

---

This item was submitted to [Loughborough's Research Repository](#) by the author.  
Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

## On the reflexivity of crises: lessons from critical theory and systems theory

PLEASE CITE THE PUBLISHED VERSION

<http://dx.doi.org/10.1177/1368431016668869>

PUBLISHER

SAGE Publications / © The Authors

VERSION

AM (Accepted Manuscript)

PUBLISHER STATEMENT

This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at:  
<https://creativecommons.org/licenses/by-nc-nd/4.0/>

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Cordero, Rodrigo, A. Mascareno, and Daniel Chernilo. 2019. "On the Reflexivity of Crises: Lessons from Critical Theory and Systems Theory". figshare. <https://hdl.handle.net/2134/22422>.

## On the Reflexivity of Crises: Lessons from Critical and Systems Theory

### Introduction

After the events of the financial crisis of 2008, social and political theorists have sought to reinvigorate the theorizing of crisis phenomena in contemporary world society (Author 1a; Fraser, 2014; Jessop, Young & Scherrer, 2015; Kjaer, Teubner and Febbrajo, 2011; Kjaer and Olsen, 2016; Author 2 et al; Mckenzie, 2011; Milstein, 2015). Despite customary criticisms on the ubiquity of the concept of crisis in public debate and on the historicist commitments of crisis narratives in social analysis (Roitman, 2014), we contend that crises remain a distinctive structural feature of modern societies as much as a rich source of knowledge of the dynamics of social life. Based on this claim, this paper seeks to reconstruct and compare the contributions to our understandings of crises made by two sociological traditions: critical theory and systems theory. Our main argument is that, notwithstanding important differences, both traditions concur in conceptualizing crises as *reflexive mechanisms*. Our view is that critical theory and systems theory are both pivotal in developing *conceptual, methodological* and *normative* resources for an approach that addresses crises as a *form of self-reproduction* of social systems as much as a *form of engagement* with the complexities and effects of such processes of reproduction.<sup>1</sup>

On the one hand, critical theorists emphasize crisis tendencies as manifestations of the *structural contradictions* of capitalist development and its “imperative of accumulation”, whose abstract logic overflows both technical and democratic control. Here crisis is an object of concern not only due to the negative impact that systemic problems have on everyday experience, but also because normative responses themselves may trigger social-cultural pathologies and the normalization of their consequences (Author 1b). On the other hand, systems theorists understand crises as a consequence of the *compulsive autopoietic growth* of social systems and their “imperative of connectivity”, which may lead to the non-reflexive reproduction of previously successful activities. Here crisis is an object of concern insofar as the compulsive repetition and expansion of “more of the same” prevents social communication from variation and instead produces indifference towards its wider societal effects (Author 2 et al).

Even if the competing social ontologies that underpin critical theory (human intersubjectivity) and system theory (social complexity) underscore the difficulties of trying to create a theoretical synthesis between these two traditions (Fischer-Lescano, 2012, 2013; Author 2 and Author 3), cross fertilization is justified by the fact that both theories conceptualize societal dynamics in terms of *contradictions and paradoxes that eventually lead to crisis situations*. Within this general framework, we argue that both *human reflexivity* and *systemic reflexivity*

can be understood as complementary social mechanisms of dealing with crises in a dual sense: on the one hand, they are a mean to account for the self-destructive tendencies of social dynamics; on the other hand, they are a strategy for designing responses that seek to set contention limits over autonomized social processes.

The notion of crisis here depends on a conceptualization of society as a domain of relations whose unity is never achieved through a coherent or stable principle. Instead, contradictory imperatives and structural inconsistencies remain in a state of latency in the working of social institutions: differently put, social life reproduces itself on condition of the impossibility of achieving a definite state of perfect harmony (Author 1a). Crises are neither a mechanical effect of predetermined conditions nor the definitive cause of further developments; rather, they offer an exceptional, contradictory and paradoxical opportunity for both human subjects and social systems to reflexively come to terms with the social products of past and current human practices and systemic operations.

The paper is organized in three parts. The first two reconstruct the concept of crisis in critical theory and systems theory respectively. The goal of this reconstruction is to show that for either tradition crisis situations call for reflexive mechanisms in a threefold sense. Firstly, conceptually, crises are the *mode of appearance* of structural contradictions and paradoxes: they allow us to reflect on the unobserved condition of excess through which a social system produces its

**Comment [DC1]:** I am still not sure this is the right formulation! Both side are too systemic for me and human reflexivity seems to get lost...

own existence by also challenging, damaging and destructing some of its preconditions. Secondly, methodologically, crisis is a means by which society turns itself into an *object of reflection*, thereby requiring a thoughtful observation of the objective conditions of crises in combination with actors' experiences in a social situation. Thirdly, normatively, crisis is a condition that stimulates *social interventions* as a way of dealing with obstacles and complex expectations about lived experience; it forces actors *and* systems to manage temporary solutions that eventually will reinstate disappointed expectations and reproduce social order under new forms.

The third and last section brings these levels of analysis together. It builds on the synergies between critical theory and systems theory by focusing explicitly on the role of reflexivity and, in so doing, we place our discussion of crises in relation to the more recent "reflexive turn" in contemporary sociology. We finish by arguing for a de-centered understanding of crisis phenomena that treats them as *structural* dynamics of self-reproduction and open-ended processes of *normative* self-transformation.

## **1. Crisis in Critical Theory**

In the post-Hegelian tradition of critical theory, crises play a fundamental role in the 'diagnosis' of systemic problems and the critical self-understanding of capitalist modernity. Despite the important differences that exist between authors who may be identified under this label (i.e., Karl Marx, Theodor Adorno, Jürgen Habermas, Axel Honneth, among others), most of them coincide in that 'the goal at which [critical theory] aims, namely the rational state of society, is forced upon [it] by present distress' (Horkheimer, 1982: 216-17). Put differently, this means that the empirical observation of social crises is a fundamental condition for both the conceptual explanation of processes of societal reproduction and the normative assessment of the social conditions that block and enable human autonomy and dignity.

Conceptually, crises are understood as 'immanent' to the unruly tendencies in a society organized around market principles and which transform all social relations into commodity-exchange relations: the capitalist logic of accumulation inevitably leads to the compulsive expansion of productive forces through increase of labor power, division of labor, changes in regulations, technological innovations, etc. (Clark, 1994; Polanyi, 2001). Crises are thus *structural features*, rather than cyclical 'accidents' in the otherwise normal operation of the capitalist mode of production: crises are neither caused by the moral wickedness of single individuals (e.g., the greed of bankers in a financial crisis) nor can they be definitively

overcome by the administrative means of State policy measures (Brunkhorst, 2011; Marx, 1969; Habermas, 1988). Crises are inscribed in the very way social relations are systemically organized and, crucially, they remain invisible until the crisis breaks.

For critical social theory, crises are the *de facto* modus operandi of a society in which commodity relations prevail. First, because the capitalist logic of endless expansion leads to systemic excesses that destabilize the accumulation cycle and induce crises on a regular basis; second, because this logic entails extra-economic mechanisms (i.e., dispossession, exploitation and class divisions) that trigger a compulsive movement of transgression of capitalism's own normative principles (i.e., free, equal and fair exchange) and of all social and moral limits that may jeopardize the process of accumulation (Marx, 1976: 209, 341-4). This is why the capitalist mode of production is driven to stabilize these mechanisms in various social and cultural forms (i.e., the State, the educational system, legal frameworks), as much as to find creative alternatives to overstep what limits accumulation while reconfiguring the grammars of social life. In so doing, capitalist society is able to survive not despite but by virtue of what tears it apart (Adorno, 2008).

If this is the case, then crises become a critical moment for theoretical research, for in these moments we are in a better position to grasp the 'stuff' of which the social world is made of, how its differences and relations are created,

and how it actually works. Their outbreak would bring into sight the ‘real movement’ of capitalist development, by both *revealing* the conflicts and *magnifying* the lines of tension that exist within capitalist society. The conceptual challenge for critical theory, therefore, is dual: producing knowledge that clarifies the internal connection between capitalist accumulation (self-production of value) and crisis (disruption of the accumulation cycle) and then exploring the structural limits that capitalism transgresses in every crisis. In doing this, reflexivity becomes crucial. Since critical theory has to connect the knowledge on the objective dimension of crises with the concrete experiences of actors (the social-lived crisis), it relies on the possibility of *reflexive learning*, namely the discourse through ‘which we thematize practical validity claims that have become problematic or have been rendered problematic through institutionalized doubt, and redeem or dismiss them on the basis of arguments’ (Habermas, 1988: 15). As long as crises expose the fundamentals of society, they are a privileged evolutionary moment for reflexive learning that is discursively organized and is able to set new limits to the autonomous functioning of social systems. Crises thus elicit moments of social criticism —i.e., reflexive negation— of the self-affirmative operation of the capitalist logic of expansion and its extra-economic mechanisms of justification. This negativity not only exposes the inherent fragility of the pillars of capitalist exchange but also ‘enables reflection and deliberation: the *dissociation*, *dissolution*,



*deconstruction* and *differentiation* of concrete recognition and perception' (Brunkhorst, 2014: 18). It is from this very condition that a reflexive reconstruction 'under our terms' may actually emerge.

**Comment [DC2]:** Esto no lo borre, pero la verdad no entiendo la frase. El parrafo me parece que cierra bien con la cita de B.

Crucially, crises are not exceptional in the otherwise harmonious functioning of the social system, nor are they an unequivocal sign towards the imminent collapse of capitalism. The concept refers instead to 'a particular situation of condensation of contradictions', with its own 'rhythm' and whose outcomes cannot be a priori determined but have to be historically observed (Poulantzas, 2008: 299-300). In our view, they also have to be reflexively confronted by dealing with its double-sided structure: they are a conflictual product of immanent contradictions of capitalism *and* an opportunity for questioning and transforming the nature of social institutions, practices, and norms. In fact, Marx himself rejected the idea of formulating a general theory of social crisis and was much more interested in elucidating the *complexity* of crisis phenomena in modern societies —when 'everything seems pregnant with its contrary' (Marx, 2000: 368). We may even argue that Marx's concept of crisis does not refer to a single event but focuses instead on a threefold movement that a critical theory of society has to differentiate in social reality itself: (i) crisis as the mode of appearance of structural contradictions (i.e. the conflictual form of social relations) that reveal themselves when the accumulation cycle is severely

disrupted, (ii) crisis as the mean to manage temporary solutions to social contradictions and restore normal cycles of accumulation, and (iii) crisis as the mechanism through which capitalism reinstate, under new forms, 'the terms of the contradictions that gave rise to the crisis in the first place' (Osborne, 2010: 20). Crises are *not* fate, they are rather a *reflexive moment* for social actors to be able to put into question the norms and institutions that govern the present organization of society *because* those very conditions produce human suffering and become increasingly intolerable. This is why the *objective* manifestation of social crises should not be divorced from the *subjective* claims of justification and transformations raised by individuals and groups. Ultimately, crises are not only theoretically relevant as a means to explore the conflicts immanent in processes of social reproduction but are also normatively demanding as a means to visualize and come to terms with destructive tendencies in social institutions and practices.

At stake for critical theory, therefore, is the need to advance a way of visualizing the in-built crisis tendencies in contemporary capitalist society, the pathological dynamics these events trigger and reproduce in our forms of life, and the potentials for social transformation that crises reveal but also repress. In other words, the challenge is to reaffirm the structural value of crises but without reducing the concept to a single, all-pervasive logic of social-systemic contradictions (class-based conflicts); to determine the plurality of distinct but

interrelated crisis phenomena which circulate through different spheres with differential effects over social relations; and to explore the reflexive mechanisms that enable society and actors to mobilize resources to respond to crisis situations and manage their destructive consequences (Brunkhorst, 2014; Fraser, 2014).

Methodologically, these challenges can only be met by trying to give an empirical account of crisis tendencies themselves. At least from the early 1970s, crisis theories advanced by critical theorists became questionable as the neo-conservative and neo-liberal literature on crisis management took the lead (Eder, 1993; Offe, 1984; Foucault, 2008). It was as patent then, as it seems today, that orthodox Marxist theories of economic crises were unable to account for the complexity, scale and variety of crisis tendencies in contemporary world society. With the progressive dissolution of traditional class politics, crisis theories lost their empirical referent and focus: the capitalist expansion of material wealth coincided with the development of new forms of systemic integration and legitimation that pacified but did not eliminate social contradictions (Boltanski & Chiapello, 2007). In this vein, according to Habermas, it becomes palpable the connection between steering problems at the systemic level and problems of social integration, which not only threaten the stability and legitimacy of the political system (crisis of legitimacy) but also put considerable pressure on the cultural traditions and normative resources (Habermas, 1988: 37-40; Brunkhorst, 2006).

In this context, the empirical observation of crisis phenomena is also undermined by the assumption that processes of social reproduction in capitalist modernity are lineally correlated to the rationalization and expansion of productive-technical forces. The material constitution of self-regulated systems has always been an object of concern for critical theorists because the extension of instrumental rationality and functional imperatives (e.g., monetization and bureaucratization) is seen as concomitant with the objectification of social relations and pathological restrictions of meaningful human action. Still, as Habermas rightly argues, the expansion of markets does not generate *ipso facto* reification and domination effects in individual consciousness or social life as a whole; there are some societal spaces that remain immune to systemic colonization. As the rationalization of capitalist societies also consists in the cultural differentiation of domains of knowledge, moral norms, and expressive practices, there is a wider range of options and learning capacities available for individuals and collectives in everyday action (Habermas, 1991a: 372-99, 1991b: 382-3). In this vein, human and collective reflexivity are crucial for bringing these potentialities into practice: reflexivity entails the ability of becoming aware of the social relations surrounding and constituting the self, it is a condition of possibility for overcoming the one-dimensional dynamics of excess in crisis situations. Through reflexivity, subjects and institutions can consider the present as one

possibility among others and can consequently reflect and learn as to how current crises might be transformed into other, also possible, options. This implies that social systems are not closed to a single operational pattern but might develop institutional innovations (new structures of social integration) through the 'learning capacities' their members put at work when reflexively attempting to cope with systemic crises that threaten the reproduction of society (Habermas, 1991c: 120-123, 1991d: 147, 153-154). Once the crisis breaks out, reflexivity becomes a mechanism that can counterbalance the fact that crises 'endanger the fund of human capacities available to create and maintain social bonds' (Fraser, 2013: 228).

A critical theory of crises must develop an empirical account that makes intelligible those systemic mechanisms that organize social life but which escape immediate understanding, on the one hand, and it has to internally connect this knowledge with the concrete experience of acting individuals and their intersubjective relations, on the other. Arguably, this is captured by the methodological distinction between 'system-objective crisis' and 'social-lived crisis' (Benhabib, 1986: 224-53), where the challenge is to describe the objective manifestations of crisis at the systemic level of society and then connect them to the experiences of those groups and individuals who suffer the effects of functional problems and channel them through their needs, demands and dissatisfactions. If

one aspect is isolated from the other, we are left with a one-dimensional view that loses the complexity that make crisis phenomena what they are. We become unable to understand that the objective appearance and circulation of the crisis is mediated by the ways in which social actors try to make sense of the problems these moments reveal, not to mention the conflicts that emerge between the structural reality of crises and their dominant representations in public discourses. After all, crisis is a publicly available idea for actors who, in defining an object or situation as crisis, not only describe a problematic state of affairs but also give it a normative meaning which, in turn, may inform, orient and legitimize their claims and concrete actions (Habermas, 1988; Koselleck, 2006; Milstein, 2015).

The methodological distinction between the objective and subjective dimension of crises allows critical theory to perform a double task: first, to *observe* problems of social reproduction while making clear at which level and in what form they damage social relations, limit individual autonomy and produce human suffering; second, to *participate* in society's reflexive production of definitions and courses of action while challenging the framework in which a particular crisis is publicly discussed. For critical theory, crisis is not simply a concept intended to diagnose socio-structural problems; it must also act as a communicative translation with critical intentions, that is, as practical discourse in the struggle of

making the objective contradictions revealed by crisis situations visible as *lived experiences*.

Normatively, therefore, the fact that crises are 'normal' events in modern societies does not mean that one has to accept the stabilization of their negative consequences as a necessary outcome. Insofar as these phenomena produce dislocations that place a great burden on people's everyday existence, understanding crisis situations becomes instrumental not only in exposing the 'stress limits' of social and political institutions but also in finding potentials for the rational change of the conditions that are concomitant to the systemic problems have been revealed by the crisis in the first place (Habermas, 1988: 143). This is why critical theory has to maintain confidence in the image of a better social condition while accepting the radical contingency of historical processes and human action. Crises are normatively relevant phenomena because they reduce social reality to a one-dimensional present, the present crisis, thereby preventing social actors and institutions from exerting their reflexivity as they look for alternatives or learning processes. Crises may actually bring collective learning to a halt (e.g. precluding political debate and normative considerations), reverse towards new forms of oppression that enhance power, justify dogmatic views of a well-ordered society, or even inspire destructive and violent passions that threaten the realm of social relations altogether. As Marx put it in the preface to

*Capital*, crises 'do not signify that tomorrow a miracle will occur'; rather, they demonstrate 'that the present *society is not solid crystal*, but an organism capable of change, constantly engaged in a process of change' and whose direction we can neither predict nor govern at will (Marx, 1976: 93; emphasis added). For critical theory, crises call for the reflexive attitude of imagining normative alternatives that allow actors themselves to regain some control over autonomized processes of functional differentiation; they help raise awareness of both the socio-technical and moral-practical *capacities of society* to respond to the pathological effects of structural dynamics. Thus, we need to grasp the forms in which crises produced by capitalist modernity appear alongside the normative resources through which these tendencies may be explained, evaluated and transcended from within the conditions of present society.

In the context of a growing de-politicization of society, in which crises are mostly seen through the lenses of professional problem solvers (e.g., therapists, policy-makers, crisis managers and the like), critical theory seeks to retain the capacity of democratic politics to address problems that concern society as a whole (Habermas, 1997: 351-2). For this to happen, the formation of a 'crisis consciousness' through social criticism is a necessary mean for citizens to challenge established constellations of political power, reverse the normal circuits of communication in the public arena and explore the possibilities of concrete



transformations of the conditions that create systemic crises and produce social suffering (Habermas, 1997: 379–81). For without putting into question institutional arrangements, decision-making processes and introducing new inputs of normative communication into social systems, the horizon of expectations of what is seen as possible and desirable remain unaffected. This is precisely the sense in which crises can trigger critique and reflexive processes of collective learning that transform functional difficulties into politically relevant problems, which, in turn, may trigger dynamics of normative self-limitation that lead to institutional restructuring and political innovation. Hence, the argument is not that politics works as an executive power that can centrally act on behalf of society at large in order to solve all its problems; instead, politics must create room for society to build knowledge about itself –i.e., reflexive knowledge– that thematizes the reality of social conflicts on the basis of the plural options of reflexive learning.

## **2. Crisis in Systems Theory**

Systems theory regards crises as the expected outcome of the internal dynamics of social systems. As they perform their functions in society, social systems give rise to self-organized patterns of action and communication whose autonomous operations bring about redundancies that, after a critical threshold, are no longer met by current processing mechanisms. This surplus of non-processed possibilities

creates a gap between social expectations and factual operations that increasingly overload systems beyond their structural limits, thereby reducing contingency to a one-dimensional singularity that originates a *crisis*. Within the systemic tradition, different categories have been used to conceptualize this phenomenon: transmission of excesses (Besomi, 2011), excess correlations (Bouchaud, 2013), manias (Kindleberger and Aliber, 2005), overflows (Callon, 1998), inflation/deflation of symbolic media (Parsons and Platt, 1973; Luhmann, 2012), reckless overextendedness (Parsons, 1963a), systemic overexuberance (Haldane and May, 2011), compulsive growth of systemic communication (Teubner, 2011). In all cases, crises express the self-organized, emergent, and ultimately *normal* character of systemic excesses.

Conceptually, the modern conception of systemic crises originates in the increasing frequency of financial crises in the first two-thirds of nineteenth century – at the onset of the modern banking system (Kindleberger and Aliber, 2005) - when periods of prosperity were regularly followed by episodes of distress (Behrent, 2008). This cyclical dynamics of economic crises was semantically reflected as a *disease* that overburdened the system and uncontrollably *infected* the social environment – as in the diffusion of epidemics as they were described by germ theories in the mid-nineteenth century (Bashford and Hooker, 2001). Yet any state of disease is preceded and followed by periods of health (Besomi, 2011),

thereby revealing the “transitional (not permanent)” character of economic crises (Koselleck, 2006: 392).

The translation of metaphors of health and disease into social analysis expresses the difference between the normal and the pathological that are key for critical theory. Yet for modern systems theory it also stresses the endogenous, self-produced, and hardly controllable creation of redundancies that characterize the operation of autonomous systems. In order to increase their own robustness and perform their function, systems bring about complex emergent patterns that motivate further communications. Communication is reflexive in the sense that applies to itself in a fundamentally self-referential manner (Luhmann, 1995). The risk of infinite regress is managed by means of a bifurcation between self-reference and other-reference. Through other-reference, the system considers relevant environmental events from the perspective of self-referential operations so that the operation can oscillate between different topics, select from contingent events, and produce information. Social systems are, therefore, *constitutively reflexive* and, as such, they ‘guide and control themselves’ (Luhmann, 1995: 455).

Systemic crises then arise when the difference self- and other-reference collapses into pure self-reference and systems cannot further reintroduce the distinction system/environment into themselves; put differently, systemic crises are an implosion of reflexivity. As a response to the imperative of connectivity of

**Comment [DC3]:** Cual es exactamente el argumento aqui? No entiendo eso de la traduccion de las metforas...no bastaria con decir que salud/enfermedad cumplen una funcion similar a normal patologico en la teoria critica??

social systems (Teubner, 2011), communication always calls for more communication. Eventually, this becomes excessive communication because the system engages in an overproduction of previously successful activities that are deemed to be successful in the present just because they were so in the past. This non-reflexive reiteration of the past leads the system to a borderline case of self-referentiality that we call *singularity*; namely, the production of self-referential redundancies *without* other-referential monitoring (Author 2 et al). This is, the system repeats selections unreflectingly and becomes involved in dynamics of excess, thereby preventing other alternatives, contingent options of connectivity, from the possibility of being selected. A systemic crisis is the result of this non-reflexive singularity: an inflation of political commitments that triggers institutional distrust when commitments are not fulfilled; an excess of transactions beyond genuine demand; the compulsion of fundamentalism (religious, political or cultural) that prevent individuals from constructing and instantiating personal projects in a plural social world. Systemic crises are thus self-produced by self-producing systems: as they function to resolve social problems, systems may fall into spirals of blindness.

Talcott Parsons (1963a, 1963b, 1968) made a decisive contribution to a wholly autonomous theory of crises once he specified the symbolic medium of the economic system (money) as a model for the analysis of all symbolic media in the

social system: power (for the political system), influence (for the societal community), and value-commitments (for the fiduciary system) (cf. Author 3c). Like money, all symbolic media also undergo inflationary and deflationary processes as well.<sup>2</sup> In politics, to mention just the most salient example of Parsons' theory, the activation of binding obligations motivates the inflation of power but the lack of a correspondent organizational basis to fulfill these expectations undermines a pluralistic political system and increases the reliance on naked authority, coercive sanctions and physical force (Parsons, 1963a). Systemic crises are endogenously self-produced in every system; they are built into systemic operations themselves. Producing 'more' of any particular media means to increase the probabilities of acceptance of communicative offers, it means to increase its potential for connectivity (Luhmann, 2012). However, acceptance entails risks that cannot be fully managed in the media these offers emerge from. 'Excesses' then anticipate the critical threshold from which *too much* acceptance turns into *too little* deliverance.

Luhmann (1984: 59, 60) considers the notion of crisis as a negative form of self-description of world society: society as a whole can no longer be described on the basis of local experiences or actions because it is 'too complex to be immediately understandable'. This reveals a 'cleavage between interactional and societal levels of system-building' that can be fulfilled by negative semantics of

‘alarm’ that suggest urgency and speed. Considering crises as semantics does not mean, however, to underrate their relevance. In several of his books, Luhmann (1984, 1995, 2005, 2012) stresses the dystopic character of functional differentiation: negative self-descriptions, systemic neglect regarding environmental concerns, avalanches of exclusion in different regions of world society, and the breakdown of modernization promises that systems would constantly make to each other. The dynamics of autonomy, self-organization, and interdependency of social systems that characterizes functional differentiation lies at the basis of these conflictive situations, and as a consequence ‘we even have to expect more or less permanent crises in some of the subsystems’ (Luhmann, 1984: 64). At this point, the semantics of crisis plays a reflexive role as *negative self-description*: it introduces reflection in these critical moments. It elicits questions about the fundamental structure of society, about the costs of developing institutions on unreliable grounds, about the risks of de-differentiations and time pressure. Eventually, it establishes the need for systemic restructuring (Luhmann, 1984).

The 2008 financial crisis provided new impetus for a systemic theory of crises . This time, however, the conceptualization reintroduces the distinction between the normal and the pathological as a difference between “necessary growth-dynamics and pathological growth excesses” (Teubner, 2011: 7). Since the

imperative of social systems is not self-preservation but the *connectivity of communication*, autopoietic communication depends to such a degree on the logic of growth that it harbors its own tendency to self-destruction. Social processes such as monetization, politicization, juridification or medialization reproduce the same underlying dynamics of growth, thereby leading to different versions of self-produced crises. Teubner's analysis engages with both the argument on inflation/deflation and the self-produced character of systemic crises. In other words, growth spirals are not restricted to economic phenomena; they are generalizable to *all* social systems. Teubner even introduces normative possibilities of dealing with crises as he regards near-to-catastrophe events as *constitutional* moments for social systems (Teubner, 2011). Yet the reintroduction of the normal/pathological distinction turns crises into an *anomaly* of system dynamics. This is problematic because, from a systemic point of view, crises should be considered as devices for self-immunity rather than for self-destruction: they are about the optimization of the system against the hypertrophy that is produced by the implosion of systemic reflexivity into pure self-reference without other-reference.

Methodologically, the self-contained character of systemic crises imposes major challenges for their empirical examination. Given their complexity, crises can be neither reconstructed nor anticipated in full. Instead, they are inherently ill-

structured; once they break out, they exceed their frames of reference and are driven by strange attractors (Topper and Lagadec, 2013; Liska, Petrun, Sellnow, and Seeger, 2012). To be sure, archetypical distinctions such as natural, technological, and social crises, or local, regional, and global crises, may be methodologically useful. However, in situations of crisis, partial problems become wicked problems (Rittel and Webber, 1973): Crises place significant problems to conventional methodologies and resist systematic classifications or typologies. Natural disasters, like earthquakes or tsunamis, affect technical systems of energy, transport, and communication, and disturb social relations differently at multiple levels in the short, mid, and long-term – indeed, sometimes even permanently (De Smet, Lagadec and Leysen, 2012). The reasons why a ‘typical’ financial crisis remains locally bounded or expands to regional or even global levels (Aalbers, 2008), and why both analysts and regulating agents are usually taken by surprise by the escalating paths of ‘financial accidents’, depend on systems learning how to grow beyond the limits they have set for themselves in previous crises. Crucially, *typologies that are drawn from the last crisis tend to be unable to account for future ones*. The time lag between the factuality of the crisis and the suitability of methodological classifications reinforces the methodological challenges of dealing with crises.



To that extent, crisis research seems always to be at a crossroads: it has to identify *discrete* components that evolve from crisis to crisis in a *complex* and *interrelated* manner, thereby modifying those very original components and their interrelations. Further, systems theory is interested in the simultaneity of problems arising in different contexts and leading to inconsistencies, incompatibilities, and collapses (Stäheli, 2000; Wagner, 2013). To deal with these problems, modern crisis theories stress the methodological importance of transitions (Dodds and Watts, 2005), circulation of communications (Habermas, 1988), off-scale dynamics (Topper and Lagadec, 2013), identification of overflows (Callon, 1998), de-differentiations (Author 2), sand-pile effects (Markovic and Gros, 2014). This focus on operations and dynamics is certainly a more adequate approach than the elaboration of a priori classifications. Nonetheless, one has to bear in mind that even the most advanced techniques in complexity sciences and computational sociology find methodological limitations in human and systemic reflexivity.

Reflexivity is, in the systemic context, a double-edge sword: it *monitors* the course of events whilst it looks for alternatives but, at the same time, it *produces* unexpected variations of meaning that escalate communication of crises in unpredictable ways. The methodological problem is that the communication that socially *constructs* the observation of crisis is, in turn, part of the operation of

**Comment [SS4]:** Este es el tipo de frase que debiera terminar con referencias bibliograficas para justificarlo, no?

social systems themselves. In other words, as actors communicatively attribute their experiences about crises to their own or to others' actions, they *reintroduce the operation of crisis into the social situation that they are going through*. The factual operation of systems may not affect them directly, but as they communicate about the possibility of the crisis affecting them, they not only become caught up in *communicative contagion* but also enhance it *as if* they were factually affected.<sup>3</sup> Thus, a distinction needs to be made between the factual dimension of systemic crises – systems not performing as expected – and its social dimension – actors constructing their own experiences as part of the crises. It is this duality, we contend, that *can* be processed methodologically through reflexivity. However, processing does not mean resolving and this opens normative questions.

Normatively, systems theory emphasizes the contingent and social (i.e. non-natural) character of norms (Luhmann, 2012: 813), on the one hand, and the unintended consequences and contradictory impacts of normative actions, on the other (Luhmann, 2008). Systems theory does not aim to discourage normatively based interventions *per se*, but it does draw attention to their limitations and, above all, **contingency**. It builds on the notion that, because the social world is contingent, then patterns of possible selections are “neither necessary nor impossible” (Luhmann, 1992: 96). Society itself rejects both perpetual necessities and impossibilities, and this means that the implosion of systemic reflexivity that

**Comment [SS5]:** Aldo: podemos usar 'unpredictability' aquí? Es para evitar que contingency este dos veces....

characterizes crisis situations threaten to reduce or even eliminate the contingency of society through inflation, deflation, and excess that, because they lead to de-differentiation, have potentially totalizing implications.

Contingency itself is not a norm but fosters a *normatively significant* type of critical observation (Amstutz, 2013): each system reintroduces contingency in its experiences of the world by means of the observation of other systems' observations. What is self-evident for one system becomes contingent just because another system, as second order observer, observes with its own categories. The experience of a differentiated world is thus the experience of 'self-diversity' (Luhmann, 1992: 103); namely, the experience of the otherness of others and of the multiple meanings of apparently self-evident, univocal facts.

Systemic crises affect this self-diversity both internally (system) and externally (environment). Internally, the excess of non-reflexive redundancies shrinks 'meaning production' (Kjaer, 2014: 107f); that is, it constrains systemic contingency by reducing possibilities to a singularity of self-replicating communication that drastically restrains or even eliminate alternatives. No political diversity is allowed under a dictatorship; on the contrary, there is imposition of necessities, prescription of impossibilities and factual elimination of sources of contingency (as a cost in human lives). Once diversity breaks down, the system becomes more and more homogeneous and monothematic (propaganda,

repression, exile, hierarchical control). This can be also illustrated with the case of the financial crisis in 2008: “excessive homogeneity within a financial system – all the banks doing the same thing – can minimize risk for each individual bank, but maximize the probability of the entire system collapsing” (Haldane and May, 2011: 353). Normatively, therefore, the only alternative to deal with the internal homogeneity of excess is to augment the contingency of the system. In the case of a global financial system, this means the provision of “regulatory incentives to promote diversity of balance sheet structures, business models and risk management systems” (Haldane and May, 2011: 355). In our example of a dictatorship, it means to reintroduce negativity; namely, dissidence, resistance, opposition or even rebellion, thereby holding the normative expectation of reestablishing contingency (for instance, in the form of open and democratic elections). Protest movements act in this way as they seek to increase contingency where blind singularity prevails.

Externally, excesses also constrain the contingency of the systems by pushing for the de-differentiation of other systems. By de-differentiation we mean interference with other systemic operations as a consequence of overflows “which cause the barriers to become permeable” (Callon, 1998: 251). Moral absolutism is a good example that Parsons (1968) analyzed it in terms of deflation of value commitments (e.g. protestant or catholic fundamentalism). He showed how a non-

reflexive implementation of values leads to deflation of other media, for example: more violence (rather than political power) is needed to impose radical values. As values de-differentiate politics, they reduce contingency and self-diversity in the *legitimate* use of power. Reducing the contingency in society restricts systemic differentiation, constrains institutional autonomy and undermines normative pluralism. As with internal reductions, the external dissemination of excesses also requires strategies of increasing contingency. Luhmann (1999) himself argues along these lines as he analyzes the function of fundamental rights in modern societies. They have to pay attention to the dangers of 'structural fusion' coming from political impositions: 'The guarantee of freedom is nothing else than a guarantee of communication chances' (Luhmann, 1999: 23). Teubner (2012: 31) then elaborates on this argument against expansive monetization trends in other of social spheres: 'A genuine equivalent of fundamental rights would be rules against the commodification of science, art, medicine, culture, and education'. In Teubner's view (2011), a self-limitative dimension of social systems through *sectorial constitutional discourses* may be able to counteract totalizing tendencies. Contingency is a constitutive feature of social systems and crises are inherent to their operation. While crises produce excesses and overflows, contingency prevents internal communication to become a singularity and external coordinations to become totalizing.

**Comment [SS6]:** Aldo: podemos decir 'social life as a whole' aquí? Me parece que le da mas fuerza al argumento. Mas aun pensando que se trata de la dimensión normativa

### 3. Crisis and Reflexivity

Our main goal in this paper is to offer a sociological concept of crisis that, defined as the expected yet non-linear outcome of the internal dynamics of modern societies, builds on the synergies between critical theory and systems theory. In order to make our position plausible, we have followed a dual path. First, we unpacked the main arguments either tradition makes on crises and tried to remain faithful to their terminological specificities —e.g., contradictions and learning processes in critical theory, paradoxes and self-referentiality in systems theory. Second, we reconstructed the moments in which crisis situations become objects of concern for actors *and* systems in terms of conceptualization, methodological observation, and normative responses. The main substantive result of our discussion points to the idea of *reflexivity* as a form of engagement with the negative manifestations and destructive effects of processes of reproduction of social systems. In summary fashion, the main findings of our discussion are introduced in the table below:

**Table 1**

Dimensions	Critical theory	Systems theory	Cross-fertilization
Conceptual	Manifestation of structural	Manifestation of self-referential excesses in	<i>Social reproduction:</i> conflicting imperatives enable

	contradictions of capitalist society	the operation of functional differentiation	and block society's self- reproduction
Methodological	Dialectics between objective configuration and subjective experience of crises	Disparity between factual operation and communicative construction of crises	<i>Social description:</i> decentralized interpretations force to trace relations between functional and normative constrains
Normative	Critique of technical management and defense of democratic- political control	Critique of de- differentiation and defense of sectorial normativization	<i>Social intervention:</i> courses of action opened to examination, critique and self-correction

In this final section, we will address more directly the possibility of cross-fertilization between critical theory and systems theory leading to a reflexive understanding of social crises. This attempt can be located within the much wider reflexive turn that sociology has experienced over the past two decades (Alveson and Skoldberg, 2009; Archer, 2007; Beck, Giddens and Lash, 1994; May and Perry, 2011). Within this context, reflexivity has become a key term to describe processes of de-traditionalization that expand society's reflexive capabilities for institutional self-transformation, as much as to account for the human ability to translate our personal concerns into projects that can make a difference in the world.

The fact that reflexivity has become an increasing and ever more demanding feature of our current historical constellation creates challenges for social research on crises. Most importantly, the need to combine a de-centred

observation of the conflicting imperatives that both enable and block society's self-reproduction, on the one hand with the immanent evaluation of actor's own descriptions and responses to non-reflexive social processes that trigger situations of crisis, on the other.

In terms of our reconstructive reading of critical and systems theory, this challenge can be met, firstly, by *making conceptually reflexive* the unobserved contradictions and paradoxes that drive the structural dynamics of contemporary world society. Both theoretical approaches share the presupposition that societies know of no center; that there isn't a single and core dimension of social life that has the ability to steer, let alone control, the functioning of other domains or society as a whole. Our reconstruction of the notion of crisis in both theoretical traditions unpacks this argument further: crises may commence in any sector of society and the ways in which they may expand cannot be anticipated. Even if crisis itself is seen as the mode through which conflicting imperatives immanent to social reproduction come into sight and thus become object of cognitive reflection and public communication, this does not mean that **this notion** is simply an epiphenomenon of underlying mechanisms (external form of representation) or a constant factor that causally explains further developments (essential unity of meaning). **In our view, crisis is a form of self-understanding that underscores society's existing conflicts; whilst at the same time it is a generative mechanism**

**Comment [SS7]:** Me perdi. Cual 'notion'? crisis??



through which society enacts the conditions of its own legitimacy by transforming its modus operandi and previous structures.

**Comment [SS8]:** Aquí le meti mano al argumento tb. Como estaba, me parecia que no se entendia....

Secondly, our ability to deal with social crises is intimately related to the very possibility of their empirical observation; from a methodological point of view, crises are far from transparent phenomena. When a crisis breaks out, it exceeds standard interpretative frameworks and established practices; they open a breach full of contingency and questions that we cannot simply bypass. In doing so, a crisis calls for awareness of the abstract dynamics that are part of society's systemic operation and thematization of the concrete experiences of actors dealing with the excesses and destructive effects of such dynamics. The point is that without a description of what is not working in the expected way, no system can reflexively realize the operational conditions of its crisis; without the objective configuration and autonomous operation of social systems, actors cannot meaningfully construct their own experiences and relations as part of the crisis. Here reflexivity matters as the ability to observe the gaps between factual operations and concrete experiences that shape the course of events; and it matters also as an ongoing process of negotiation of meaning through which crises are enacted in unpredictable ways. Seen in these terms, critical theory and systems theory both suggest a *methodologically reflexive attitude* to the experience of otherness that the plurality of distinct but interrelated crisis phenomena brings

**Comment [SS9]:** Hmmm...parece que no entiendo que significa esto

about in modern social life; one, moreover, that actors themselves embody when trying to come to terms with their immediate consequences.

Last but not least, there is the inner normative imperative to respond and intervene that crisis situations mobilize. Critical and systems theory must address the relation between the *need* of introducing inputs of normative communication into social systems (i.e., setting of contention limits on autonomized social processes) and the *impossibility* giving normative closure to the social world (i.e., acceptance of the contingency of institutional innovations). A possible solution lies in reestablishing the connection between norm and contingency instead of treating them as mere opposites. This means that in order to deal with social crises we must be able to produce *normatively reflexive interventions*: that is, interventions that not only ought to be responsive to contextual forms of regulations, but also engage with democratic forms of decision making. This proposition is significant because it defies, albeit does not prevent, attempts at giving closure to the social world through the non-reflexive repetition of a frozen past or the non-reflexive openness to a utopian future. In complex societies, normatively reflexive interventions must work hard to keep widening the horizons of expectation but without divorcing them from experience.

A further implication of this argument is that, when it comes to the reflexivity of crises, functional outputs and normative values stand in close

proximity. When major modern institutions such as the press, police forces, national parliaments, the Catholic church, or banks are described as undergoing various crises, the characterization of their troubles implies that they are failing to deliver on the protection and promotion of those *values* that are central to their *functional* contribution: independent and trustworthy information, civil protection, representation and decision-making, moral guidance, safeguarding our private assets. Their depiction as crises entails both *the functional performance* of these institutions and the *normative duties* they are expected to fulfill for the rest of society. Sociological engagements with crisis require that we are able to analyze the functional and the normative in their own right, but we need also to understand their interrelations. And this is perhaps one of the key contributions of critical theory and systems theory: namely, that crises in modern society can be seen as such if and when we witness the normative and functional factors mutually reinforcing each other.

The temptation remains, of course, to argue that this is just a question of connecting the *structural* failings of institutions with the actions and practices of specific *individuals* (media editors, members of parliament, police officers, priests and traders) in a way that may resemble the perennial debate between structure and agency in sociology (Archer 1995, Mouzelis, 1995). For our purposes, however, the specificity of social crises refers less to this problematic and more to

the ways in which the systematic disappointment of normative expectations becomes itself a functional problem (Author 3a).

## References

- Aalbers M (2009) Geographies of the financial crisis. *Area* 41(1): 34-42.
- Adorno T W (2008) *Lectures on Negative Dialectics: Fragments of a Lecture Course, 1965/6*. Cambridge: Polity.
- Alveson M and Skoldberg K (2009) *Reflexive Methodology. New Vistas for Qualitative Research*. London: Sage.
- Amstutz M (2013) Der zweite Text. Für eine kritische Systemtheorie des Rechts. In: Amstutz M and Fischer-Lescano A (eds) *Kritische Systemtheorie. Zur Evolution einer normativen Theorie*. Bielefeld: transcript, pp. 365-401.
- Archer M (2007) *Making our Way Through the World*. Cambridge: Cambridge University Press.
- Archer M (1995) *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.

Author 1a

Author 1b

Author 2

Author 2 and Author 3

Author 2 et al

Author 3a

Author 3b

Author 3 c

Bashford A and Hooker C (eds) (2001) *Contagion. Historical and Cultural Studies*.  
London: Routledge.

Beck U, Giddens A, and Lash S (1994) *Reflexive Modernization: Politics, Tradition  
and Aesthetics in the Modern Social Order*. Stanford, California: Stanford  
University Press.

Behrent M (2008) The mystical body of society: Religion and association in the  
nineteenth-century French political thought. *Journal of the History of Ideas*  
69(2): 2019-243.

Benhabib S (1986) *Critique, Norm and Utopia: A Study of the Normative  
Foundations of Critical Theory*. New York: Columbia University Press.

Besomi D (2011) Crises as a disease of the body politic. A metaphor in the history  
of nineteenth-century economics. *Journal of the History of Economic  
Thought* 33(1): 67-118.

Boltanski L and Chiapello E (2007) *The New Spirit of Capitalism*. London and New  
York: Verso.

- Bouchaud JP (2013) Crises and collective socio-economic phenomena: Simple models and challenges. *Journal of Statistical Physics* 151(3-4): 567–606.
- Brunkhorst H (2014) *Critical Theory of Legal Revolutions: Evolutionary Perspectives*. New York and London: Bloomsbury.
- Brunkhorst H (2011) The Return of Crisis. In: Kjaer PF, Teubner G and Febbrajo A (eds) *The Financial Crisis in Constitutional Perspective: The Dark Side of Functional Differentiation*. Oxford: Hart Publishing, pp. 133-172.
- Brunkhorst H (2006) The Legitimation Crisis of the European Union. *Constellations* 13(2): 165-180.
- Callon M (1998) An essay on framing and overflowing: Economic externalities revisited by sociology. *The Sociological Review* 46(S1): 244-269.
- Clark S (1994) *Marx's Theory of Crisis*. Basingstoke: Macmillan.
- Cliff C and Andrew F (2013) Testing for contagion/diffusion of terrorism in State dyads. *Studies in Conflict & Terrorism* 36: 292-314.
- De Smet H, Lagadec P and Leysen J (2012) Disasters out of the box: A new ballgame? *Journal of Contingencies and Crisis Management* 20(3): 138-148.
- Dodds P and Watts D (2005) A generalized model of social and biological contagion. *Journal of Theoretical Biology* 232(4): 587-604.
- Eder K (1993) From the crisis of class politics to the critique of class politics: Reflecting on the role of crisis discourses in modern society. In Eder K *The*

*New Politics of Class: Social Movements and Cultural Dynamics in Advanced Societies*, London: Sage, pp. 185-196.

Fischer-Lescano A (2013) Systemstheorie als kritische Gesellschaftstheorie. In: Amstutz M and Fischer-Lescano A (eds) *Kritische Systemtheorie. Zur Evolution einer normativen Theorie*. Bielefeld: transcript, pp. 13-37.

Fischer-Lescano A (2012) Critical Systems Theory. *Philosophy and Social Criticism* 38(1): 3-23.

Foucault M (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979*. London: Palgrave.

Fraser N (2014) Behind Marx's Hidden Abode: For an Expanded Conception of Capitalism. *New Left Review* 86: 55-72.

Fraser N (2013) Between Marketization and Social Protection: Resolving the Feminist Ambivalence. In: Fraser N *Fortunes of Feminism: From State-Managed Capitalism to Neoliberal Crisis*. London and New York: Verso, 227-241.

Habermas J (1997) *Between Facts and Norms*. Cambridge: Polity.

Habermas J (1991a) *The Theory of Communicative Action*, Vol. 1: Reason and the Rationalization of Society. Cambridge: Polity.

Habermas J (1991b) *The Theory of Communicative Action*, Vol. 2: Lifeworld and System: A Critique of Functionalist Reason. Cambridge: Polity.

- Habermas J (1991c) Historical Materialism and the Development of Normative Structures. In: Habermas J *Communication and the Evolution of Society*. Cambridge: Polity, pp. 95-129.
- Habermas J (1991d) Toward a Reconstruction of Historical Materialism. In: Habermas J *Communication and the Evolution of Society*. Cambridge: Polity, pp. 130-177.
- Habermas J (1988) *Legitimation Crisis*. Cambridge: Polity.
- Haldane A and May R (2011) Systemic risk in banking ecosystems. *Nature* 469(7330): 351-355.
- Horkheimer M (1982) Traditional and Critical Theory. In: *Critical Theory: Selected Essays*. New York: Continuum.
- Jessop B, Young B, and Scherrer C (eds) (2015) *Financial Cultures and Crisis Dynamics*. London and New York: Routledge.
- Kindleberger C and Aliber R (2005) *Manias, Panics and Crashes. A History of Financial Crises*. New York: Palgrave.
- Kjaer PF (2014) *Constitutionalism in the Global Realm. A Sociological Approach*. London: Routledge.
- Kjaer PF, Teubner G and Febbrajo A (eds) (2011) *The Financial Crisis in Constitutional Perspective: The Dark Side of Functional Differentiation*. Oxford: Hart Publishing.



- Kjaer PF and Olsen N (eds) (2016) *Critical Theories of Crisis in Europe*. London: Rowman and Littlefield.
- Koselleck R (2006) Crisis. *Journal of the History of Ideas* 67: 2.
- Liska C, Petrun E, Sellnow T and Seeger M (2012) Chaos theory, self-organization, and industrial accidents: Crisis communication in the Kingston Coal Ash Spill. *Southern Communication Journal* 77(3): 180-197.
- Luhmann N (1984) The self-description of society: Crisis fashion and sociological theory. *International Journal of Comparative Sociology* 25(1-2): 59-72.
- Luhmann N (1992) *Beobachtungen der Moderne*. Opladen: Westdeutscher Verlag.
- Luhmann N (1995) *Social Systems*. Stanford: Stanford University Press.
- Luhmann N (1999) *Grundrechte als Institution. Ein Beitrag zur politischen Soziologie*. Berlin: Druncker & Humblot.
- Luhmann N (2005) Inklusion und Exklusion. In: Luhmann N *Soziologische Aufklärung* 6. Wiesbaden: VS Verlag, pp. 226-251.
- Luhmann N (2008) *Die Moral der Gesellschaft*. Frankfurt: Suhrkamp.
- Luhmann N (2012) *Theory of Society*. Standford CA: Stanford University Press.
- Markovic D and Gros C (2014) Power laws and self-organized criticality in theory and nature. *Physics Reports* 536: 41-74.

- Marx K (2000) Speech on the Anniversary of the People's Paper. In: McLellan D (ed) *Karl Marx: Selected Writings*. Oxford: Oxford University Press, pp. 368-9.
- Marx K (1976) *Capital: A Critique of Political Economy*, vol. 1. London: Penguin
- Marx K (1969) *Theories of Surplus Value*, vol. 2. London: Lawrence and Wishart.
- May, T and Perry, B (2011) *Social Research and Reflexivity*. London: Sage.
- Mckenzie D (2011) The Credit Crisis as a Problem in the Sociology of Knowledge. *American Journal of Sociology* 116(6): 1778-1841.
- Milstein B (2015) Thinking politically about crisis: A pragmatist perspective. *European Journal of Political Theory* 14(2): 141-160.
- Mouzelis N (1995) *Sociological Theory: What Went Wrong?* London: Routledge.
- Offe C (1984) Ungovernability: the renaissance of conservative theories of crisis. In: Offe C *Contradictions of the Welfare State*. London: Hutchinson, 65-87.
- Osborne P (2010) A sudden topicality: Marx, Nietzsche and the politics of crisis. *Radical Philosophy* 160: 19-26.
- Parsons T (1963a) On the concept of political power. *Proceedings of the American Philosophical Society* 107: 3.
- Parsons T (1963b) On the concept of influence. *The Public Opinion Quarterly* 27: 1.
- Parsons T (1968) On the concept of value-commitments. *Sociological Inquiry* 38(2): 135-160.

- Parsons T and Platt G (1973) *The American University*. Cambridge: Harvard University Press.
- Polanyi K (2001). *The Great Transformation: The Political and Economic Origins of our Time*. Boston: Beacon Press.
- Poulantzas N (2008) The Political Crisis and the Crisis of the State. In: Martin J (ed) *The Poulantzas Reader: Marxism, Law and the State*. London and New York: Verso, pp. 294-222.
- Rittel H and Webber M (1973) Dilemmas in a general theory of planning. *Policy Sciences* 4: 155-169.
- Roitman J (2014) *Anti-Crisis*. Durham: Duke University Press.
- Stäheli U (2000) *Sinnzusammenbrüche*. Weilerswist: Velbrück Wissenschaft.
- Teubner G (2011) A constitutional moment? The logics of 'hitting the bottom'. In: Kjaer PF, Teubner G and Febbrajo A (eds) *The Financial Crisis in Constitutional Perspective: The Dark Side of Functional Differentiation*. Oxford: Hart Publishing, pp. 3-42.
- Teubner G (2012) *Constitutional Fragments*. Oxford: Oxford University Press.
- Topper B and Lagadec P (2013) Fractal crises – A new path for crisis theory and management. *Journal of Contingencies and Crisis Management* 21(1): 4-16.

Wagner E (2013) Systemtheorie und Frankfurter Schule. In: Amstutz M and Fischer-Lescano A (eds) *Kritische Systemtheorie. Zur Evolution einer normativen Theorie*. Bielefeld: transcript, pp. 63-98.

## Notes

---

<sup>1</sup> Further justification for the use of these three levels in comparing different traditions in social theory can be found in (Author 3b).

<sup>2</sup> Although marginal, this is also a strategy followed by Luhmann (2012: 230ff).

<sup>3</sup> A case in point are the social consequences of localized terrorists acts, which make citizens elsewhere participants of the experience of terrorism because governments take measures to protect themselves against this possibility, thereby actualizing the semantics of terror (Cliff and Andrew, 2013).