critique and change. In doing so, I respond to Haiven's diagnosis of a "crisis of imagination," in addressing the difficulties that have befallen the imagination of "alternative futures" and locating examples of social imagination that point beyond the narrow spectrum of answers the crisis produced on its face.

In interrogating the possibilities and impossibility of critical change in times of crisis this chapter is divided into two main parts. In the first part I investigate the resurgence of utopian thought in reaction to the crisis and describe a theoretical framework to understand the conditions of the possibility of critical change, which I call creative destruction. First, I ask what role the concept of imagining a better place or future could play in working through the crisis, considering the conflicted history and the conceptual and political challenges of the term utopia. Given the sense of an impossibility of alternatives, I discuss Ruth Levitas' concept of utopia as method. Considering her approach, I reemphasize both the necessity of utopian thought and the need for simultaneously broader and more fragmentary utopian practices of engaging with the present. Second, I introduce the concept of creative destruction. I propose the term as a parallel description to the Schumpeterian notion of economic innovation, to describe the unsettling of established economic imaginaries and the ensuing competition for new practices and ideas that accompanies large economic crises. In positing creative destruction to describe an open-ended process of challenging and changing economic imaginaries across culture, politics and economics, I propose centralizing social imagination as a pivotal analytical category in correspondence with the utopian method.

In the second part of this chapter, I locate the possibility of change within cultural production and within the larger framework of creative destruction and utopia. First, I discuss the fictional and artistic as a laboratory of social imagination and change. In what I call imaginative practices of creative destructions, I identify the fictional and artistic work in cultural production as part of what makes and breaks economic imaginaries. I propose that aesthetic-cultural production be understood as a special site to understand the role of utopian thought and the possibility of formal innovation in working through the crises. Second, I examine two examples at the intersection of culture, politics and economics, namely Alexander Kluge's work on crisis, as well as a discussion of video game economics, virtual economies and utopian play. In my analyses, I demonstrate how these two different imaginative practices of creative destruction reflect a view of utopia that no longer suggests a blueprint or final goal. Independent of the concrete content these examples generate, these practices describe a critical and participatory mode of searching, thinking, and experimenting with new forms; a laboratory with the ambition of transforming social imagination itself.

1. Creative Destruction and Utopia as a Method: The (Im)possibility of Alternatives

Utopia, the word that More provided, is a deliberately ambiguous play on the Greek words meaning both no place and the good place. According to this tradition, utopia is commonly understood as a fictional or imagined place (often a city or an island) that houses an ideal or idyllic society. However, utopia has come to be a simultaneously specific and polysemantic term, describing a literary genre, a philosophical exercise, and the general ability to imagine alternatives to the status quo. Similarly varied throughout history is the perception of utopias and utopian thought, as products of wishful thinking and inconsequential daydreaming, or as the fundamental condition of the human capability to enact change; as either worthwhile and positive visions of a better future, or as dangerous, totalitarian fantasies.

I investigate these historical and conceptual discrepancies and a present critical concurrence of an impossibility of utopia and need for alternatives in the following sections. To do so I raise the following questions: what is the conceptual history of utopias that ends in today's widely-assured impossibility of the notion? How can utopia be reimagined and reconceptualized for the 21st century as a practicable method rather than a fantasy? And how can such a utopian method be operationalized in view of this larger investigation into cultural production in times of crisis?

1.1. Past Utopias and Limits of the Present

The perception of utopia as superfluous, or even dangerous, is intimately linked to the Cold War, in the failure of socialist regimes in the last century, that after Stalinist terror seemed to associate utopia with totalitarianism (see e.g. Jameson, Archaeologies of the Future xi-xii). If the conflation of communism with utopia has cast a shadow over the word, the victory of the West and capitalism after 1989 cooled interest in utopian dreaming and utopian experiments, outside of market liberalism. As Fredric Jameson suggests, the last attempt at "a utopian forecast of the future" was (ironically), "free-market fundamentalism as it seized the moment of globalization to predict the rising of all boats and the wonder-working miraculous powers of worldwide unregulated global markets" ("Utopia as Method, or the Uses of the Future" 22). In similar terms⁸⁸, Krishan Kumar has chronicled the decline of utopia as a literary genre, and as a political or philosophical program (what he calls "social-theory-utopia") in his article "The Ends of Utopia" (556). Regarding the present, Kumar concludes that even after the supposed "end of history," considering the negative effects of free-market capitalism on "ordinary people," and in view of new geopolitical instabilities and terrorism and during the "the worst economic downturn since the Great Depression of the 1930s" that "not since the second world war had the prospects for utopia in whatever from seemed so bleak" (559).

Given this more recent history, and in view of the inescapable political valuation of the term, it is helpful to approach utopia with an (albeit brief and schematic) sense of its larger conceptual history. Since More's tale of a traveler described an ideal society living on a fictitious far away island, utopia has undergone a significant transformation.

Reinhardt Koselleck has traced the conceptual history of utopia in his essay "The Temporalization of Utopia." First, he posits that by the second half of the 18th century,

⁸⁸ Even though Kumar passionately disagrees with what he sees as Jameson's somewhat constructed claim to the importance of utopia today (e.g. as a genre in science fiction) (Kumar 550–52) he seems to reach the same conclusion regarding the fall of communism and triumph of a free market utopia (Kumar 556).

against the backdrop of geographical conquest of the planet, utopian thought was relocated from the spatial (a place not yet discovered, and far away) to the temporal (a place in the future) (Koselleck, "Die Verzeitlichung der Utopie" 133). This insight seems poignant, considering the state of utopia. It is no coincidence that the utopian imagination is not only associated with time and future, but that utopian fiction has often taken the form of science fiction, looking beyond earth, to the stars. Framing utopia within time, rather than space, is especially important when considering a crisis *of* finance and capitalism, regarding the depletion of earth's resources, the unprecedented reach of financialization, and in view of the aspirations of markets to form an inescapable global totality.

Second, the change from space to time concerns and delimits how utopian ideas are made plausible by those who author or imagine them. As Koselleck observes, placing utopia in the future presents a necessarily shift away from their suggested, albeit fictional, physical "verifiability" (a place one could theoretically find and visit) (Koselleck, "Die Verzeitlichung der Utopie" 134). Rather, a utopia of the future relies on the suggestion of "temporal continuities" (Koselleck, "Die Verzeitlichung der Utopie" 134). Rather, a utopia of the future relies on the suggestion of its characteristics in the present conditions. Elements of the utopia that can be recognized by readers in the present would establish a sense of continuity and allow for such imaginings to be convincing and believable. Today, the original physical verifiability certainly become improbable. As Koselleck points out, by the 18th century utopias were placed on the moon, or underground (134). Similarly, temporal continuities have become more difficult: the supposed totality of markets and of dominant economic imaginaries that simultaneously enable and reproduce the present, reduce plausibility of any

significant reimagination of the world. In other words, if neo-liberal capitalism is believed to be everywhere and in everything, the imagining of a radical alternative is more challenging and dismissible, i.e. as impractical, wishful thinking outside of reality. The necessary breaks with the present and jumps ahead of such an imagination (rather than continuities) simply confirm the inconsistency of such a utopia with present conditions, or the impossibility of alternatives to the present all together. Symptomatically, in current political discourse, the proposed alternatives voiced on the political right, as well as the left, tend to look to an idealized past rather than the future, they suggest that what could have been, over that what could be. Thus, in much current political discourse, the future figures as utopia's twentieth century mirror-image, dystopia. Menacing futures dominate political rhetoric, whether politicians warn of the overreaching state, a future Europe completely ruled by bureaucrats, or the resurgence of fascist nationalism and the inevitable fall of the European project. The imaginations of the future achieve their desired political effects as menacing dystopias. The suspicion towards or the problematic of utopian thought, with the concurrent interest in the imagination of alternatives, has sparked several different analytical approaches while reaching a similar diagnosis for the present.

Leslie A. Adelson has called for an investigation into "futurity" ("The Future of Futurity"; "Futurity Now"; *Cosmic Miniatures* Cosmic Miniatures). What becomes obvious are the differences from utopia introduced by this term. Futurity thinks of imagination along a temporal axis, as a "future" (rather than a non-place), and describes the activity or possibility of imagining *any* kind of future (rather than a *good* place or time). Thus, if the study of futurity focuses on "social imagination" and proposes to conceptually

investigate "cultural forms and functions of futurity" ("Futurity Now" 213, 117) such an approach seeks to separate itself from the historical baggage of utopia. While Adelson does not explicitly compare or differentiate futurity from utopia uses, she 1989 as the central historical point of reference. The fall of the Berlin Wall not only marks the end of "mass utopia" but also, similar to Jameson, "the triumph of capitalism" as the utopia to end all utopias (Adelson, "Futurity Now" 216). Futurity is proposed as a strictly analytic term to understand how, at a given point in time, thinking about the future becomes culturally, socially, or philosophically virulent. Per Adelson, "Futurity in this sense becomes especially pressing when the future emerges not only as an object of thought but also and acutely as a problem in thought. Since 1989 and for many different reasons, the future has emerged, in Germany and elsewhere, as a growing problem in thought" (Adelson, "Futurity Now" 216). The notion of the future as a problem (rather than an open horizon, signifying possibility) echoes a general sentiment in a post-1989, postcommunist and maybe, a post-utopian world, and designates the difficulty to imagine and enact change.

Futurity, however, as opposed to utopia is not necessarily without critical intent or even hope. In her more recent book on Alexander Kluge's short fiction, Adelson quotes Seyla Benhabib to invoke an utopia "that is no longer utopian, for it is not a mere beyond" (Benhabib qtd in: Adelson, *Cosmic Miniatures* 28). In Kluges use of futurity in his multimedia oeuvre, Adelson identifies an attempt to "making real counterfactual realities" (in future as well as past) to cultivate a "future sense", an explicitly critical perception of history and the world (Adelson, *Cosmic Miniatures* 28–29). The end of utopia, the sense of a foreclosed future has been aptly described by Hans Ulrich Gumbrecht and his concept or diagnosis of a "broad present." Gumbrecht argues that we are no longer "historically conscious" and that while we still act as if we have left the historical experience of time behind (Gumbrecht xii). Rather, between an ever-present past and a foreclosed future there exists a broad present of expanding simultaneities. For Gumbrecht, the evidence that we no longer live in historical time can be seen "most clearly with respect to the future":

For us, the future no longer presents itself as an open horizon of possibilities; instead, it is a dimension increasingly closed to all prognoses – and which, at the same time, seems to draw near as a menace. (xiii)

An unpredictable future as menace (Gumbrecht gives the example of "global warming") signifies "the closure of futurity and results in a sense of paralysis a contemporary consciousness" in which it is "impossible to act" (xiii). The future as a problem in thought, and the future as menace, describe how futurity has taken a dystopian turn, delegitimizing and disabling any utopia of the future.

As Jameson suggests, with the repeated failure of the promises of a free-market utopia, the term utopia passed to its critics. The enemies of free-market globalization rally from the fringes, under a now "empty signifier," as they try to imagine that another world is possible. The present "waning of utopias," Jameson concurs, is thus tied to the conviction that fundamental changes "however desirable" are "no longer possible" ("Utopia as Method, or the Uses of the Future" 24). Jameson has argued repeatedly that this sense of impossibility extends to and changes the function of cultural expressions of utopia ("Progress versus Utopia"; *Archaeologies of the Future*; "Utopia as Method, or the

Uses of the Future"). According to Jameson, rather than providing programs or roadmaps of the future, the function of utopian literature has become dramatizing the inability to imagine a future distinct from the capitalist present. Rather, utopian texts serve "to bring home, in local and determinate ways, and with a fullness of concrete details, our constitutional inability to imagine Utopia itself" (Jameson, "Progress versus Utopia" 153).

Why then, should utopia be salvaged from history, if it is tainted by a totalitarian past? What does the activity of imagining a better place describe in the "broad present," where one is confronted with the "impossibility to act"? And, what does it mean to talk about utopia, if under the conditions of capitalism, it has become "an empty signifier," a mere expression of its own impossibility? To consider these questions for the current crisis, one must look beyond a purely intellectual investigation into the problem, beginning with a careful reconceptualization of utopia. Outside a strictly academic or historical inventory of the problem of futurity, the current crisis has made these critical questions more relevant than ever. The present moment not only draws attention to our powerlessness, and our inability to imagine alternatives, but in doing so, the crisis produces the precise sense that both our incapacity and the diagnosis of a foreclosed future are unacceptable. Rather, between the diagnostic and productive features of a crisis, determination, the courageous little sister of desperation rises with the slogan, that that which is impractical is not utopia, but capitalism in its current form. Or, as Ruth Levitas, the sociologist and theorist of utopia has put it in a nutshell on the occasion of her lecture at the LSE's "Utopias" festival: "We simply cannot go on as we are" (Levitas, Literary Festival 2016: Utopia in the Twenty-First Century).

The pressing economic, ecological, and social crises at hand demand radical change, and the imagination of a better world is indispensable in the search for genuine alternatives to the status quo. However, given the historical context and transformations since More's book, and given the undeniable conceptual difficulties of the term, a critical reconsideration of utopia for the present time is equally urgent. The next section discusses Levitas, among other scholarship, to understand utopia as a method, rather than a goal.

1.2. Utopia as Method, critical reconsideration of Utopia

With the political and conceptual difficulties that have befallen utopia in the second half of the last century, one can consider older and newer theories of utopia capable of describing and capturing the productive potential of imagination in the current crisis. It is necessary to reflect on and restore a more encompassing idea of utopia, one that is neither limited to full-fledged visions of alternative worlds (as a narrowly-defined literary genre or as the roadmaps of social-theory-utopia Kumar seems to have in mind), nor should a reconceptualization of utopia be so broad that it expresses a diffuse longing for a better world. Regarding broad concepts of utopia, has remained a central point of departure. Bloch's three-volume investigation chronicles an anticipatory consciousness of a better world, in all of men's activities and expressions. As a result, Bloch's "utopian impulse" as Jameson has put it, "governs everything future-oriented in life and culture" (Jameson, Archaeologies of the Future 2).

In his time, Bloch was critiqued for the ultimately messianic message of his work by e.g. Adorno and Horkheimer. Today, as the study of utopia has revived his work, the critique of Bloch seems to aim at the broadness of his approach. On the more dismissive end, Kumar dismisses Bloch's concept as an "overgenerous embrace of the utopian cause" and suggests that if Bloch was "anxious to show the universality of the unquenchable Hoffnungsprinzip" it had a "regrettable" influence on the general study of utopia until today "as it becomes a recourse for an the signs for an increasingly desperate attempt to find the sings of persistence or revival of utopia" (Kumar 562).

However, apart from the regrets of utopian traditionalists like Kumar, Bloch has indeed been a critical influence on older and contemporary scholarship that seeks to reconsider utopia, despite a widespread political dismissal outside narrower academic or historical understandings. As literary and Broch scholar Klaus Berghahn put it in 2008, in a foreword to a collection of over 30 years of essays on Bloch, to talk about utopia today might seem "untimely" since: "in our postmodern age utopian thought seems be obsolete"(9).⁸⁹ However, as Berghahn insists, since the days of More, untimeliness is a constant reproach to utopians. After all, utopian literature is foremost a critique of the conditions of its times. Further, the supposed "end of utopia" that cites the collapse of totalitarian forms of socialism is often owed to a misunderstanding and narrow conception equating utopia with social utopias. If Broch has expanded and liberated utopia, the criticisms of utopia today are "reprises of an older critique aiming at Marxism rather than utopian thought" (13). As Berghahn insists, to reconsider the broader project of utopian

⁸⁹ Translation by Kaipainen "Im postmodernen Zeitalter scheint utopisches Denken obsolet."

thought today might be "a risk," but one worth taking and, considering the contemporary circumstances, (15).

Levitas, in her 2013 book Utopia as Method, also reassesses Bloch for the study of utopia; she insists that utopia is more than a literary genre or a totalitarian program, arguing that it is an urgently needed, ultimately material, practice. Regarding the first, Levitas rejects utopia as an impossible fantasy, insisting throughout her work that "what really is impossible is to carry on as we are, with social and economic systems that enrich a few but destroy the environment and impoverish most of the world's population. Our very survival depends on finding another way of living" (Utopia as Method 122). With these stakes in mind, Levitas, a sociologist by training, sees her method as a kind of speculative sociology, aiming at what the subtitle of her book calls an "imaginary reconstitution of societies" (Levitas, Utopia as Method viii, 102). Starting with social imagination and aiming at concrete practices and solutions for present problems, the method she envisions is permanently provisional and reflexive. That is, the alternatives should not be seen as static goal or state, but as part of a process – a methodology of gradually and continuously imagining concrete alternatives—which will then undergo further critique and refinement through this ongoing process (Utopia as Method 57).

What motivates the process of revision of utopia for Levitas are two key functions of utopia: the first is a critique of the status quo, suggesting that in imagining something different, one achieves a denaturalization, or a "cognitive estrangement" of that what is. The second function is the actual proposition of what ought to be in its place, while remaining open to judgment and accountability. Thus, the simultaneous critiques of what is and what ought to be results in a subsequent modification of the articulation of utopia. For this, Levitas builds on Bloch's concept of an educated hope, a move from the escapist realm of the compensatory, to an anticipatory hope that is activated in the service of realizing some notion of a better world, or a concrete utopia (Levitas, *Utopia as Method* 65–80).

In working with examples from social movements to actual policy, while occasionally drawing from literature and music, Levitas develops three aspects of her utopian method: the "archaeological" method of finding elements of utopian possibility "buried in the constant barrage of political rhetoric and policies" (*Utopia as Method* 153–74, 242), the "ontological" method (175-196) of "considering the kind of people we want to become" (*Utopia as Method* 175–96, 244), and the "architectural" (197-220) method of producing holistic and concrete visions of a better society (*Utopia as Method* 197–220).

What Levitas' method proposes is a way of organizing the longing for a better place, a channeling and making effective of social imagination. These insights are critical in considering the role that social imagination, in cultural production, can play during a crisis. As an analytical device, Levitas' method suggests not looking for blueprints of a better world (i.e. utopian novels, or political manifestos in response to the crisis), but considering utopian aspects of things that are more fragmentary, exploratory, and experimental. A smaller, more holistic approach allows for consideration of a variety of cultural, political, economic practices and ideas, ranging from the everyday to the democratic process itself as "a contest of utopian ideas" (Levitas, *Utopia as Method* xviii).

In considering the function of utopian imagination in cultural production, it is helpful to emphasize the provisional, the openness for change, not as a deficiency but as an asset of a collective imaginative practice that aims at betterment and improvement without starting with a final goal. Further, Levitas' three aspects, the architectural, archeological, and ontological, are not meaningful categories to approach concrete examples within cultural production. More than a system of classification, the three methods point to the multiple ways that utopian imagination can approach the present as critique and creation. They free imaginative practices from the impossible task of imagining the radically new when confronted with its present impossibility, encouraging different and smaller steps, e.g. the search for something archeological, buried in the past, or something ontological to be unlocked in ourselves.

Finally, the urgency with which Levitas posits that change is needed helps to understand the need for no further disinterested analysis of the problem of futurity but to see the method and analysis as part of a search for a way out of a crisis of imagination. It is a method that does not shy away from the normative in analyzing, making visible, and encouraging developments towards not just any, but a *better* place.

This last point also addresses the growing public interest in questions of utopia, or as Levitas herself has observed at LSE, looking back at 45 years of working on utopia: "if utopia had been a minority interest for decades perused in face of public disdain it never had the public profile it has acquired by this year" (*Literary Festival 2016: Utopia in the Twenty-First Century*). The concurrence of the anniversary of More's book and the still unresolved crisis, in terms of the looming systemic questions, produces two things: one, the interest in utopia speaks to reverberation of the systemic and epistemological shock of the crisis that any political window dressing and calls for a return to normality was so far unable to douse; two, the crisis has produced more than a critical awareness of the contradictions and deficiencies of our ever prolonged status quo, but might point towards the possibility of a creative destruction of the neo-liberal imaginary.

1.3. Creative Destruction and Cultural Production

To understand the concurrency of an economic crisis and the urgency of utopian thought, or to grasp the simultaneity of a large economic unsettling, and the potential for radical political and social change, requires looking beyond a narrow idea of the crisis as a series of purely economic events and forces. Rather, I propose understanding critical economic phenomena as embedded in larger cultural, political and social spheres. And in pushing the CPE framework of my investigation further, it is the critical interplay of these spheres in a crisis that I call creative destruction.

As I argue below, creative destruction borrows the name from Joseph Schumpeter, who coined expression, reflecting historical philosophical the on Marx's ideas(Schumpeter, Capitalism, Socialism and Democracy 81-82). If economists today following Schumpeter understand creative destruction as the evolution of an economy through cycles of boom and bust, I propose the term as a parallel description of the unsettling of established economic imaginaries and the ensuing competition for new practices and ideas that accompanies large economic crises. Rather than suggesting a simple conceptual analogy that transplants creative destruction from the realm of the economy to the realm of ideas, I retain Schumpeter's description of economic innovation through crises and extend creative destruction to a CPE understanding of economic imaginaries. Second, in positing creative destruction to describe an open-ended process of challenging and changing economic imaginaries, I propose studying the crucial role of social imagination in cultural production. To this end, I insist on the conceptual overlaps and differences of the utopian method and creative destruction. Anticipating the second part of this chapter, I propose to pay special attention to art, and what I will call imaginative practices of creative destructions.

To begin with Schumpeter, creative destruction, as generally understood by economists denotes a central idea in the evolution of capitalistic economies. Within the history of crisis theories, the notion represents a view that recognizes economic development (as opposed to strictly static views) and insists on the cyclical nature of this development. Schumpeter linked innovation and crisis as follows:

The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. [...] The opening up of new markets, foreign or domestic, and the organizational development from the craft shop and factory to such concerns as U.S. Steel illustrate the same process of industrial mutation [...] that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one. (*Capitalism, Socialism and Democracy* 82–83)

New products, markets, production methods, etc. disrupt established markets, industries and entire economies, followed by job losses and downturns, which allows for economic expansion over time. Accordingly, while economic crises are seen as inevitable, they are understood as fulfilling an important function of restructuring an economy. In the words of Schumpeter, reacting to World Economic Crisis in the 1930s: "depressions are not simply evils, which we might attempt to suppress, but [...] forms of something which has to be done, namely, adjustment to [...] change" ("Depression" 16).

Schumpeter's concept of creative destruction has often been understood as describing, even justifying, a tale of progress. Such an interpretation suggests that creative destruction (however disruptive of life and openly violent in the short run), will lead to a long-term evolution of capitalism towards the betterment of societies. The concept of necessary adjustments to the economy not only agrees with fundamental ideas of liberal economics such as the (self-adjusting) efficiency of markets, but the promise of future higher standards of living in exchange for economic crises, which also integrates seamlessly with the promises of neo-liberalism. In fact, the acceptance of Schumpeter's concept within liberal economics today suggests that regulatory policy aiming at softening the impact of crises would negatively interfere with the natural, necessary adjustment of the economy; its evolution to a more efficient form, i.e. concerning labor market, or banking regulations (see e.g. Caballero; Bertrand et al.). This liberal adaptation of Schumpeter's concept, however, runs contrary to the author's own, more pessimistic, view towards ideas of progress and his revaluation of the concept and capitalism at large later in his career. That is, today, and in popular sources and instructional literature, Schumpeter's creative destruction is often simply explained in opposition to Marx's original description of the increasingly devastating force of crises, which would lead to an end of capitalism itself (see e.g. Pettinger; Cox and Alm). However, as John E Elliot has rightfully pointed out, rather than a positive evolution of capitalism (a view of crisis as an evolutionary process leading to equilibrium and progress), Schumpeter renewed the Marxist prognosis and predicted the "inevitable

decomposition of capitalist society," and also that capitalism's failure to "survive" its crises would lead to "the triumph of socialism" (Schumpeter qtd in: Elliott 45).

Without following either the promise of progress in its neo-liberal interpretation, or Schumpeter's own teleological description of an end of capitalism (both social utopias or utopian blue prints in their own right), the central takeaway of his concept, when used to describe cultural production in times of crisis, is not that of "progress" or "evolution," but the idea of a continuous disruption and restructuring. The Schumpeterian notion also suggests the replacement of the old with the new, not as a smooth process of gradual adaptation and innovation, but as critical, abrupt events. Similarly, the changes of economic regimes of order are best understood not as a history of continuous improvement (or even of an increasingly accurate or scientific understanding of "the economy") but as a history of clashes of ideologies and ideas, as one of vicious confrontation, sudden innovation, of breaks and jumps.

To make the concept of creative destruction meaningful for my study of cultural production, necessitates including it in a CPE understanding that does not recognize crises as exclusively economic processes. Rather than creating an analogy that suggests a process of ideological change akin to a strictly economic phenomenon, I suggest expanding the concept to understand the competition of economic imaginaries whose destruction and creation also historically closely followed the destructive economic cycles Schumpeter had in mind. In other words, if economic crises are prompted by the forces of creative destruction, the crises are part of, or spill over to the realm of ideas, when older and established imaginaries become unsettled and open to change. Considering Schumpeter's concept within a CPE approach to crisis recognizes that the restructuring

of an economy cannot be viewed as independent from everything else, neither concerning the causes nor regarding the consequences. Rather, it is important to recognize that economic innovation (new products, markets, methods, etc.) are not created or entered from outside an economy but arise interdependently with and inseparably from the social, cultural and political.

I posit that any kind of innovation (from commodity to economic policy to ideology) is embedded and depends on an interaction between social imagination and all the other spheres. Innovation also necessarily describes a more neutral category, or one that neither implies the neo-liberal idea of progress, nor the Marxist-Schumpeterian sense of inevitable downfall. Rather, the interplay of economic and political innovations might be contradictory in their result (e.g. the opening of a new foreign market creates a domestic crisis which in turn creates a protectionist policy). The contradictions that follow from this interplay also seem to characterize a cyclical process of creative destruction in the history of economic paradigms, i.e. the dramatic back and forth between liberalism, Keynesianism and liberalism, following the large crises of the 1930s and 1970s.

To conceptualize how change remains possible within this circularity, or to move towards the problem of imagination of alternatives in cultural production, it is helpful to recognize a certain Wittgensteinian family resemblance that arises between creative destruction and utopia. Both concepts are connected to critical change. Both creative destruction and utopia describe the necessary destruction of something in the present to make possible or create something new (and supposedly better) in the future. Whether a dominant neo-liberal order gives way to a protectionist imaginary, or protectionism is replaced by a newly-awakened liberalism, the creation of one order is justified by,
dependent on, and inseparable from the articulation of the deficiencies of the old, i.e. its destruction. In comparison, utopian thought, in its most general sense, is always related to the historical conditions in which it is produced. Utopia as a critique of a deficient present diagnoses what is preventing the creation of a future utopia. As a result, creative destruction in times of crisis has utopian aspects, as it performs the twin functions of critique and creation.

Further, apart from this more immediate similarity between creative destruction and utopia, the investigation of cultural production in times of crisis is concerned with a second conceptual correspondence regarding social imagination. Creative destruction in cultural production, as described, and Levitas' utopian method, are linked to activation of a collective social imagination. The awakening of social imagination, in times of crisis, across culture, politics and economics, enables the processes of innovation or creation as well as destruction. In other words, if in a crisis the faults and inconsistencies of the present order become visible (what Marx called the didactic function of crisis) and what was stable becomes open to change, I posit that activation of social imagination in creative destruction is not merely the result, but *is* the very force that *makes* visible and *creates* possibilities.

The breaking up of naturalized orders or imaginaries is the suspension of the processes that constantly recreate that order. Semiotic and material practices that once upheld and thereby naturalized an order, are now working to challenge, expose, rework and change it. New imaginaries result from the competition of imaginaries, and they depart from a dissatisfaction with the present, and its reduced feasibility. Creative destruction, then, describes how social imagination is bound up in the open process of

working through a crisis. As Jessop has put it, "crises offer a real-time laboratory" that allow for study of the interaction of meaning-making and material practices; they allow for observation of how the shaping of multiple "imagined recoveries" involves "processes of variation, selection and retention" ("Recovered Imaginaries" 11). However, as I would like to add, for an imaginary to be selected and to emerge as dominant in this competition of imagined recoveries, social imagination becomes pivotal as it works to create believable interpretations, narratives, images, etc. that translate into material practices. Further, an emerging imaginary needs to capture as much as possible of the unsettled social imagination, with the promises that these new or recovered meanings and practices would produce a good place or a better future (e.g. of a return to stability, radical change, etc.).

If the concept of creative destruction insists on change, one should remember that in the competition of and over social imagination, multiple and conflicting visions develop. One person's utopia is another's political prison and utopian ideas compete with those that would preserve the status quo. Crises are not inherently utopian, and creative destruction does not describe a strict teleology that will either bless us with rising living standards or liberate us from capitalism. However, this should not invite cynicism, but a recognition that change is not neutral, and that creative destruction also describes the battle over social and ethical norms in crisis.

Crises create openings for change, and open historical windows, in which social imagination becomes unsettled and activated. This sudden, often violent activation, is the condition for the possibility of cultural, political, and economic change. Cultural production is a privileged site to study the expressions of longing for a better place or time, and its

study addresses how change and innovation can become possible even when the end of utopia and the impossibility of action are assured.

2. Imaginative Practices of Creative Destruction – The utopian functions of artistic production

Considering the role of cultural production in creative destruction raises the question: what artistic modes of engaging with the present contribute to the dynamic of creation and destruction—especially since works of art are as much part of cultural production as cultural production is part of the economic order? First, I differentiate between three media, arguing that what unites literature, film and video games is their relationship to imagination. The imaginative labor of cultural production is not limited by a narrow conception of art but is a larger imaginative social practice that merely has its special site in fictional discourses. Aesthetic-cultural production constitutes a space in which different imaginations, new beginnings, and possibilities can be created and experimented with, rather than merely representing what is already there or known. The artistic modes of exploring alternatives can, within the realm of art and fiction, fulfill both the critical and creative function of utopian expression; an articulation of the deficiencies of the present and a laboratory for social imagination.

Second, considering the link between social imagination and art, an idea worth returning to is the supposed independence of art from other spheres. The autonomy of art could keep the momentum of critique and exploration going, without needing to settle for temporary orders. In other words, art (and science, to a certain degree) might have the relative liberty and independence to explore ideas less tied to the present's immediate need for solutions. This autonomy suggests less pressure to compromise and find temporal solutions when considering economic or political exigencies such as next paycheck, the next opening of the stock market, or the next election cycle. Rather, in confronting the crisis, art and fiction create a space to more freely and calmly consider possibilities outside of current needs for monetary and policy needs. Less bound by the dramatic time frame of a crisis (that demands urgent decisions from CEO's and politicians, immediate answers from economists and financial advisors, pressing solutions for homeowners and pension fund beneficiaries, etc.), artistic production can contain and preserve the productive impulse of the initial epistemological shock of a crisis, in interrogating possible answers.

However, as argued, artistic creation, as part of cultural production, does not occupy a sphere of critique completely autonomous from society, politics, economy, etc. Art is not a place one goes (or escapes) to, later to return to a present one is dissatisfied with. Rather, aesthetic-cultural production is part of the present, as mode of making and changing. In other words, to posit artistic independence should neither suggest that art is radically free from the exigencies of the world, nor that it is without consequence in the world. To take artistic production seriously is to understand it as part of cultural production and to insist on the connections, interactions, overlaps and interdependencies rather than separation. To focus on the creative in creative destruction, is not to claim that creativity is exclusive to art. Rather than a refuge from reality, or a provider of solutions, art is a

privileged site to engage readers, viewers, players with the larger cultural, political and economic problem of imagination.

The functions of cultural production considered thus far, the identification and overcoming of too-convenient images and the critique of dominant discourse; the confrontation of formal issues and critique of economic formalism, are necessary steps towards the utopian potential of cultural production, moving from the critique of the deficiency of toward positive change. Together these functions allow for study of the larger social imagination at work in artistic production, as not only informing ways of seeing the world, but transforming actions within it.

Considering the fundamental interconnectedness of aesthetic cultural production, the examples that follow challenge an understanding of the work of art as a separate unit that can be considered independent from its conditions of creation, its reception, analysis, use, etc. Rather, the examples, and engagement with them, critically blurs these distinctions as they show, insist on, and even depend on the inseparability of art (and by extension, cultural production) from everything else.

Consequently, in linking the imaginative labor of these examples with the larger conceptual framework of creative destruction, I analyze them as what I call imaginative practices of creative destruction. These practices are in kinship with the utopian method as they no longer aspire to generate full-fledged social utopias, or intricate blueprints of alternative futures. Rather, the practices engage with fragments, take smaller steps and forward experimental modes of engaging with the problems of crisis and the assured lack of alternatives. The examples to be discussed are not simply instructive but depend on an active and activated reader, viewer and player, suggesting a mode of engaging with

these practices that explodes the fictional and artistic out of the cultural and into the political and economic.

First, I discuss Alexander Kluge's DVD projects, *Nachrichten aus der Ideologischen Antike* and *Früchte des Vertrauens*, which, in their combination of media and materials, and also in the form and methodology of approaching their subjects, actively subvert their own status as documentaries, or pieces of art. In identifying a radically democratic and imaginative practice of heterotopic forms of meaning in Kluge's work, I locate an archeological function of artistic production that exceeds the thematic issues Kluge explores and aims beyond the fictional or artistic altogether. Second, the inseparability of such artistic examples is evident in video game economics. In understanding large scale multiplayer games as alternative spaces, I present a quest for economic innovation that is as much about economic theory as it is about the games themselves, as much about a mode of critique as about the particularities of play. Finally, in exploring the possibility of utopian forms of play, I consider the collective creation of alternative worlds as performing an ontological function of critical change.

2.1. *News from Ideological Antiquity* and *Grapes of Trust* - Alexander Kluge's radical participatory methodology as an imaginative practice

Within the realm of art in a more traditional and established sense, Alexander Kluge notably engages with the current crisis (of capitalism as well as of imagination) in a mode of open exploration and experimentation, in his two projects *Nachrichten aus der Ideologischen Antike: Marx/Eisenstein/Das Kapital*⁹⁰ (*Nachrichten*) from 2008 and

⁹⁰ Available English subtitles as: News from Ideological Antiquity - Marx/Eisenstein/The Capital.

Früchte des Vertrauens (Kluge, Früchte) from 2009, respectively. Kluge was a student of Theodor Adorno, an apprentice of Fritz Lang, and is a social theorist, author, filmmaker, signatory of the Oberhausen Manifesto and owner of a TV-Production company-a multifaceted intellectual force to be reckoned with. In his late work (Kluge turned 75 in 2008), he not only found a new digital format for his work, the DVD, but also an appropriate formal language for the immense range of his intellectual and artistic labor. As impressive as the diversity of work assembled in the two projects is the sheer volume of materials: three DVDs of Nachrichten and four of Früchte house. Nachrichten is comprised of nine hours of film, *Früchte* of over ten hours, and both include a commentary book as well as downloadable short stories by Kluge. In approaching this monumental work as part of my investigation, it will be impossible to completely do the projects justice, but I argue that the possibility of finding one's own way through the materials (whose scope and range suggests not totality but exploration) is part and parcel of the formal intent and invitation to a collective imaginative labor. My analysis aims less at the content of the films (for example, what is said about Marx or the Global Financial Crisis) but at its radical form, an imaginative practice of creative destruction.

In the following, I first introduce the shared format of *Nachrichten* and *Früchte*, their content and respective organization. Second, I analyze the two projects together. Both share the same filmic language and formalities, but the second project is in many ways a continuation of the investigation proposed in the first. In my analysis, I insist on the individual formal elements of the film as inseparable from a larger and critical methodology which works somewhat independently from its content. In reconstructing Kluge's own hints for a "vertical order," and in considering Eisenstein's idea of a

"spherical" dramaturgy, I reconstruct how both projects refuse to reach conclusions, or suggest conclusions to audiences, and instead invite participation in the creative destruction of established interpretations. What I identify as Kluge's methodology suggests a radically democratic and imaginative practice of establishing heterotopias of meaning making. Finally, I argue that while *Nachrichten* establishes the methodology for such an approach, in re-examining Marx for the 21th century, *Früchte*, with its thematical focus on the financial crises, gives Kluge's invitation to participate in his creative destruction a more urgent and politically relevant orientation.

If Kluge's project engages with similar problems as filmic examples already discussed, it is evident that the two projects are far from the narrative cinema of e.g. Stone or even Cronenberg. Neither documentary, nor strictly fiction, both *Nachrichten* and *Früchte* are an episodic and loosely ordered collection of heterogeneous, even conflicting, materials. This collection or assemblage involves animated features, montages, historical footage, short stories, real and mock interviews, comedy, opera footage and other musical performances. Kluge deliberately blurs fiction and non-fiction, shows public history and real people along with made-up characters and stories. The DVDs hold a plethora of titled and thematically organized film clips named "chapters," ranging in length from less than a minute to the better part of an hour. Further, the projects are complemented by written materials by Kluge. Each titled section of the DVD corresponds with short texts (stories and essays) in digital format, and the boxed DVDs are supplemented by a printed booklet, containing the credit list, and a longer essay and commentary by Kluge.

The first DVD-project, Nachrichten aus der ideologischen Antike is concerned, as the subtitle suggests, with "Marx – Eisenstein – Capital." The point of departure for the project is the idea of Russian filmmaker Sergei Eisenstein to make a film out of Marx's theoretical work, namely Capital, Volume I. What is known about Eisenstein's unrealized plans was discovered by his biographer Oksana Bulgakowa in his personal notes.⁹¹ In 1927, the day Eisenstein finished filming for his monumental film October he wrote down his plan to film Capital "after a libretto by Karl Marx" (Eisenstein gtd in: Kluge, Acc. Booklet Nachrichten 12). Eisenstein spent 2 years pursuing this project. He tried to secure financing from the Communist Party, then a film distributer in Paris, and finally Hollywood, but ultimately failed. Eisenstein never shot any footage. Instead of a film, he produced about 20 pages of notes. In 1929, he met James Joyce in Paris, and discussed his plan to structure the film as a day in the life of two protagonists, like Leopold Bloom's journey in Ulysses. As Kluge also notes in his accompanying booklet to Nachrichten, the tumultuous events and crisis of 1929 are strangely omitted from Eisenstein's thoughts on the project (Acc. Booklet Nachrichten 13–14).

Kluge describes his investigation into Eisenstein's plans as an "imaginary quarry": "it resembles the excavations on an antique site; one learns more about oneself than there are shards and treasures to find."⁹² This passage in Kluge's commentary, introducing his project, is evocative, as the image of the "quarry" encapsulates Kluge's approach. In treating Eisenstein's unrealized project, and through it, Marx's theories and

⁹¹ Published as, Eisenstein, Sergei. "Notes for a Film of 'Capital.'" Trans. Maciej Sliwowski, Jay Leyda, and Annette Michelson. October 2 (1976): 3–26.

⁹² Trans. Kaipainen "Ein solch respektvoller Umgang mit den Planen eines Meisters wie Eisenstein ähnelt der Grabung auf einer antiken Fundstelle; man erfährt mehr über sich selbst, als man an Scherben und Schätzen findet" (Kluge, *Acc. Booklet Nachrichten* 15).

writings, as "ideological antiquity," suggest a certain, mediated and intentional distance by Kluge. Further, Kluge's suggestion to consider Marx as something long past and no longer available, also proposes the possibility of a rediscovery. A discovery that, as Kluge maintains, tells more about the explorer than the objects he might find. With these warnings in mind, Kluge's organization of his materials does not follow an obvious plan, such as a strict chronology or thematic organization. Rather, the projects consist of the montage of loosely associated, often disparate materials. The resulting assemblage suggests an essayistic use of form without attempting to work towards a coherent narrative or logical conclusion.

The various clips are arranged in three sections, corresponding to three DVDs. Those are: "I. Marx and Eisenstein in the Same House", "II. All things are Enchanted Human Beings" and "III. Paradoxes of the Exchange Society." As vague as the titles is also the thematic organization they suggest: for example, the first section "Marx and Eisenstein in the same house" jumps from an opening sequence, a thematic treatment, readings and filmic illustration of Eisenstein's project through his notes, to an interview with Eisenstein's biographer, to readings of fragments of Marx's writing over live music, to a montage of short stories and historical imagery, to interviews with an actress (Sophie Rois), a poet (Hans Magnus Enzensberger), a supposed "Grandniece of Lenin's translator" (Galina Antoschewskaja), a German author and Marxist (Dietmar Dath), etc. What departs from a historical, hermeneutical and filmic exploration of Eisenstein's Project ("What he wanted and did do"), becomes a demonstration of how Marx's prose sounds and conversations about Marx's language (his use of metaphors, the issue of translation, the relevance of Marx today). Nonetheless, Kluge weaves a rich tapestry out of the initial thought ("is it possible to make a film out of Marx's Capital?") in which interrelated thematic strains and reoccurring motives become visible, often dispersed over multiple sections and DVDs. Themes include: the difficulty of representation regarding economic phenomena (e.g. in conversation with Magnus Enzensberger, or Durs Grünbein), and the relevance of Marx today, his prose, metaphors and central concepts such as commodity fetish, exchange value and labor (e.g. in conversation with theorists Joseph Vogl and Oskar Negt, but also in a short film contribution by Tom Tywker).

Früchte des Vertrauens, Kluge's second project, was published one year after *Nachrichten*, in 2009. This project is about "The Financial Crisis, Adam Smith, Keynes, Marx and ourselves," and poses the question "what can we trust in?" If the main title has often been translated as "Fruits of Confidence" or "Fruits of Trust," Kluge has more recently disclosed that rather than an original metaphor, the title suggests a play on John Steinbeck's Grapes of Wrath (or Früchte des Zorns in its German translation.) Thus, Kluge's "Grapes of Trust," can be seen as in relation to Steinbeck: the novel explores the collateral damage of the crisis in 1929 in the American Midwest, while Kluge (according to his accompanying booklet) investigates the collateral damage of the Global Financial Crisis as a "shattering of trust" (Acc. Booklet Früchte). If Nachrichten is thematically centered around Marx, in *Früchte*, Kluge explores "trust" as a basic anthropological, social, and economic category. Further, if the first project was concerned with an "ideological antiguity," Nachrichten professes to tackle the Global Financial Crisis itself. However, rather than an entirely different project, Kluge explicitly introduces Früchte as "an extension of" Nachrichten (Kluge, Acc. Booklet Früchte 15).

There are strong continuities between the two: both projects have an overlap in contributing personnel, such as Kluge's frequent interview partners and collaborators (e.g. Vogl, Negt, Enzensberger, Helge Schneider); both share the same formal language and loose arrangement of individual episodes, while picking up similar thematic strains. The four DVDs of *Früchte* are also organized by titles: "I. The Restlessness of Money," II. "Salvation cannot be bought with money," "III. To light a cigarette in thin air," and "IV. What can we trust in?" The second project continues the interrogation of Marx and adds classical economists such as Adam Smith to the list of historical referents.

Like *Nachrichten*'s indirect and multidirectional approach to Marx, the Global Financial Crisis is rarely approached directly, but rather interrogated through related and adjacent themes (such as historical crises, comparisons to Fukushima, etc.). Parallel to the topos of commodity in *Nachrichten*, money is introduced as one of the central protagonists of the crisis and approached from every possible angle: in interviews with sociologists, theorists, and artists, and in short stories and evocative montages, money is interrogated as a means of exchange, in its historical genesis, as a transformative power, as debt, as a literary trope, and finally, in contrast to things that cannot be bought for money, such as trust.

As is obvious from this survey of Kluge's projects, the radical formal organization and language of *Nachrichten* and *Früchte* tends to frustrate any such endeavor. Questions such as "How should we understand Marx today?"; "What is Kluge's thesis on the Global Financial Crisis?" or even the question from the subtitle "What can we trust in?" necessarily go unanswered by Kluge or his work. As one reviewer has pointed out, Kluge's Film is "the opposite of a thesis film," suggesting: Alexander Kluge has successfully submitted a counter-project to Michael Moore's 'Capitalism – a Love Story' (...) The de facto authoritarian filmmaker, Moore has no doubts about good and evil, true and wrong from the get go. The older and much more playful Kluge observes reality with more curiosity and openness, he allows freedom to his spectators.⁹³

What separates Kluge from the partisan documentarian Moore, and what enables the supposed "freedom of his spectator" is not simply his "openness," or "curiosity", but rather his radical formal language. Given Kluge's multiple roles (both within the film and in life) and his broad intellectual biography, it becomes evident that his approach is neither that of a documentarian, of an artist in a more classical sense, or even of a social theorist, nor is it simply a combination. By extension, it is helpful to consider his two DVD-projects not as individual films, documentaries or pieces of art, but as a kind of methodology that confronts issues smaller and larger than what is thematically and materially given. In the following, I discern the formal elements of the methodology that Kluge establishes in *Nachrichten* and continues through *Früchte*, to arrive at a description of Kluge's approach as an imaginative practice of creative destruction and a radically democratic form.

To come to terms with Kluge's methodology necessitates reflecting on the medium of *Nachrichten* and *Früchte*. As Philipp Ekardt, who has written extensively about Kluge's work with new media, has pointed out, Kluge's adaption of the digital form signals a larger "reconfiguration" of his work ("Starry Skies" 115–16). Namely, it "enables Kluge to

⁹³ Transl. Kaipainen: "*Früchte* des Vertrauens" ist allerdings das Gegenteil eines Thesenfilms, sondern eine Sammlung von Material, Gedanken, auch entlegenen, und von komischen Einfällen über Geld und Vertrauen. Alexander Kluge ist mit diesem Film ein Gegenentwurf zu Michael Moores "Kapitalismus – eine Liebesgeschichte" gelungen, der zurzeit in den Kinos läuft. Der im Grunde autoritäre Filmemacher Moore weiß über Gut und Böse, Richtig und Falsch von Anfang an Bescheid. Der ältere, viel verspieltere Kluge betrachtet die Wirklichkeit neugieriger und offener, er lässt den Zuschauern Freiheit" (Martenstein).

recalibrate, as it were, the activity of montage, which is no longer necessarily tied to the linear temporal unfolding of a film or a literary text" ("Starry Skies" 115). The DVD as a carrier of information signifies more than the need to have the capacity of holding the vast amounts of material Kluge has worked into his projects. Rather, Kluge himself in an Interview referred to the "vertical structure" of a DVD as opposed to the "linear" organization of classical film as "very liberating" (Kluge in: Ekardt, "Returns of the Archaic"). Since independent chapters, different formats, individual clips, the included PDF files of written stories, etc. are all accessible via the disc menu, Kluge can organize his materials in a different way than traditional film. As Kluge, who as a media entrepreneur is very aware of his audience and "the currency of attention," has put it:

It would be impolite to request ten hours of attention from a cinema audience. However, I also have an interest in depicting contexts for which I would never find an appropriate ninety-minute form. The DVD enables me to put ten hours onto a

raft. I like to call it a polite offer. (Kluge in: Ekardt, "Returns of the Archaic" 123) Kluge's polite offer correlates the "vertical organization" with the possibility of a vertical consumption. As Kluge suggests, the viewer is free to explore the abundance of material, rather than being forced by a director to proceed along a given linear axis.

However, the possibility of entering Kluge's work anywhere, with the ability to skip forward or jump backwards in the materials, does not suggest an arbitrary organization of the material. Even if the organization of *Nachrichten* and *Früchte* as laid out on the individual DVDs (larger titled sections, numbered chapters) appears on its surface not be thematically coherent at all, the project does follow its own, non-linear methodology. As Kluge announces at the end of his commentary: "That what is being told on the three DVDs is not systematically but filmically organized."⁹⁴ He proceeds to nonchalantly suggest to his reader several alternative connections, or correlations between the different chapters, without offering any additional explanations of why or what. Thus, as his language in announcing these correspondences ("for example" and "it is to be tested") suggests, Kluge follows an experimental or rather exploratory approach. As Fredric Jameson writes in his review of *Nachrichten* about Kluge's organization of materials: "Viewers unaccustomed to his practices may well find this an unbelievable hodge-podge" ("Marx and Montage" 111). What Jameson suggests is that if newcomers can "learn how to navigate this prodigious site of excavation," or if those who are accustomed are able to endure the "zany or even idiotic moments," they should accept the "not yet full-fledged," even "amateur" for its more useful, productive moments ("Marx and Montage" 110–11).

To approach the riddle of organization, *Nachrichten* itself, respectively Eisenstein's notes, hints at how Kluge considers the issue of organization in such a non-linear project and how such an approach constructs meaning. In a formula that Kluge repeatedly returns to in his accompanying booklet as well in his filmic material, it is Eisenstein who proposes the idea of a "spherical dramaturgy" for his film about *Capital*. Eisenstein notes, "In ancient film, a plot was told from different perspectives. New cinema uses montage to develop one perspective from several plots." For Eisenstein, this perspective was most likely Capital itself. Multiple sequences and plots are methodically assembled in

⁹⁴ Translation by Kaipainen: "Das, was auf den drei DVDs erzählt wird, ist nicht systematisch sondern filmisch geordnet" (Kluge, *Acc. Booklet Nachrichten* 39).

constellation, in relationship and opposition to each other, by way of montage, intended to dialectically produce the central theme of *Capital* in the reaction of the spectator.

However, just as Kluge uses Eisenstein as means to talk about Marx, he neither aims to complete Eisenstein's film nor to arrive at this particular idea of spherical work himself. As is established below, Kluge rejects Eisenstein's theories of montage, and the idea of an intellectual cinema—a cinema that elicits a specific response and a cinema which already knows what the audience response should be. Rather than a determinative form, Kluge is interested in the dialectic potential of montage and the freedom of his spectator and seems to have a different reading of Eisenstein's suggestion in mind. As Kluge, cryptically suggests in his commentary for *Nachrichten*:

A constellation of corresponding works. That's what Eisenstein's SPHERICAL DRAMATRUGY means. Not utopia but heterotopia: right next door something is possible.⁹⁵

What Kluge has in mind here in invoking "correspondences" or "conversations" between different works (at this point of the commentary he hypothesizes about a fictional cooperation between "Eisenstein, Brand, Brecht, Piscator and maybe one of the modern composers e.g. Berg or Schönenberg") is that multiple stories do not necessarily need to result in a single perspective to be meaningful. What follows from this is that Kluge (as opposed to Eisenstein) neither aims for the reconstruction of some kind of totality, or that of a consistent perspective on its subjects that required a predetermined path for the spectator (i.e. Marx or the Global Financial Crisis). As an organizational principle, the

⁹⁵ Trans. Kaipainen: "Eine Konstellation von aufeinander antwortenden Werken. So ist Einsteins Konzept der KUGELDRAMATURGIE gemeint. Keine Utopie, sondern Heterotopie: Gleich nebenan ist etwas möglich" (Kluge, *Acc. Booklet Nachrichten* 40).

spherical, or vertical, the montage of seemingly disparate materials allows Kluge to imply any kind of possible "correspondences," a free play of the dialectics of montage.

The liberation of montage and its correspondences, as Kluge seems to suggest, should no longer form a single coherent program (utopia), whose artistic enforcement would probably seem authoritarian to Kluge—but rather the spontaneous, surprising conversations between different works allow for new kinds of meaning to be possible as the radically different, or rather, the multiplicity of differences (heterotopia).

It is hard to fully appreciate Kluge's idea of heterotopia without considering French philosopher Foucault's seminal essay on the subject (1984), based on a series of lectures from 1966-67. Translated to English in 1986 under the title "Of Other Spaces," Foucault describes the characteristics of certain spaces that are in one way or another different from the place or time they are in. Heterotopias are real spaces within larger social, institutional or historical spaces. They are both linked with and contradict that which is outside. Foucault's unusual set of examples includes brothels, prisons, cemeteries, gardens of antiquity, fairs, Turkish baths, ships, etc. In his lectures and essay, the author sketches ideas and principles of heterotopia that he never developed into a coherent theory. Yet, Foucault's elusive thoughts have generated a wide breadth of scholarship and artistic applications.

Kluge's notion of heterotopia relates to and differs from Foucault's ideas, and can be made clearer in comparison. First, unlike Foucault, Kluge does not seem to have explicitly physical or concrete spaces (e.g. social institutions like prisons) in mind. Kluge's correspondences seem to be strictly between ideas and forms, creating a kind of discursive heterotopia of meaning, that is different and other to traditional forms, or orthodox or mainstream interpretations. Meanwhile, Foucault explicitly differentiates his notion from utopia ("sites with no real place") in insisting that heterotopia exists. Interestingly, for Foucault, utopia and heterotopia are both other places, while heterotopia is simply "a kind of effectively enacted utopia"(24). At the same time, utopia and heterotopia mirror and contest what is outside of them. In fact, as a "last trait" of heterotopia, Foucault describes a function "in relation to all the space that remains":

Either their role is to create a space of illusion that exposes every real space, all the sites inside of which human life is partitioned, as still more illusory (perhaps that is the role that was played by those famous brothels of which we are now deprived). Or else, on the contrary, their role is to create a space that is other, another real space, as perfect, as meticulous, as well arranged as ours is messy, ill constructed, and jumbled. This latter type would be the heterotopia, not of illusion, but of compensation, and I wonder if certain colonies have not functioned somewhat in this manner. (27)

Foucault's explication describes heterotopia as like utopia's critical function of contesting the conditions of the present, in imagining a better future. Both heterotopias of illusion and heterotopias of compensation reflect on the space outside, while heterotopias are nothing more than spatially-reified utopias. Kluge's heterotopias of meaning, while not designating concrete, physical spaces, seem to similarly insist on an exposing reality in the present. Thus, for Kluge, we can say with Foucault, heterotopia designates concrete alternative meanings rather than utopian dreams, while also performing a critical function in relation to "all the *meanings* that remain." This function, however, is certainly not one of compensation, but delineates a creative destruction of dominant meanings, an

imaginative practice of asserting not just the possibility, but the reality, of imaginable alternatives.

If this notion of heterotopia initially suggests a vague artistic concept of forming alternative meanings, Kluge repeats this last formula ("not utopia, but heterotopia") at the end of his commentary for *Früchte* and gives it a more immediate and urgent political meaning. Here, Kluge quotes from the notebook of Nikolai Kondratieff, the Soviet economist who predicted a cyclical development of capitalism in long cycles (against the Marxian law of the falling rate of profit and the prediction of the inevitable end of capitalism) and who was later sentenced to death by Stalin. In these fragmentary notes, Kondratieff writes about political organization, maintaining that if most collectives do not have their own structures of production, they make themselves susceptible to blackmail "in case of emergency." He continues:

We have to identify organizations of solidarity that have their own structures of production. They exist. Inside of them people cannot only defend themselves, but rather (without attacking the system directly) put autonomous alternatives next to it. Hence, not utopia, but heterotopia.⁹⁶

At this point we glimpse what Kluge's method suggests, which is a sudden correspondence between two different works, which seem initially unrelatable: between two fragmentary sets of thoughts, between Eisenstein's and Kondratieff's notebooks, Kluge finds a third. The heterotopia of Kluge, via Eisenstein's spherical dramaturgy, is more than a play with filmic forms, but is itself in a "correspondence" with Kondratieff and

⁹⁶ Trans. Kaipainen: "Wir müssen nach Organisationen der Solidarität suchen, die eine eigene Produktionsstruktur besitzen. Es gibt sie. In ihnen können sich Menschen nicht nur verteidigen, sondern (ohne ein System direkt anzugreifen) autonome Alternativen danebensetzen. Also nicht Utopie, sondern Heterotopie" (Kondratieff qtd in: Kluge, *Acc. Booklet Früchte* 49).

his call for autonomous alternatives; alternatives to a system that according to his own defiant predictions, would not end with its crises. As an alternative to utopia, in its totalitarian sense (Kondratieff was imprisoned and shot), Kluge's heterotopia of meaning simultaneously describes a method of arriving at new meanings, and insists on the need to assert autonomy, defend oneself and resist a hegemonic system. Thus, between *Nachrichten*, which establishes a methodology, and *Früchte*, the response to the crisis at the end of one of Kondratieff's long cycles, emerges a radical imaginative practice.

The imaginative practice, and the creative destruction of traditional form such a practice proposes, is no longer the work of an individual or the vision of a single designer. Rather, this practice is inherently based on cooperation. Kluge's methodology of looking for correspondences and a multiplicity of meanings is suggested in the kind of associative or evocative and preliminary ordering of Kluge's materials by himself as an author. However, his affirmation of the vertical as freedom most importantly involves a correspondence with his audience. The invitation to the spectator to explore the materials at will, proposes a necessary participation of the audience in the destruction of linearity and creation of new possibilities, of new meanings that can assume reality, or heterotopia. Rather than offering these possibilities as explicit interpretations or commentary on his work it is only in the audience's mind, that these possibilities, and montage, can come together as meaningful. Finally, the participation of the audience in the meaning of Kluge's "non-systematically" but "filmically" arranged materials (Acc. Booklet Nachrichten 39), is also Kluge's invitation to become a co-organizer of the material, or to become part of its "productive structure" in the sense of Kondratieff. As a result, in taking Kluge's "polite offer" and exploring the content of his DVDs vertically, a spectator is more than a

collaborator—they are an autonomous producer of meaning, i.e. free to happen upon or to construct correspondences and possibilities beyond what Kluge has put forward or intended.

Returning to Kluge's description of his investigation into Eisenstein's plans as an imaginary quarry, it becomes obvious that his proposed method, as well as warning, is aimed at his audience: he hands his spectator a figurative shovel to mine Marx and, in excavating with Kluge, to learn "more about oneself than there are shards and treasures to find" (Acc. Booklet Nachrichten 15). This methodology is simultaneously an invitation to become part of the project, to train one's imagination with what Kluge proposes, and to move on to produce new meanings with or beyond what Kluge's materials offer. Kluge emphasizes the political relevance of his project in view of the crisis already in *Nachrichten*. In a somewhat comical stab, Kluge extends his offer to the spectator and to those in charge: a manipulated photograph (a still image within the film) pictured in his commentary shows the heads of state comprising the G-8 (Merkel, Sarkozy, etc.) holding spades and digging in the ground. One of the attendees depicted is a poorly photoshopped Helge Schneider as Karl Marx. The caption underneath reads: "the analytical instruments of Marx are not obsolete. Karl Marx attending the G8-summit in Hokkaido" (Kluge, Acc. Booklet Nachrichten 5).

At the organizational level, Kluge's methodology emerges as an explorative and imaginative practice of creative destruction, breaking with old and established meanings, enabling a radically democratic form of spectator or reader participation. These larger and more abstract principles translate into smaller aspects of the two projects and are made clearer in describing the individual formal elements, and in examining some of the correspondences of more concrete examples. In the following, I first discuss Kluge's form of the interview and his use of text as strategies of estrangement, and activation of the spectator as participant. Second, I demonstrate how the formal language and larger methodology work together in a close reading of a segment of *Nachrichten*. Finally, I consider Kluge's idea of an "ideological antiquity" in more detail before returning to the more urgent political project of an activation of social imagination that arises between *Nachrichten* and *Früchte*.

Kluge's interviews, and their unique characteristics, align with the larger themes of correspondence and conversation already at the heart of this liberated montage. The interviews with the likes of philosophers, comedians and made up characters have the shape of collaborations, between interviewer and interviewee, between the formality of the film and the spectator. As a result, the interviews are neither one-sided interrogations by Kluge, nor meant for the audience's passive reception of information.

Many of the interview segments in Kluge's *Nachrichten* and *Früchte* consist of much older material than the two projects themselves (including interviewees that are no longer alive, such as Heiner Müller). For the montage of *Nachrichten* and *Früchte*, Kluge both relied on material shot and produced exclusively for the 2008 and 2009 projects as well as his vast canon of older work. Kluge's specific and trademark form of the interview, as well as many of the interviews included in the projects, stem partially from longtime work for private television in Germany. Among other formats, *Nachrichten* and *Früchte* include reused segments from Prime Time Spätausgabe, a short late-night format, shown on RTL that ran from 1990-2008. It is in this TV culture magazine, that Kluge cultivated the language prominent in *Nachrichten* and *Früchte*. Prime Time Consisted mostly of

interviews with intertitles, but also performances, readings and montages presenting unusual (rather than strictly educational) details from history and culture.⁹⁷ This work has involved collaborations with musicians, actors and directors (e.g. Werner Herzog, Christoph Schlingensief, Rolf Hochhuth, etc.). A number of segments of *Nachrichten* involving "famous" people or "experts" are directly taken from Prime Time (e.g. a notable interview with Heiner Müller but also multiple interview segments with Vogl, Enzensberger as well as Negt).

As has often been remarked, Kluge's interviews are an artistic form in their own right (Forrest 305–06). If the conversations start with a topic, they shoot off in unexpected directions. Kluge as an interviewer directs his conversations, similarly to his filmic materials, as a kind of montage: prompting, asking leading questions, interrupting and monologing himself, or letting his interviewees go on tangents without intervening, confronting his interviewees with seemingly unrelated quotes, insisting on details, etc. In contrast to more traditional documentaries, Kluge has a strong presence in the interviews he conducts. Rather than deploying interview segments to present individual viewpoints or expert information on a topic, Kluge's interviews evoke a sense of trying to establish correspondences between two minds in the sense of his spherical dramaturgy, but also that of a collaboration in making meaning between interviewer and interviewee and spectator.

Further, similar to Kluge's play with fiction and fact, and history and story, in the broader organization of his material he plays with the status of his own interviews as artificial, or fiction, as serious, or downright funny units. Kluge does so in presenting these

⁹⁷ For Kluge's work for Television e.g. see Tara Forrest on "Raw Material for the Imagination."

segments, sometimes more overtly, sometimes more covertly, as heavily staged happenings. The techniques of undercutting, or estranging, his own formal presentation involve the unexpected inclusion of mock interviews, such as actors playing "experts" or "intellectuals," e.g. Sophie Rois, in a highly satirical interview on Medea, love and Marx in Nachrichten (as one of the segments previously on Prime Time as "Liebe ist härter als Beton"). Inversely, Kluge has actual experts enacting fictional roles, such as Joseph Vogl deliberating on Marx's supposed use of the term "creative destruction" based on an entirely fictional, "newly-discovered fragment", not as Prof. Vogl but in the fictional role of "comrade Gerd Welp, local historian [Heimatforscher] and Marx specialist." The estranging effect of such inversions suggests the activation of the spectator, not as passive recipient of information, but as someone who has to remain both critical and creative towards what is shown and heard (is this a genuine interview or a performance?; Does it change the information I hear, if it is produced by an actor, etc.?). Further, the explicitly or covertly deployed fictions are not simply a reality check for the audience, but also insist on Kluge's notion of heterotopia. The fictional interviews create heterotopic spaces of meaning. While they are fictions (e.g. discussions of fictional texts of Marx by fictional scholars) they assume a kind of reality in critically reflecting on existing meanings, and discourses. These heterotopic meanings question not only the authority or the form of the interview as a purveyor of factual meaning but expose the createdness of meaning as such.

The productive estrangements through fiction are paralleled in the formal presentation of the interviews. Each interview uses a static frame to highlight the artifice of these conversations, with ever-changing and unusual settings (castles, shopping malls, theater stages, single black background, animated blue screens, etc.) as well as props (such as a dramatic single light bulb, or the oversized gas lamps in two interviews with Vogl). Further, Kluge almost always keeps the technological means in the frame (e.g. parts of microphones, cables, stage lights), drawing attention to the means of recording and filming, and hence the framing, the artifice of the situation of both the interview itself and its reception through film. Moreover, with few exceptions, the interviews are focused exclusively on the interviewee, without the usual shot, counter-shot structure; Kluge's voice moderates from off screen. Conversely, his occasional presence in the film (e.g. a phone conversation with Grünbein, or Kluge in the same frame in an interview with Negt) draws attention to the strict, explicit formalism of the rest of his interviews.

If we relate these techniques to what I have thus far described as Kluge's collaborative and imaginative practice of creative destruction, the estrangement they produce introduces another step of keeping his audience involved. By formally insisting on the artifice of both the interview as a conversational situation, and its filmic representation, Kluge's purpose is both critical and productive and does not simply aim at shattering illusions (e.g. of that of a spectator believing he is simply witnessing a natural conversation). Instead, these formal strategies aim at keeping audiences from passively receiving information. These strategies destabilize and renew one's perception of film and the conversations taking place and ask or enforce an active participation in the project's meaning-making. The undermining of the form of the interview also undermines a sense of authority usually associated with the interview's use in documentaries. Instead of asserting that something is true or relevant, because a certain expert or known person says so (e.g. renowned scholar Joseph Vogl), Kluge constantly refocuses the spectator

on how and what is being said. This separation of individual elements of the film (its recording, its representation on screen, its characters, the setting, their statements, etc.) becomes more pronounced as kind of productive semiotic liberation, when we consider Kluge's use of text.

Text, or more precisely, static panels of intertitles are another stylistic and formally suggestive element in Kluge's projects. Kluge uses a variety of techniques that dramatize, or oppose the things spelled out: different and contrasting typefaces in the same panel, words are tilted, single letters enlarged, etc... Further, the lettering is often in different (somewhat grating) colors and sometimes accompanied by literal graphical representations of that what the words says, e.g. flames emanating from the word "burned." In some panels, the text is arranged in visual patterns, suggestive of concrete poetry.

The use of intertitles by Kluge performs multiple functions in his projects. First, in his interviews Kluge frequently cuts to black panels with words or lines of text that spell out sentences or statements from the conversation. While the interview continues in sound, the words on the panel seem to hang freely in time. This simultaneously interrupts the conversation and adds emphasis to parts of it. Second, in other instances, Kluge uses a montage of a series of intertitles to tell short stories that rely exclusively on text, as opposed to audio narration. In these picture-book style stories, he deploys intertitles in juxtaposition with moving images, digital animations or historical footage, that either illustrate or contrast with the words on screen.

Kluge's project departs from Eisenstein and is reminiscent of early silent film, in its use of text and visual material. However, more than a visual or nostalgic gimmick, Kluge

(who apprenticed with Fritz Lang), has himself referred to this interaction of lettering and image in 1920s film as allowing "a much larger space for the autonomous activity of the spectator" (Kluge in: Ekardt, "Returns of the Archaic" 132). Thus, as Kluge suggests, the relative independence of the different filmic elements this separation creates, the autonomy of text, image and sound, leaves (like his montages) the interpretive work to the spectator. The formal breaking up, or destruction of film as a seamless unit, allows the audience to become productive. Like the function of the formal elements discussed above, this describes the simultaneity of an estrangement (the plot, or interview, is literally interrupted by the insertion of a black screen with text) and an invitation to free association and participation in the project's meaning-making.

In his use of montage and intertitles Kluge re-invents or actualizes much older and somewhat forgotten cinematic techniques. In both cases, he refocuses the older technique's function in a different context (see also Ekardt, "Returns of the Archaic" 115 on "archaic" forms in Kluge; or also: Hansen 389–408 on "early cinema" and Kluge). If the intertitle in a silent film was supposed to advance the plot, Kluge, in a change of context and method, reappropriates it for the present as a critical device. If montage, in the sense of Eisenstein, describes a quasi-scientific method of producing pre-considered effects in an audience, Kluge exerts creative destruction and reinvents montage as a liberated, radically democratic form. To gain a better idea of some of these concepts at work, I now approach them in a closer reading of a segment of *Nachrichten*, before I conclude by discussing the interplay of the larger themes of *Nachrichten* and *Früchte*.

Among the wealth of materials that Kluge unearths in *Nachrichten* is a remarkable, if maybe less known, attempt by Bertolt Brecht to turn Marx and Engel's Manifesto from 1848 into an epic poem.⁹⁸ Kluge's "chapter" from the third DVD ("Paradoxes of Exchange Society") is entitled "7. Brecht's hexameter of the Communist Manifesto" and presents this topic as a conversation/interview with German Poet Durs Grünbein. The conversation takes place over the phone and the film cuts back and forth between the two men in their respective spaces, i.e. Kluge's office and an apartment in Berlin (Kluge, Acc. Booklet Nachrichten 40). Going back and forth, the two men describe the object of their conversation: Brecht's attempt at a verse-version of the manifesto took shape in 1945, roughly 100 years after the publication of Marx and Engel's polemic. At this time, Brecht is in the United States, and with the war in Europe ending, he begins to rewrite the Manifesto in hexameter and pentameter, "the classical metric known from Homer" (Kluge). However, according to Brecht himself, the model is neither the *lliad*, nor the Odyssey but rather a poem by the Roman poet Lucretius (Grünbein). His didactic poem *de rerum natura*, or on the nature of things, was an attempt to summarize and instruct on the contemporary knowledge and teachings on nature and human nature. Brecht tries to apply this didactic use of the classical metric to Marx, for a post-war audience, but abandons the project by the end of the year.

The parallels between Brecht's project under discussion and Eisenstein's attempt to turn Marx's *Capital* into a film, even though they go unmentioned by either Kluge or Grünbein, are striking, and indicate a first correspondence Kluge seems to be after. Once

⁹⁸ See Brecht, Bertolt. "Das Manifest." Werke. Große kommentierte Berliner und Frankfurter Ausgabe. Ed. Werner Hecht, Jan Knopf, and Werner Mittenzwei. Vol. 5. Berlin: Suhrkamp, 1988. 126–128. Print. 32 vols.

more, an artist attempts the unlikely translation of Marx's prose and theory into an artistic form. Once more the project remains unfinished and for Kluge's purposes, antiquity and formal aesthetic questions play an interesting role in Brecht's project.

In this longer segment of Nachrichten (21'30 min), Kluge and Grünbein speculate on the different reasons Brecht would attempt to write an epic version of the manifesto, always returning to the questions of why he chose this particular form and what effects would be achieved by it. The results of the back and forth, jumps and returns, are anything but a final interpretation by Kluge or Grünbein: First, the filmmaker's and poet's discussion of the formal properties of the text arrives at an understanding of the use of the rigid classical meter as a joyful "provocation" by Brecht: "to use the form of humanism for dangerous thoughts" (Grünbein). The film accentuates this thought with an intertitle. Then, the conversation jumps to Grünbein, speculating against Brecht's alleged model of didactical poetry by Lucretius; Grünbein proposes that the use of the classic metric is less a didactic poem than an even older form, the hymn, or more precisely, the ancient tradition of hymns to the gods. This suggests, according to Grünbein (now opposed to a kind of ironic use of the form) that for Brecht, Marx and Engels' thoughts are already classical; they are no longer the object of critical examination, but indeed the object for "a hymn to the gods of Marxism."

Later, Kluge and Grünbein shift their discussion to the poem's serious didactical intent. The poem was to achieve for a contemporary audience (future Germans after the expected end of the war) what the manifesto did in the 19th century—namely, to work out and generate the terminology and concepts of communism (bourgeoisie, proletariat, communists, etc.). Then, Grünbein immediately considers Brecht's attempt an

"aestheticization of theory," observing that the rhythm of the hexameter and pentameter might (contrary to the prose of the Manifesto) "lull" rather than agitate. According to this charge, the poem would create "beautiful objects" to be admired aesthetically rather than critical thoughts.

Finally, shifting directions once more, Grünbein suggests a similarity in Brecht's plans to what the German classic poet Friedrich Schiller did with the philosophy of Immanuel Kant: turning theoretical thoughts into poetry while using strikingly similar poetic means. He offers the following analogy to the viewer: "Kant was for Schiller what Marx is for Brecht: a new viable idealism." Kluge, insisting on the larger formal issue, adds that for Brecht, just as for Schiller, there is a difference, but "no border between theory and poetry." Rather, according to Kluge, Brecht seems to say: "I write thoughts." Kluge observes, "It is actually a bold attitude towards the means of poetry," and he adds, "I like that." However, as Kluge and Grünbein also repeatedly suggest, Brecht's choice of poetry, even if using an antique form, meant to make it accessible for a contemporary audience, as a kind of *Verfremdungseffekt* or estrangement of Marx.

Kluge's throwaway endorsement at this point of the Brecht-segement ("I like that") is certainly noteworthy. At first, it is atypical for Kluge's role throughout the film (and his work in general). Rather, as established above, he constantly suggests, asks, and contrasts, but rarely offers opinions, conclusive thoughts or judgment on the heterogeneous material and conflicting positions his film presents. Granted, an open and unequivocal acceptance of art as theory and theory as art is rather unlikely for Kluge. However, precisely in between the idea of art as estrangement (Brecht) and art as theory (Schiller), there are hints at Kluge's own position and the general methodological

approach of his projects: Poetry as theory, and vice versa, not as a conflation of the two, but rather as a reciprocal estrangement of the two domains, a making productive of differences between them, a correspondence to be worked out by his viewers rather than the film itself.

If estrangement is an obvious interpretation of a work by Brecht⁹⁹, Kluge's short film about the poem itself is rich in his own estrangement techniques, found throughout his projects. Again, with Kluge these techniques do not simply serve to shatter illusions and interrupt immersion, but as part of a didactic approach to an imaginative practice, they train the audience in a kind of cognitive estrangement: a making strange of the toofamiliar and a making familiar of the seemingly odd. This didactic simultaneously enacts a creative destruction of form and instructs the audience a kind of utopian pedagogy. In other words, the estrangement works to destroy the authority of the art work while creating participation by the audience, and in defamiliarizing the too-familiar, the estrangement prepares the audience to challenge the present and think the radically new.

An example of the estrangement of the audience in this segment is the heavilystylized setting of a phone conversation between two intellectuals. Grünbein, wearing film makeup is mostly shown in a perfectly lit close-up, in a light interior, while (in stark contrast in terms of quality) Kluge is shown in an under-lit medium shot, perched over an overflowing desk in a dimly lit office. Kluge holds an old-fashioned red phone whose cable prominently runs towards the front of the screen while Grünbein holds a cord-less phone to his ear. Towards the middle of the conversation, a cut from Kluge to Grünbein suddenly

⁹⁹ This idea of Brecht's choice of poetry as estrangement is also suggested in Brecht scholarship, see. E.g. Darko Suvin's article on "Brecht's Gedichtfassung des kommunistischen Manifests," who suggests that with by choosing poetry Brecht wanted to achieve a "de-automatization of the manifesto" for a contemporary audience (611).

shows him from medium distance and reveals more technology: a microphone and cables in front of him before slowly zooming back to a close-up shot.

Further, apart from the change in visual quality, every cut in the conversation of the two men puts emphasis on the technicality of the film, as the quality of sound changes with the cuts. By cutting back and forth between Kluge and Grünbein, sentences that begin on-screen as a recording of the speaker in the same room, abruptly change offscreen and continue as a heavily-distorted voice audible over a phone. In fact, even the same-room-on-screen-recordings differ notably between Kluge's and Grünbein's location in terms of reverb and clarity. These discontinuities are carefully constructed and instructive: for a viewer, the contrast between Kluge and Grünbein, in terms of image quality and sound, at first irritate and interrupt. As a film strategy these discontinuities, like the presence of a microphone on screen, insist on the technologies involved in recording and transmitting. Thus, like Brecht's estrangement of the manifesto (e.g. in the contrast between an antique versus meter and words like "proletariat") Kluge's contrasts reminds the viewer of the form and artifice of the film, but also separate and draws attention to its individual parts to be considered in contrast or individually from each other.

In terms of the content of the conversation, and as a result of Kluge's interviewing technique, Kluge and Grünbein jump back and forth between multiple offers of meaning and conflicting readings of Brecht's projects. The interview itself appears as a montage that opens itself up for the viewer. Together, this multi-layered formal treatment achieves a commentary in itself, once more a methodology and an offer to the spectator rather than information or thesis.

Strikingly, rather than a final interpretation or summary of the discussion, the sequence ends with Kluge encouraging and joining Grünbein in reading a longer passage of the poem "simply, to demonstrate how this sounds." In this moment, the contrasts and layers come together for full effect: the "sound" of Brecht's verses (respectively Marx and Engel's Manifesto) reach the viewer of *Nachrichten* through a multitude of framings, remediation and intentional techniques of distancing and estrangement: Brecht turns Marx's social theory and agitation from 1848 into verses in 1945; produces a text that Grünbein and Kluge discuss and read over the phone; this reading is filmed and edited; made into a film segment to be watched after 2008, in the context of a larger project on Eisenstein and Marx, at the beginning of a larger crisis of capitalism. As Kluge notes succinctly in his commentary "To talk about hexameter by phone is unusual."¹⁰⁰ To consider Marx, through Brecht, through Grünbein and Kluge, thus demonstrates a multilayered practice of defamiliarization, and spectator activation, and of destruction of naturalized or orthodox meanings. Importantly, the "unusual" here suggests the creation of the possibility for a multiplicity of new meanings in cooperation with the audience – in short, an imaginative practice of creative destruction of Marx, to which I will return.

From what I established thus far, Kluge's methodology makes it difficult to provide a complete overview of his project or reconstruct some kind of thematic intent, without indeed revealing "more about [my]self than there are shards and treasures to find" (Kluge, *Nachrichten* 15). Rather, Kluge's work requires becoming attuned to an initially unfamiliar methodology and finding correspondences (similarities and contrasts) in his spherical

¹⁰⁰ Trans. Kaipainen "Fernmündlich über Hexameter zu sprechen, ist ungewöhnlich" (Kluge, *Acc. Booklet Nachrichten* 40).

organization and montage of heterogeneous materials that enable new meanings. However, Kluge's work is not without thematic intent or coherence; his own voice and interest are not absent within the heterotopic method he proposes. Thus, the reconstruction of Kluge's suggestions for an "excavation" of Marx in *Nachrichten* and of trust as an "anti-capital" in *Früchte*, together with his methodological rigidity, provides the point of departure to the following discussion of an imaginative practice of creative destruction, corresponding to the archeological role in Levitas. Second, I show how the interest of *Früchte* reorients *Nachrichten* and how together the two projects serve as a rich starting point and reservoir for cultural production that seeks to confront the crisis, for more than crisis in finance, with the ambition to contribute to the transformation of social imagination itself.

Critics and reviewers often described the timeliness of Kluge, releasing his DVD project on Marx just before the Global Financial Crisis. Thus, Kluge is labeled as a kind of prophet, who foresaw the new relevance of Marx that the Global Financial Crisis would bring to the fore. However, this view misunderstands the crisis, as well as growing public interest in Marx; both clearly predate the bankruptcy of Lehman Brothers in September 2008. In fact, one month before the publication of *Nachrichten*, the German Frankfurter Rundschau gave testimony to an older and renewed interest in Marx in view of what was by then recognized as the "worst financial crisis since 1929" ("Finanzkrise: Marx Hat Hochkonjunktur"). Since 2007, the numbers of copies of *Das Kapital* that sold had increased by the thousands, at times selling out of printed copies. The article quotes Jörn

Schütrumpf, managing director of the Karl-Dietz-Verlag, giving testimony to the cyclical sales of Marx's since 1945: "If Marx sells well, society is doing bad."¹⁰¹

While Kluge would certainly appreciate the irony of considering the sales of the commodity Marx as an early warning system, or cultural indicator for crises, the interest in Marx that Kluge explores is not simply owed to his own sensibilities as a kind of public intellectual or artist. Rather, Kluge's project connects to the developing crisis and makes explicit references to its events (such as, Kluge guest and poet Magnus Enzensberger's description of the real estate crisis and the credit bubble).

Further, apart from Kluge's other work (e.g. his theoretical texts together with Negt), as shown in the reuse of his older materials in *Nachrichten*, Marx, his uses and abuses, his possibility and impossibility delineates a lifelong interest in Kluge's work. Nonetheless, even if *Nachrichten* boldly declares that "the instruments of Marx are not obsolete" and comically puts Marx in attendance at the G8 Summit in 2008, where heads of state were urgently concerned with the simultaneity of the Global Financial Crisis and a failure of the instruments of liberal economics, *Nachrichten* on its face seems concerned with the past rather than the present, 1929 more than 2007, an "ideological antiquity" rather than future.

Kluge's concept of an "ideological antiquity" and what "news" it could contain, again does not assume the form of a thesis, but requires reconstructing and combining multiple fragments, shards and hints Kluge dispersed throughout his excavation site. Jameson identifies a kind of provocation in Kluge's reconsideration of Marx: "Is this 'ideological

¹⁰¹ Translation by Kaipainen: "Verkauft sich Marx gut, geht es der Gesellschaft schlecht" (Schütrumpf qtd in: "Finanzkrise: Marx Hat Hochkonjunktur").

antiquity' not simply another way of saying that Marx, and with him Marxism, is outmoded?" ("Marx and Montage" 116). Indeed, among the multitudes of material and the manifold ways Kluge reconsiders Marx (through interviews, readings, music, animations, etc.) are several segments that look at Marx (or Kluge's own enterprise) from a comedic perspective. Comedian Helge Schneider appears in multiple roles e.g. as an unemployed worker attending classes on Marx that hardly seem to relate to his plight, and finally Helge appears as an unhinged Marx himself in an "interview" with Kluge. Multiple clips show actors reading especially abstract and dense parts of Marx, for long and torturous stretches of time, in unison, only to comically fail to make sense of the passage in question and start the reading over. In another segement entitled "making liquid," two students of Marx come up with increasingly absurdist readings, beginning with the economic concept of liquidity, and insisting on a literal meaning of metaphors and theoretical concepts.

Kluge gives a hint at the use of the jocular in his commentary: "We must let Till Eulenspiegel pass across Marx (and Eisenstein too), in order to create a confusion, through which knowledge and emotions can combine in new ways."¹⁰² What Kluge seems to propose and provide, beyond comic relief, is that making Marx (and his various contexts) strange is necessary, in order to create openness to new meanings of Marx. To imagine or treat Marx as belonging to antiquity is an attempt at a radical defamiliarization of Marx, a creative destruction of Marxism, and a heterotopia of meaning. An intertitle in an interview with Oskar Negt reads "The use of antiquity: defamiliarization of experience."

¹⁰² Trans. Kaipainen "Man muss Till Eulenspiegel einmal über Marx (und auch Einstein) hinwegziehen lassen, um eine Verirrung zu erhalten, durch die sich Erkenntnisse und Emotionen neu verbinden" (Kluge, *Acc. Booklet Nachrichten* 16).
Greek texts about our present moment, simply because there is no more contact with our present-day experience: "[Antiquity] is for our imagination once more a completely new place."

To place Marx in antiquity is also the attempt to separate him from the reception of his ideas, to cut Marx out of Marxism, and to dissociate the theory from the historical baggage of the last century. In a long interview with the German author and self-declared Marxist Dietmar Dath, Kluge discusses the language and metaphors of Marx. At some point, Darth proposes a metaphor of his own, or a correspondence between Mormon theology and the possibility of studying Marx. According to Dath, for the Church of Mormon, the Book of Mormon's reason for existence is captured in the following image: We have to imagine the Bible as a book nailed to a table with a single nail. While the book is fixed it can turn in every direction. The Book of Mormon then acts as second nail that holds the Bible in place for all Mormons. Dath, now proposes, that for Marx's Capital the second nail has for the longest time been Soviet Russia. However, as this nail has begun to disappear "the Capital can move again." Dath's image neatly describes the kind of critical pluralism of reading Marx that seems to inspire Kluge's project, a pluralism that no longer associates Marx solely with the utopias of totalitarian states but allows for multiple, heterotopic rediscoveries of Marx.

The thematic preparation of Marx corresponds to Kluge's methodology and filmic means: the defamiliarization, the montage of contrasting materials or opinion aimed at a resetting, or a recalibrating of one's imaginative power, and by extension, an activation of social imagination. In addition, rather than a distinct reading of Marx, Kluge invites his audience to find one's own Marx, so to speak; in between, rather than in one specific offer of meaning Kluge has montaged. Kluge has his own interest that he "necessarily departs from," as he writes in his commentary, in regards to Marx's texts: "I am less interested in the description of the exterior economy and its laws, but mainly in the CAPITALISM INSIDE OF US."¹⁰³ However, rather than enforcing this particular take on Marx (e.g. Kluge's interest in "feelings" as discussed by e.g. Jameson in "Marx and Montage"), Kluge makes his own voice merely one of many.

To sharpen an understanding of Kluge's methodology, with his approach to Marx as an imaginative practice that reaches beyond a purely artistic consideration of its subject, it is helpful to recall Levitas' concept of the archaeological mode, from her utopian method. For the explorative, open and reflexive "imaginative reconstituition of society" that Levitas envisions in lieu of blueprinting complete alternative words, the archeological or analytical mode "compliments" the architectural of actively implementing such provisional forms of utopia in the real world. One can think of many kinds of existing collective and experimental alternatives and movements, e.g. participatory budget, microfinance, etc., or that what social scientist Olin Wright has called "real utopias" (Enivsioning Real Utopias). However, for the architectural mode, rather than orienting one's imagination solely to the future with the urge to design concrete, better societies, in disagreement with everything past or present, Levitas encourages archaeology: "the excavation of fragments and shards and their recombination into a coherent whole" from a range of discourses and spheres including art and politics, while "the point of such

¹⁰³ Trans. Kaipainen "Ich kann nur von meinem eigenen Interesse ausgehen. (...) Mich interessiert in den Texten von Marx dabei nicht so sehr die Beschreibung der äusseren Ökonomie und ihrer 'Gesetze', sondern vor allem der KAPITALISMUS IN UNS" (Kluge, *Acc. Booklet Nachrichten* 6).

archaeology is to lay the underpinning model of the good society open to scrutiny and to public critique" (*Utopia as Method* xvii).

While there are clear overlaps between such a description and Kluge's suggestion of his work as an "archaeological excavation site" of an "ideological antiquity," it is the radical methodology, as worked out above, that suggests an imaginative practice of creative destruction operating somewhat independently of the content of Kluge's work. While Kluge might encourage a reconsideration of Marxian instruments for a public confronted with a present-day economic crisis, Kluge's way of producing such a reconsideration propose that artistic production plays a central role, with regard to social imagination. In Kluge's methodology and form, we glimpse a radical imaginative practice that suggests an activation and reorientation of imagination with the means of art that seeks to transcend its own limited content. Further, Kluge not only proposes or carries out the practice in his work, but by means of equally playful and didactical techniques, actively instructs his audience to adapt. Heterotopia then designates an open and collaborative practice of creative destruction, of challenging and constructing real, existing meaning, in view of the utopia that ended all utopias.

To conclude, Kluge's double project *Nachrichten* and *Früchte*, presents a different kind of Gesamtkunstwerk, a total art that refuses totality. Kluge's projects are neither organized in a linear fashion, nor do they move towards any clear conclusion. However, the telos is the methodology itself, the relation between the project's inner correspondence and a correspondence with his audience that is encouraged to work the raw materials into their own synthesis. Kluge's production and presentation of a monumental collection of material, his methodology in excavating Marx for the 21st

century and looking for the other side of the Global Financial Crisis, produces a radically democratic and imaginative practice of creative destruction. Kluge's vaguely didactical use of estrangement techniques presents a utopian pedagogy that defamiliarizes the familiar and familiarizes the strange, both activating and instructing his audience in this imaginative practice.

Together, creative destruction and utopian pedagogy suggest art's role in cultural production is as a site of critical renewal of social imagination, of collaborative and experimental approaches to the problem of a foreclosed future. Kluge's heterotopia of autonomous meanings does more than propose reconsidering Marxian instruments to come to terms with a crisis of imagination. Rather, as a mode of rereading and recreating not just Marx or art, but a world in crisis, this imaginative practice has the ambition to transcend the artistic biotope of the film festival or the museum exhibition, promising to reach a public sphere beyond that of the film connoisseur or unreformable Marxist. Finally, Kluge's work professes to create heterotopias—not physical spaces in a Foucauldian sense, but new spaces of meaning in a critical relation to established social meanings and political discourses. If these virtual sites attain reality through the power of fiction and collective imagination, their critical and creative potential can be understood through the following investigation into video game economies and alternative universes, which maybe allow exploration of more literal versions of this virtual heterotopia.

2.2. Virtual Economies and Utopian Play

"The Global Financial Crisis is Now a Fun Game," a news headline suggests, on the rather serious occasion of the simulation of a financial crisis by regulators and banks (Roose). This situation neatly encompasses the conflicting views that either judge a medium to be escapist, compensatory entertainment with little serious application (or utopian potential) or which conclude that gaming and fictional play can explore and explain real-world issues. Outside of video games as entertainment, digital simulation has been a way to approach scientific problems (too difficult, too expensive or outright impossible to test in real-life) since the beginning of computing. However, in the wake of the crisis, regulators, bankers and economists have shown a new interest in harnessing the power of interactive simulations to overcome the limitation of available tools and to better understand economic processes. Digital simulation has advantages over real-world experimentation in testing economic theories, and in studying behavior and policy impacts. Simulation was especially attractive when established economic common sense and regulatory frameworks had broken down, with the critical events of 2007/2008, and new policies were needed but carried unknown risks. In other words, where basic assumptions about the behavior of economic actors and its aggregate effects were no longer resting on stable scientific ground, when models could no longer be trusted or their formulaic promises of equilibrium, and when measures like large-scale quantitative easing had never been implemented in non-pixel markets, fiction and gamification seemed an attractive way to safely approach this new, uncertain world and provide a badly-needed assessment of theoretical and policy alternatives.

In this section I discuss the equally surprising and illuminating intersections of economics, economic crises and video games, ending by continuing a line of thought that started in Chapter II and III regarding play and cultural production. Both in virtual economies, and in understanding the specific place of digital play within cultural production, the ambition of imaginative practices of creative destruction becomes visible: as a critique of the status quo, as a necessary break with the past, and as a new way of experimenting and probing in creating alternatives to a unsustainable status quo.

I first discuss several examples that show how gamification can be used for the research of economic regulation regarding future crises. These economic wargames and policy simulation depend on fiction and play as imaginative practices, in approaching problems of economic stability that became increasingly difficult to reliably assess in the wake of the crisis. Second, in investigating what are known as virtual economies, I show how economists have discovered more traditional forms of video games, particularly Massive Multiplayer Online Games, as objects worthy of study. I discuss how exposure to such virtual economies has prompted a more critical stance towards fundamental economic truths and sparked innovation in the economic sciences, a creative destruction that has not stayed confined to the virtual world. Finally, in exploring the potential of games and play as imaginative practices of creative destruction, I move from a discussion of educational games teaching financial literacy to a notion of play as the collaborative imagination of alternative worlds. I argue that as a form and activity, collective games have the potential to profoundly change our perception of the world.

2.2.1. Imaginary crises and imaginative research: Simulations and Wargames

The headline cited above references a two-day-event, a simulation run by a banking lobby group in November 2012, which simulated the entirely fictional failure of a large commercial bank in New York. The simulation meant to replicate the actual bank failures in 2008 and 2009. In a way, similar to a fictional Kluge interview about a non-

existent fragment of Marx allows for new insights into the real Marx and the status of the discourse on Marx, a fictional bank failure was enacted to learn about real failures, while challenging orthodox policies.

More than crunching numbers in a somewhat septic digital environment, the liveaction game used 180 human participants (a staggering number) to study regulation and crisis decision-making on the side of regulators and bankers. The participants played a variety of additional roles including journalists, politicians, clients and competitors of the failing bank. Studying real human actors in interaction with a simulation allowed for those factors commonly excluded from standard economic models and more traditional simulations, such as issues of hierarchy, inter-personal communication, spreading of false rumors, character, psychology, etc. to come into critical focus. In this sense, the experiment did rely on the power of fiction (a hypothetical, future liquidation of a made-up bank), but also harnessed the medium-specific characteristic of dynamic interactive play. In this case, the experiment was not set in a utopian alternative reality but firmly grounded in present-day conditions. Rather than exploring radical alternatives to the status quo, the New York experiment was explicitly designed to stress-test an existing piece of legislature and regulation. The Clearing House Association who sponsored the simulation, meant to convince "skeptics," during a time of pressure for political reform, that Title II of the Dodd-Frank Act worked smoothly and did not need to be overhauled (Rehm).

However, if the CLA example closely resembles a game and most narrowly concerns the status quo, it is only one among many large-scale simulations run in the US and Europe after the crisis. Part of a larger trend, these experiments exceed industry interests of the sponsors of the New York example, and exemplify an experimental approach to understanding economic and regulatory issues.

She reasons why simulations have increasingly come to embrace the openness of games over analyzing numbers becomes clearer when considering the issue of predetermined economic assumptions. The most prominent example to include this kind of gamification is the annual Europe-wide stress-tests of banks by the European Banking Authority. In 2016, the EBA expressed, for the first time, the need to look at more than "just numbers," seeking to test the impact of messier parameters such as the "misconduct of bankers" in various crisis scenarios simulated in exchange with the respective banks ("EZB-Stresstest"). Similar to the New York example, the results of the EBA's simulation in cooperation with the European Central Bank and the European Commission are not merely a technocratic assessment of the status quo but have important scholarly and political implications for the future. The numbers and reports that the stress-tests generate, departing from fictional scenarios, serve as indicators for the real-life stability of the banking sector. Further, their interpretation generates hotly-debated reference points for political discourse about the future of existing frameworks of regulation and legislature at the European and national levels.

As the gamification of the research into stability and regulatory issues in the banking sector is designed to disprove (CHA) or reveal (EZB) problems with current market conditions and regulations, gamification is also a remarkable development considering the investigation this chapter proposes. Namely, these examples show how in an environment where established economic knowledge and theory are clouded with unreliability, uncertainty and issues of predictability, fiction and active play can be used

to come to terms with possible futures. If the inclusion of play, or hard-to-quantify parameters, might have been deemed unscientific or unreliable in the past, their inclusion seems to acknowledge both the non-mathematizable complexities of the issues as well as the need for experimental innovation to create knowledge about them. The epistemological impasse of the crisis seems to have allowed for surprising alliances between economy, politics, and fictional and aesthetic forms. Like Kluge's heterotopia and his serious play with the fictional, the virtual spaces created in simulations and wargames are both linked with the real world and radically other to it. The productive differences between the heterotopic virtual and the real allow for critical reflection from merely possible spaces onto the real-existing.

The results of exploring these digital virtual worlds, as I show in the next section, has the potential to exceed the designed intent, i.e. the hypotheses necessarily programmed into a simulation or a game, and to designate an imaginative practice of creative destruction of naturalized economic common sense and orthodoxy. Per Foucault, not only the heterotopias of illusion (e.g. the above simulations and wargames, with their specific purpose) but also the heterotopias of compensation (virtual realities that are seemingly purely entertainment) can become critically productive in relation to deficiencies of the surrounding world.

2.2.2. Varoufakis, Guðmundsson, virtual Earmuffs, EVE and Euro Crisis

Outside of the narrowly-focused and tailored war-games and simulations, more traditional examples of video games and economic phenomena that surround them have slowly become a field of interest for economists.¹⁰⁴ Maybe counter-intuitively, these games have been neither economic policy simulations nor more mimetic games such as the *Stock Market Game* (discussed in Chapter I). Rather, it is the often non-mimetic world of large-scale multi-player games, inhabited by hundreds of thousands, if not millions of players, that have sparked the enthusiasm of economists. Whether players trade virtual hats and earmuffs for the competitive shooter *Team Fortress 2* on Valve's steam platform, or commandeer spacecrafts in *EVE Online*, the study of player-centered, digital interaction has proven a surprisingly fruitful and thought-provoking field of study, at least for those looking outside of pure theory and beyond the traditional tools of statistics and surveys.

More than fringe academic phenomenon, the arguably most prominent example of research into video game economies is the work of economist Yanis Varoufakis (before he became Greek Minister of Finance at the height of the Euro-Crisis). In 2003, Varoufakis, a self-professed "non-gamer," responded spontaneously to an email by a company, who had run into difficulties regarding the virtual markets that had sprung up around their games ("It All Began"). Varoufakis soon enthusiastically agreed to work as "an economist in residence" for Valve, one of the industry's largest publishers and digital distributor of video games worldwide. The unlikely marriage of the maker of genredefining games such as *Half-Life* and *Portal*, with an academic economist and later policy advisor, was characterized both by Varoufakis and Valve as a "mutually beneficial agreement"; Valve got expert knowledge about managing the social markets the company

¹⁰⁴ For an overview of the growing interest in video game economics, as well as the history and growth of virtual economies themselves (such as *Second Life*, or *World of Warcraft*) see "A Brief History of Virtual Economy" (Nazir and Lui).

and its players had inadvertently created, and Varoufakis received access to what he would later describe as an "economist's dream" (Varoufakis in: Suderman).

Among the things Varoufakis initially studied were the complex barter-markets that sprung up for virtual goods. These are tradable items used within a game, such as guns or power-ups, that are traded for other virtual items or exchanged for real-world currencies. In one of his posts for the newly created blog Valve Economics, Varoufakis deliberated on the potential for arbitrage in the barter markets for *Team Fortress 2* (TF2). The economist in residence writes, "One of the first things I did at Valve was to put the TF2 economy under the microscope to see whether it is in equilibrium or not" (*Arbitrage and Equilibrium*). In other words, he tried to establish whether there were stable prices for a single item across the market, or if there was the possibility for arbitrage, i.e. to buy low and sell high. Neo-classical economics assumes that the possibility of arbitrage in free markets causes prices to tend towards equilibrium over time. However, these assumptions about the real world are difficult to prove:

One of the problems of living in the analogue world is that these concepts (e.g. arbitrage and equilibrium) are extremely hard to pin down. No one has enough information on how actual prices diverge from their 'equilibrium' level so as to be able to measure, or to visualize, the potential for arbitrage. All we can do is guess what it might be. (Varoufakis, *Arbitrage and Equilibrium*)

The lack of information, however, is not the case in Valve's digital economy. With the help of Valve's video-game distribution platform *Steam*, Varoufakis was able to compile detailed graphs about the arbitrage potential over time, or what "no economist can

compile [...] for the 'real economy'" showing, among other things, a huge and continuous potential for arbitrage in *TF2*'s barter market (*Arbitrage and Equilibrium*).

While these digital markets proved to be interesting economic phenomena in themselves, for Varoufakis they were far more than an alternatively-formulated problem to solve. Rather, he came to recognize such virtual markets as a testing ground for more fundamental economic concerns. As Varoufakis later said in an interview:

We economists are very much disposed toward our models, and our models assume that economic choices converge very quickly toward some kind of equilibrium where demand equals supply and where prices tend to their natural level and so on and so forth. Well, that's not how the real world works. We should have known that. In the video game world it's quite astonishing to watch. Quickly, collective aggregate behavior converges at equilibrium and then disequilibrates itself. Then some other equilibrium comes and then goes away. It's the speed and the irregularity of behavior around some equilibrium and the speed with which new equilibria are being formed. (Varoufakis in: Suderman)

Varoufakis' economic expertise did not simply solve video-game problems, nor did videogames' problems simply become relevant for economics. Rather, the very inquiry into this virtual market surprisingly and dramatically reflected on essential economic questions the kind of questions that the crisis had also made relevant. What the academically trained economist was able to study empirically, in real time, were neo-classic theories presented as factual to generations of economists and MBA students. Varoufakis' account is remarkable, and his personal journey—from initial excitement, to compiling the arbitrage potential for a market, to questioning orthodox economies, and finally, turning into a staunch and outspoken critic—is instructive. As he later refused to call the mainstream academic form of economics a "science," but a kind of "mathematical astrology," or "a cult," (Parker) it is even more remarkable that other economists reached similar conclusions about fundamental economic assumptions in analyzing virtual economies.

The (perhaps counterintuitive) scientific attractiveness of digital games, outside of the explicit and external barter markets Varoufakis first analyzed, becomes clearer when examining the phenomenon of so-called massive multiplayer online games (MMOs) like *World of Warcraft, Second Life* or indeed *EVE Online*. While the content of these games seems to have little to do with the non-virtual world or economics, the sheer availability of data in an environment where everything is digital and leaves a digital trail, grants a researcher unprecedented access to information about transactions, behavior, and markets. The economic complexities MMO's present is what led video game companies to reach out to economists.

The first video game company to hire an in-house economist was the Icelandic developer CCP games (Crowd Control Productions), who successfully recruited academic economist Eyjólfur Guðmundsson in 2007 to manage the virtual currency in their MMO *EVE Online*. What Guðmundsson oversaw during his tenure is a virtual economy that today is comprised of about 500,000 players and whose market depth is estimated at 18 million USD. By the time Guðmundsson left CCP games in 2014 to return to the university, he professed to have learned some virtual "lessons," that he was "itching to apply" to the academic study of a post-economic-meltdown world (Jack). Similarly to Varoufakis, Guðmundsson stated, "The virtual universe with its hundreds of thousands of

players is an economic petri-dish in which the operation of markets can be observed with

a clarity impossible in the real world" (Guðmundsson in: Vallance).

Guðmundsson's and Varoufakis' observations about the critical potential of the virtual world of MMO's once more bring to mind Foucault's definition of heterotopia as "counter-sites" and "effectively enacted utopia," reconsidered through Kluge (24). Virtual worlds, understood as "other spaces," are indeed a kind of walk-in utopia. Unlike the brothels, or religious colonies, which Foucault lists as examples, virtual worlds are a nonplace in the physical world. The heterotopic virtual world and the real world are linked in terms of Foucault's sixth principle of his heterotopology, by the function they perform in a society. As both economists would probably agree, virtual worlds are a "space of illusion that exposes every real space [...] as still more illusory" (Foucault 27). This exposure becomes literal, considering the supposed economic laws of the real world Guðmundsson and Varoufakis saw questioned by the virtual, as products of imagination robbed of their empirical foundation. However, designers and players often attempt to design and enact these virtual worlds as more than illusions, as perfecting the real space, generating what Foucault would call "heterotopias of compensation" (Foucault 27). In this regard Guðmundsson's own heterotopic petri-dish is worth a closer look.

EVE Online was originally launched in 2003, and on first sight appears to be a space simulation with a classic mixture of planet mining, industry building and space combat, where thousands of live players try to obliterate each other's ships in spectacular fashion. Since the game's currency is convertible into real world money, the game

routinely makes headlines for the mind-boggling amounts of real-world-equivalent currency destroyed in its virtual wars.¹⁰⁵

A closer look at the virtual universe reveals that combat comprises only a small fraction of the activities players engage in. In fact, some space citizen might never set foot in a combat ship, instead spending their in-game time exclusively as miners or traders, or as employees or managers of virtual companies. Rather than fast-paced combat, economy and politics take central stage in the vast open world of *EVE*, a game that prides itself in its "community-made" and "player-driven" content and where players band together in vast alliances of thousands of players. This means that the programmers and designers have created a game world (or rather universe) that is merely a stage set for the players, allowing for as much emergent play and free player interaction as possible. Thus, referring back to our discussion of Frasca in Chapter III, *EVE Online* is a close example for "paida" over "ludus," or a game that more closely resembles an elaborate game of children's make-believe, rather than a match of chess or poker (Frasca 230).

This difference, and its consequences for the analysis of such a game in regard to the central inquiry of this chapter, become more apparent in a comparison of *Offworld Trading Company* and *EVE*. At the most general level, setting and framing are about the competition over scare resources in space, and within this scenario seem to forward certain ideas about liberal economics. However, in terms of their mechanics and core design, the two games are on opposite ends of the spectrum (paida vs. ludus). In contrast

¹⁰⁵ E.g. the 2014 "bloodbath of B-R5RB" in which an USD equivalent of approximately 330'000 dollars in resource were destroyed in just 21 hours (see e.g. Pitcher; Moore), another link between the heterotopic space and real space that attests to its disconcerting reality.

to *OTC*, where a match produces winners and losers before the game resets, *EVE* does not state any explicit winning conditions and its world is permanent. While players meet their demise, restart, win and lose fortunes in a single sitting, the game does not end. *EVE,* as an MMO, offers its players a persistent game world that continues and evolves over time, whether individual players are logged in or not. *EVE*'s universe, rather than a framework for clearly and temporally-defined competition between players, is referred to in video games as a sandbox.

As argued in Chapter III, *Offworld Trading Company*'s mixture of creative play and determinative goal, advances a simulational critique of neo-classical and neo-liberal economic ideas, and in a sense, enforces this critique in stating its winning conditions (monopolize). While any description or journalistic account of *EVE*'s open world will identify a similar extreme of liberal economics at work, the virtual economies of *EVE* and *OTC* are generated by very different means. In its conceptual design, *EVE* effectively creates the kind of radical liberalism than *OTC* merely attempts to represent. Absent strict rules regarding economy in the game, players are free to conduct their affairs as they please. In this sense, *EVE Online* pushes the consequences of monopolization and asymmetry, apparent in *OTC*, a step further: where no restrictions are in place in the competition over scarce resources, crises, even cycles of military escalation, colonialization, and war seem logical and inevitable.

However, if the above description is how the universe of EVE has played out over time,¹⁰⁶ the cutthroat liberal economy of the virtual universe is also where EVE must be understood to be radically different from OTC. The world of EVE is as much the creation of its designers, programmers, etc. as it is created by its players. If the stage set by CCP games is arguably liberal by design (everything, or as much as possible is allowed), the game does not enforce any economic beliefs or a particular economic system. Indeed, players are free to enact their own utopia within the heterotopic space of the virtual; in this sense, EVE houses a multitude of heterotopias. Players are free to collectively enact liberalism, as they create their own (necessary) conventions and rules of trade, or free to resist this scenario and form socialist enclaves, or even play as anarchist collectives. An example of this radical freedom is the founding of various in-game economic enterprises, from mining companies to full-fledged financial start-ups.¹⁰⁷ With no in-game rules to enforce financial laws, such enterprises, and even player-operated banks that store currency, are based on trust and the quasi-governmental or policy structures players collectively enact.

An open-game world like *EVE* does not offer itself to the same kind of analysis as *OTC*. Rather than a fully describable object of art or entertainment, *EVE Online* is an ever- evolving, collectively-created alternative world. A world that indeed requires an economist like Guðmundsson to kept track of what he described as the "largest

¹⁰⁶ The world and events of EVE have no only produced their own novels (Gonzales) but also historians, such as the *Empires of Eve (Massmarket): A History of the Great Wars* chronicling 10 years of *EVE Online* (Groen).

¹⁰⁷ In fact, *EVE Online* is famous to have produced the world's first IPO in an MMO, the ISS Marginis in 2005. One of the games early alliances, Interstellar Starbase Syndicate, came forward with the ambitious plan to build a neutral trading outpost. Shares in the outpost were sold to fund its construction, with dividends paid out from the station's later trade tax revenue (Drain).

interconnected virtual economy on this earth." Thus, rather than a mere economic advisor, Guðmundsson oversaw an entire team of economists, as combination of "national economics institute, statistics office and central bank"(Gilbert). The central bank fills a subtler function in EVE than its real-world counterpart, as it merely monitors and adjusts the volume of ISK (the games' currency), to prevent inflation and criminal activity (e.g. money laundering through *EVE*). The paucity of money policy on the design side is again intentional, allowing for as much player control as possible. Guðmundsson describes the relevance of EVE style laissez-faire economics in the real world, as follows:

It has sharpened my view on neoclassical economics, at the same time I do see the faults of that system. Personally I am very fond of the Scandinavian model, a good combination of healthy competition whereas the government helps those in need. (Guðmundsson gtd in: Vallance)

Within the fiction of a video game, Guðmundsson and Varoufakis were able to empirically test fundamental hypotheses underlying contemporary economics, related to actors and markets in the real world. Yet, aside from the examples (a barter market on the steam platform, and a space economy), the games' form, as an imaginative practice of creative destructions which departs from the fictional, has played a pivotal role in activating the imagination of economists. If Guðmundsson initially thought of EVE as "a giant social and economic experiment," he came to understand the game as "an alternative universe that is just out there and needs to be studied like any other universe" (Guðmundsson qtd in: Gilbert). Thus, while players pursue their own interests, competing, cooperating, and trading, in a world that on its face has little to do with the non-virtual world, they still partake in fundamental economic processes. In an unexpected way, the form of fictional play,

virtually independent of its content, performs a kind of cognitive estrangement from the status quo. Per Levitas, to the point that the collectively-imagined alternative world within a videogame sparked the critique of that what is, and the urge to move to what ought to be.

Both Varoufakis' and Guðmundsson's work with video games are striking examples of how cultural production matters not only communicatively (e.g. in providing imagery and reinforcing certain stereo-types, like Masters of the Universe), or critically (e.g. in denouncing financial abstraction). Their work also shows how fiction, and aesthetic and explicitly playful instances of cultural production, can contribute to the exploration of alternatives, to activate imagination and (for *EVE* quite literally) serve as a laboratory for new and alternative ideas. The digital trading of virtual goods and a multiplayer space opera have fueled the imagination of two economists who independently and repeatedly professed that the study of video games has changed and shaken their economic convictions (Suderman; Vallance). Engaging with aestheticcultural production led to a more critical stance towards neo-classical orthodoxy for both economists, opening new paths to tangible innovation in economics as well as a more critical stance toward the fundamental methodology and empiricism of the discipline in general.

The takeaway from his excursion into virtual economies is, as Varoufakis insists, that "economic theory has come to a dead end — the last real breakthroughs were in the 1960s." And he suggests: "the future is going to be in experimentation and simulation — and video game communities give us a chance to do all that" (Varoufakis qtd in: Plumer). Regarding Varoufakis, who's work reaches beyond academia, it is maybe not too

farfetched to suggest, that his unorthodox approach to markets and finance and his negotiation with the Troika as Greek Minister of Finance during Euro-Crisis has not last been informed by the critical insights he gained from virtual economies ("Video Games Could Save the Greek Economy").

If the examples discussed in this section also make obvious what we cannot expect from aesthetic-cultural production or video games, i.e. blueprints and roadmaps for a better world (the emerging cutthroat liberalism of *EVE Online* is arguably the opposite of an utopia), then the cultural practice of imagining, participating in, even shaping alternative worlds, has meaningful implications for a crisis of imagination, and sparks impulses that do not stay confined within the fictional, or virtual. It is hopeful to see such innovation working towards mainstream economics; this might signal the beginning of a much-needed return to basics in the economic sciences. If utopia was expelled from the economic sciences to establish an objective science tasked with mathematically measuring an objective reality, then video game economies might be starting point for the exploration of alternatives, for an imaginative practice of creative destruction.

2.3. From Knowledge and Skills to Play as a Utopian Practice

The remaining question is what (apart from analyzing video game economies from up top and intervening in these economies as a designer or economic advisor) playing games could signify for cultural production and utopia regarding a larger crisis of imagination. In other words, the question is how, apart from explicit research from an omniscient position, could playing and participating in a game like *EVE Online* have the potential to enact change on the level of the individual player, or the society in which she plays.

On a more modest level, games can (by design or inadvertently) teach practical skills to their players, such as cost benefit analysis in *OTC*, or even impart empathy as is the case in *Layoff*. What comes to mind regarding finance and the crisis are the innumerous educational games aimed at various age groups, which are designed to build financial knowledge and teach concrete financial skills. These games are often sponsored by local and national governments as an educational effort to promote financial literacy and/or by private sector banks as part of an advertising campaign to encourage saving and investment (e.g. *Stock Market Game*).

Remarkably, the uneasy alliances between governments and the financial sector were conceived in direct response to the Global Financial Crisis. These collaborative projects address a suddenly, widely-recognized and alarming degree of financial illiteracy in the general public, in combination with high private household debt (see e.g. Harnisch; Bucher-Koenen and Lusardi). In terms of the scope and reach of programs that offer educational resources in combination with fictional games, examples range from global initiatives like *Practical Money Skills* (practicalmoneyskills.com), an effort sponsored by VISA in partnership with national and state governments around the world, to the local efforts of the Finanzführerschein (а "financial driver's license," www.finanzfuehrerschein.de) promoted by the city of Essen and the state of Nordrhein-Westfalen in Germany.

Other examples aiming at educating the public in larger financial issues, beyond consumer banking and credit, include the public relations efforts of the Federal Reserve

in the US. Given the public's notoriously low understanding of issues of financial policy, the Federal Reserve Bank in San Francisco has deployed an elaborate and ambitious game as a central piece of its educational materials offered to the public. In *Chair the Fed*, the player is named Chairman of the Federal Reserve and asked to pay attention to macro-economic indicators and news headlines, as he adjusts the interest rate in a simulated economy, to keeping unemployment and inflation within certain objectives. The game's goal is to illustrate or teach the primary functions a central bank performs for the public and the challenges it faces; in the project's own words, "to learn how monetary policy works by taking charge of a simulated economy"(*Chair the Fed*).

In general, the games offered by these educational programs are modest in scope and while they might quite effectively practice financial skills or teach about financial issues, these games do not, or rarely use, play as an open, critical, let alone exploratory or imaginative practice. However, on an entirely different scale than economic simulations and war games, these efforts speak to opening minds to the potential of games, play and simulation as a form for reaching a wider audience on crucial economic issues. In other words, in the search for a response to the Global Financial Crisis (and in this case, the crisis in financial literacy), fictional play has become a powerful tool and points to ways in which gaming is not simply used for escapism or indoctrination, but to experiment and collaborate.

The impulse that points beyond the didactic design of these programs and what could be a solely illustrative use of games suggests the utopian potential of certain forms of play. It is what I have called video games' media-specific utopian impulse to collectively create possible worlds. In considering games as laboratory for collective imagination of alternative worlds, we can begin to envision play's contribution, in aesthetic-cultural production, to a creative destruction; this process addresses the dissatisfaction with the present, and in experimenting with concrete alternatives, prepares a new kind of critical subjectivity. I propose in the following that utopian play has the potential to fulfill the ontological aspect of Levitas' utopian method, i.e. players' experimentation with alternative worlds and societies prepares a subjectivity that understands the world as fundamentally changeable.

I continue here the line of thought where I left it with my critique of both Layoff (understood as an indoctrination of the player into the imaginary of blame) and the Stock Market Game (as a preparation of financial subjects). I argue that playing video games the process of acquiring and understanding a game's simulated world—impacts a player's view of his/her own life world; how a game's procedurally-generated representation enables a player to critically engage with his or her own representations of the world. While a book or a film might similarly prompt a reader's or viewer's modification of views, either in agreement or resistance to the narrative representation, simulation and interactivity allow a player to learn by engaging with a game system (to be convinced or to contest the claims of a simulation about reality), and also to explore and test one's preconceptions and hypotheses in experimenting with the possibilities and limitations of a simulation. To follow lan Bogost's suggestion: a game allows a player to compare the rules that structure a simulation with the implicit or explicit rules that organize the real world. Ted Friedman has called this "cognitive mapping," a term he borrowed from Fredric Jameson, to suggest that:

Playing a simulation means to become engrossed in a systemic logic that connects a myriad array of causes and effects. The simulation acts as a kind of map-in-time, visually and viscerally (as the player internalizes the game's logic) demonstrating

the repercussions and interrelatedness of many different social decisions. (86) This description, for example in *Offworld Trading Company*, might serve as a corrective to a free-market narrative, where one system contradicts the other; this notion extends to the idea of collectively creating alternative worlds and seeing this imaginative practice not only as escapist pastime, but in response to a sense of the urgent need for alternatives.

A first piece of evidence is the emerging cultural interest in this form of play, i.e. the active and collective creation of walk-in utopias, rather than mere participation in alternative worlds, especially in the popularity of certain games with framings of survival and crafting simulations in the crisis years. If the pervasiveness of zombies and other monsters in entertainment point to a society that cannot directly confront its daemons (Wolff), the trend towards crafting and survival games in current years suggests a cultural desire for the very act of create economies and societies from the ground up. In this sense, the game forms of an MMO or online sandbox might not only be attractive as the latest technological developments and player possibilities in terms of scope, size and complexity of virtual worlds, but because the worlds they open correspond to a more conscious or inadvertent interest of players in beginnings. In other words, the premise of these games is reminiscent of Robinson Crusoe economics, in which a player starts with limited resources and seeks to address his needs and establish himself in an initially hostile world. However, opposed to the linear progression of such an economy in classical economics, the dynamic simulations and the inclusion of multiple players do not lead to

predefined and predefined results. Rather, players are free to compete or cooperate, to immediately change the world they virtually inhabit. Thus, against the backdrop of one's powerlessness towards the world and its crises, confronted always with a sense of an already-determined future, the commercial and critical success of such titles might delineate a larger search for alternatives within the relative safe space of virtual fiction. Whether players participate in and build a fantasy Middle Ages society in *Reign of Kings* or *Conan Exiles*, or manage an entire settlement of fantasy creatures in *Dwarf Fortress*, or establish intricate space colonies in *Rimworld*, what players explore is more than the individual and predictable fantasy scenarios but exploration itself as an imaginative practice.

To conclude, like the analyses of economists like Varoufakis and Guðmundsson, but on the level of an individual player, the imaginative labor within such an alternative world does not remain in the virtual sphere, but can change a player's critical understanding of the world, or even their political behavior. A study of civic engagement of U.S.-players who participate in clans in MMOs suggests that such players were more politically engaged (were more likely to be registered voters compared to the general population), and reported relatively high levels of feeling a "responsibility to be civically engaged" in the real world (Friedman et al. 188). Discussing the implications of the study for citizenship education, the authors observed where the power of building and participating in a virtual community lies in comparison to education:

It is not enough to simply cover terms, dates, places and people when teaching how to become an effective citizen. Rather it is important for students to actually experience being a citizen and to have opportunities to practice these skills, and one way this could take place is through participation in a MMORPG [...], (Friedman et al. 188)

Similarly, we can propose that it is not enough to learn and read about utopia or a utopian method; what these games enable is participation and practice of collective imagination. Players, on their own terms, co-create a place where another world is always possible—only a few keystrokes or mouse clicks away. While the creation and accessibility of alternative worlds might enable escapism, or while an online utopia might serve a purely compensatory purpose, the imaginative labor of millions at play could be a vast laboratory for cultural production to train or condition the imagination of a generation, attuned to games and playing as a meaningful and critical in unexpected, productive ways. Thus, with Foucault's understanding of heterotopias performing a critical function in relation to "the space that remains," and similar to Guðmundsson's observation as a social scientist, these cultural, social, political and economic experiments must be taken seriously as "alternative worlds"—not as mere quarry for data, not solely as the other space, but as separate realms that allow a critical reflection on reality, places of active and potentially transformative forms of social imagination that will not stay confined to the virtual.

Dever-Witheford and Peuter have argued in general and in vaguely Marxist terms, that this kind of play is a profoundly collective activity that stands in a "contradictory relationship to corporate control of game properties" (222). While admitting that this form of player-co-production also allows for exploiting the players as content creators, the authors suggest that it also leads to "a socialization of the means of production" (222). Finally, aware of the dangers of escapism, Dever-Whitford and Peuter argue: Rather than swallowing the utopian potential of digital play's possible worlds, commercial game culture might also simultaneously be incubating a culture of system-simulating, self-organized, cooperatively producing hacker-players capable of looking to a future beyond the edge of the global market. (229)

In a time of concurrent crises of capitalism and of imagination, such a look beyond "the edge," is more than ever needed. However, the "utopian potential" does not consist of the literal creation of a social utopia (Marxist or otherwise), but in considering play as a small part of a utopian method; an imaginative practice of creative destruction, of altering our ways of seeing the world and, in the process, changing ourselves and our actions in it.

3. Conclusion - An Ontology of Imagination

This chapter investigated the future, the paths ahead and the processes that lead to it. Between the future as menace, and the future as what ought to be, the ideas and discussions focused on imagination as a social force of critique and change, the possibility and impossibility of utopia in the 21st century, and finally, the analysis of the potential of aesthetic-cultural production, of the fictional and artistic as imaginative practices of creative destruction. If throughout all my chapters my analysis has moved from the center of cultural production and a dominant imaginary of blame to the periphery of avantgardistic critique of economic formalism, some of the ideas and projects discussed in this chapter might at first (and for now) be even further from the mainstream. But as I have shown, as a critique of the status quo, as a critical form and an imaginative

practice experienced by millions of players around the world, these examples show a larger ambition; some have already started to work their way into the center of social imagination, and out of a narrowly-defined artistic, escapist, or compensatory sphere.

Further, as I have demonstrated, the argument is less concerned with concrete or isolated objects of art, individual cultural artifacts, or their respective popularity. Rather, I engage with imagination as such: with forms, with modes of thinking, creating, and engaging with dominant imaginaries as part of a larger social imagination at the core of cultural production, central to larger historical processes of creative destruction. Finally, this is not an argument for art as an instruction manual, or as an alternative to political discourse or economic inquiry. However, artistic expression is part of a larger cultural production, and can act as a privileged site to study these forms; imagination can find expression and application beyond the fictional and beyond what is deemed impossible or without alternative.

Creative destruction, as a description of the competition of imaginaries of economic order, also expresses the potential for meaningful change. However, if the concept in its original form has served to suggest the necessary end of capitalism, or been co-opted to describe the necessary sacrifices on the road to a neo-liberal utopia of equality and equilibrium, it is even less clear if such teleological, or optimistic visions can hold if the term is used to describe the simultaneity of economic crises and fundamental change. In the meantime, and given the larger picture, the cyclical sequence of liberalization, crisis and reregulation, which has described economic policy since the mid-19th century, seems to suggest otherwise. The temporal contracting of this very cycle, in the worst crisis since the Great Depression, leaves little hope for any quick or radical

evolution. To put it differently, while economies and markets have evolved significantly in order of scale and interconectness, the magnitude, reach and destructive potential of large crises have increased, while ways of understanding, engaging with, and governing economic affairs appear stuck in the same fundamental debates of the 19th century.

However, absent any larger radical changes in the socio-economic sphere, the forms of imagination and imaginative practices that these examples present constitutes the condition of the possibility of a formation of alternatives to a still-dominant neo-liberal imaginary. Larger geo-political shifts suggest the continued dissolving of previously stable orders, international as well as social. However, these unsettlements, rather than a dystopian turn (an imminent end of international cooperation, the fear of further social inequality and the increasing unfeasibility of meaningful ecological policies) not only suggest that utopian work as critique and construction is more needed than ever, but also more than ever possible.

As I have shown in this chapter, the imaginative practices under investigation are not limited, or exclusive to, art as a separate, independent sphere. Rather, they enact a kind of creative destruction that breaks the separations between art and other spheres and suggests new relationships between the supposedly purely economic and everything else. In the juxtaposition of a crisis of capitalism and a crisis of imagination, artistic production as an invitation to pluralism (Kluge), or as an experimental space for alternatives (virtual economies), works to make hegemonic economic formations visible, not solely as a political economy, but as a cultural political economy that remains open for change. For one, the imaginative practices represented in the projects discussed suggest an ontological function, in the sense of Levitas' utopian method; the hope that exploring alternative ways of seeing the world develops a different kind of subjectivity altogether. In his Essay "Revolution in Reverse" David Graeber differentiates between two modes of understanding the world: a "political ontology of violence" and a "political ontology of the imagination." If the first corresponds to a conservative view that the world is and should be unchangeable, the second recognizes its radical constructedness. Graeber entertains a critical interaction of art and social activism:

If artistic avant gardes and social revolutionaries have felt a peculiar affinity for one another (...), borrowing each other's languages and ideas, it appears to have been insofar as both have remained committed to the idea that the ultimate, hidden truth of the world is that it is something that we make, and, could just as easily make differently. (47)

These imaginative practices, following Graber's terminology, might indeed be indispensable in bringing about a political ontology of the imagination. An ontology in which utopia is not a fantastical or dangerous concept, but part of everyday and collective practice of creative destruction, of confronting the impossible with countless possibilities. Finally, I hope that this investigation makes productive affinities between activism and art visible for a reader, and contributes to a continued and future reciprocal borrowing of languages and ideas, maybe as an alternative or anti-economy of imaginative practices a wildly free and heterogeneous barter market, whose only regulatory force is the urgency of change.

Afterword

Ten years after the collapse of Lehman brothers, disagreement persists over the causes, even the exact events of the Global Financial Crisis; certain themes, tropes and narratives have emerged as dominant on all sides of the discussion. Crisis descriptors include corrupt, money-driven bankers, traders, and brokers, the scandals, and the rise and fall of disconcertingly powerful financial institutions. Other descriptors include the ominous and abstract nature of finance, its incomprehensibility for laypeople, and the mysterious quasi-magical forces at work in the markets. The opposing view of finance promises that in the hands of financial wizards, the markets can be controlled and bent to the will of men via mathematical description or algorithms. Finally, given people's perplexity at what transpired, these narratives concern the unsettlingly limited general knowledge about finance, and the inability to predict or explain what occurred in 2007/2008, even in the economic sciences.

What these descriptions have in common is a sense of a loss of control by the greater public, a sense of the concentration of power over commanding heights and that the meaning of economic and financial affairs is determined by others. These others are either crooks or experts, yet always the few, the global elites in Berlin, in London, Washington, and elsewhere. Unsurprisingly, more often than not, the artistic treatments of the Global Financial Crisis have furthered the perception that for the vast majority the so-called financial crisis has not been experienced as a crisis (that demands decisions and opens possibilities) but as a disaster or catastrophe, whether manmade (i.e. by greedy bankers or incompetent politicians) or beyond the control of men (i.e. by self-determined, unpredictable markets) struck from far away. Further, it is no coincidence

that the new wave of populist parties, with their promises of law and order, have positioned themselves against globalization, or global elites. Opposed to this sense of powerlessness, and contrary to many backwards-looking policy proposals, is the dire need to envision alternative futures. What the crisis and its fallout have also revealed is that we face issues that cannot be addressed with a return to more nationalism and less international cooperation.

At time of writing these lines, a decade after the near collapse of the global financial system, the financial markets are soaring to new heights, while the end of the shared currency looms over Europe. Unresolved government debt coincides with only moderate signs of recovery in the so- called real economies. Talk of a new recession looms in politics and media, while the Great Recession is far from over for most. We are reminded that the Global Financial Crisis has not been limited to finance. Certainly, there is still much to critique, e.g. in how financial accumulation outstrips more immediately productive forms of accumulation, and how certain forms of finance do not serve economic development, or a society at large. However, the larger systemic issues revealed by the crisis confront more radical questions than the need for better financial regulation, such as the inability of capitalism(s) at large to avoid devastating crises and the inability of capitalism(s) to address ecology and social justice.

As this dissertation project comes to an end, some of the pressing questions remain unanswered and some of the hopeful propositions I raised might seem to face a dark outlook. Is there an ongoing, fundamental reassessment of our economic knowledge and practices, akin to changes in the last century after large economic crises (for better or worse)? Is there a genuine willingness in the old guards of economic sciences and international policy to reform neo-liberal orthodoxy, or does the believe prevail that a quiet and orderly return to the pre-crisis years is still possible? Inversely, and if neoliberalism turns out to be impossible to reform, will the result be further fractioning of international cooperation? Is the return of nationalism, with its tariff and trade wars (and its decisively less economic, internal and international conflicts) the real creative destruction the crisis will bring about on a planetary scale?

Having spent the last half-decade on this project and having lived and breathed the above questions, I believe that the answers and the fate of the neo-liberalized world still hang in the balance. However, for the Global Financial Crisis, critical development has reached a point where decisions need to be made—they can no longer be sidestepped or delayed. As pressure on the neo-liberal world order increases, continuation of the old has become unfeasible; it is up to us not to wait, but as scholars, as citizens and activists, we must pick up the pen, the ballot, and if needed, the pitchfork, to help bring about the world we would like to inhabit in the future.

As an academic, my hope is that the above study provides more than just an original perspective on the Global Financial Crisis. Rather than an alternative description of an interesting problem in economics, or an academic inventory of the state of literature, film, and games about the Global Financial Crisis, I hope my work plays a small part in the much-needed theoretical renewal across disciplinary divides. Coming to terms with my object of study has necessitated that I step out of disciplinary comfort zones, and I hope the result contributes to setting aside qualms about everything economic in the humanities, and in putting social sciences (back) into contact with the cultural embedding of their objects.

Undoubtedly, much still needs to be done; risk and experiments lie ahead. Renewing and recalibrating our theoretical and critical instruments is a first step in working through the larger epistemological crisis. Scholars must resist falling back on older theoretical paradigms and divides in face of the unknown, confront and denaturalize neo-liberal assumption, come to terms with a seemingly independent, unaccountable immateriality of financial markets, and arrive at a better understanding of the critical interplay of culture, politics and economics—all have consequences that reach far beyond academic debates, departmental divides, and university walls.

For my own contribution, I hope to impart a better sense how art and fiction can be more than distraction or entertainment, more than a warehouse for rhetorical forms and convincing images, more than a semantically unique descriptor of cultures and times. Rather, as I have argued, aesthetic-cultural production is an active participant in larger social, political and economic transformations, and presents a special site for a renewal of social imagination. Put simply, if the only way out of a crisis is in the conditional tense, then art and fiction have classically functioned as an expression of individual and social ambitions that reach beyond that what existed in the past and what is possible in the present. The discourse of art can anticipate and articulate possibilities and possible worlds. Even when the absence of alternative futures is assured, or imagining is made dangerous, the utopian impulse in art demonstrates that, between the street and the trading floor—it's not *just* the economy, stupid.

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