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# Imagining Catastrophe: Scenario Planning and the Striving for Epistemic Security

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The Basel Committee on Banking Supervision recently stated that one important cause for the catastrophic nature of the financial crisis has been a false sense of security. The report thereby rehearses the widely shared diagnosis that a lack of an appropriate estimation of risk exposures belongs to the core causes of the crisis. Interestingly, this epistemological failure is taken to be a “failure of imagination” about what the future may hold in store (Basel Committee on Banking Supervision 2009: 17). Accordingly, the efforts of regulation called for are directed at furthering more imaginative and flexible views of the future. They seek to imply modes of stress testing that are not any longer linked to the notion of risk as a “constant statistical process” (ibid.: 9f). Imaginations of “shocks which have not previously occurred” (ibid.: 14) promise – so it seems – more adequate knowledge about one’s own risks. The archive of previous occurrences and the statistical calculations of normal distributions are replaced by “non-statistical modes of anticipating the future” (O’Malley 2003: 277).

This reference to fiction and imagination as the proper basis for knowing and surviving the future is not peculiar to the above cited response of the Bank for International Settlement to the current financial crisis. As recent scholarship on catastrophic risk suggests, we are witnessing a much more widespread shift in the ways in which the future is imagined, rationalised and acted upon that goes beyond previous conceptualisations of risk (Power 2007; De Geode 2008; O’Malley 2004; Ericson and Doyle 2004; Bougen 2003; Collier 2008; Collier and Lakoff 2008). The critique of probabilistic calculations of risk and the turn towards an inherently uncertain future belongs, as Pat O’Malley suggests, to new epistemic, organisational and regulatory constellations that need to be investigated. It correlates with a “new approach to producing knowledge about collective life, one that is increasingly important in the disperse emerging assemblages of risk, rationality, and security” (Collier 2008: 226).

The following essay discusses “scenario planning” as an example of these new approaches to producing knowledge about risk. Today, scenario planning has become an integral part of risk assessments and risk regulation; it is used in management practices and organisational learning; and, last but not least, political discourses and strategies around national security employ catastrophic scenarios in their planning procedures, too. The genealogy of scenario planning, aptly enough, reaches back to the context of the Cold War: Herman Kahn, employed at the RAND Corporation, called for imaginative techniques to enhance the possibility of survival in the event of a nuclear attack. “Thinking the unthinkable” was his motto: “It has usually been lack of imagination, rather than excess of it, that caused unfortunate decisions and missed opportunities” (Kahn cit. in Ghamari-Tabrizi 2005: 146). During the 1970s, the Royal Dutch/Shell Company introduced scenario planning to the world of business and management (Wack 1985; Schwartz 1991). While scenarios of catastrophe have all the way through been used for civil defence and emergency planning (Collier 2008), they have recently gained prominence in the risk calculations of investment and insurance companies. Corporations like Risk Management Solution, for example, rely heavily on scenarios of catastrophe for calculating risks (Bougen 2003: 264; Ericson and Doyle 2004: 149). The wide application of scenario planning provokes sociological questions: what cultural subtexts and social implications are at play in the spread and ubiquitous use of catastrophic scenarios? Drawing on recent scholarship, the remainder of this paper begins to unfold how such shifts in the “material systems of representation” (Michael Power, this issue) partake in the formatting of new temporalities, novel territorial differentiations and the shifting of notions of collectivity. As will be shown, imagining the future through catastrophic scenarios paradoxically provides the epistemic security for the regulatory aspiration to govern through risk. The essay proceeds as follows: The first part introduces the technique of scenario planning and discusses how it informs an “imaginary of emergency” (Calhoun 2004). The second part addresses the use of catastrophic scenarios by insurance and security discourses. It draws attention to the prevalence of territorial mappings of risk that are accompanied by calls for defining new collectivities of risk. The

conclusion reflects on how scenarios might bolster the established ideals of transparency and logics of regulation, rather than undermining them.

### Scenarios: Knowing the unknown in a hostile world

In the words of its practitioners, scenarios are the proper tool for dealing with a future that is uncertain, complex and irregular (Wack 1985). In view of such uncertainty, the “illusion of certainty” (Schwartz 1990) and the “tyranny of the past” are taken to be the biggest impediments to being prepared for the challenges ahead (Wilkinson, Heinzen and Van der Elst 2008: 2). One of the most prominent scenario planners, Peter Schwartz from the Global Business Networks, emphasises therefore that scenario planning consists to a large extent in challenging dominant perceptions of “the official future” (ibid.: 59). Directed against the “perils of too narrow thinking” (Lohr 2003: 1), scenario techniques strive to incorporate information from the “fringes” in order to weave multiple plausible stories about the future (Schwartz 1991: 69). Consciously employing narrative strategies and dramaturgical means, scenarios present the future as fictions or myths: “Scenarios aren’t predictions. They are plausible, relevant provocative stories – in the scenario lingo *possible futures*.” (Ertel and Walton 2006). Yet at the same time, they promise a “knowledgeable sense of risk” in an uncertain world (Schwartz 1990).

As can already be gathered from this cursory account, scenarios engage in a paradoxical translation of uncertainty into certainty. While they depict an essentially uncertain world and proclaim the need to understand the limits and porous foundations of one’s own ways of perceiving the future (Schwartz 1991: 59), they also promise certainty and firm grounds for decision-making. The certainty they offer is of a particular kind: it does not ground itself in statistical regularities, experiments or universal laws, but it joins a particular set of outlooks to an emotional sense of certainty and preparedness. Creating the emotional salience of scenarios and imbuing them with “heat and urgency”, accordingly, is an important stage in scenario planning. The very poetological devices used – such as stage writing, jazz improvisations or science fiction – aim at creating “affirmation” and “ownership” of the scenarios (Flowers 2003; Davis 2004: 4). Given this intention of producing an emotional sense of preparedness, it becomes a mistake to imagine too many “possible futures”: “When you’re trying to find that middle ground between paralysis

and denial, you can’t entertain 15 scenarios meaningfully and actually do something. We aren’t trying to identify all the possible futures” (Ertel and Walton 2006). While two scenarios “might not capture reality”, Peter Schwartz contemplates, three apparently will do (Schwartz 1991: 140). Each story about the future is distilled in a process that obviously harbours many contingent decisions as to what counts as “inevitable” and what counts as “critical uncertainty” – but these epistemological uncertainties do not show in the stories that are based upon the presumed “real life behaviour” of social systems (ibid.: 114; 136).

Organisational sociology and the sociology of knowledge will find a rich field of research about the “good organisational reasons” – to borrow from Harold Garfinkel (1967) – for why and how these scenarios are assembled and employed in practice. Leaving this untapped and interesting research field aside, it is worthwhile attending to the possible impact that scenario planning techniques may have on the shaping of culturally prevalent patterns of temporality. Cultural anthropologists and sociologists have begun to discuss more extensively the making of temporality within economic contexts (Guyer 2007; Knorr Cetina and Bruegger 2002). Scenarios are essentially ‘plot lines’ that order events according to certain narratological structures. As if rehearsing the argument about the inevitable rhetorical underpinnings of historiography furnished by Hayden White (1987), scenario planners offer a limited menu of story lines, consisting, inter alia, of “winner and losers”, “challenges overcome”, “revolution” or the “lone ranger” (ibid.: 151ff). Scenario planning itself seems to be prone to one particular plot line and notion of temporality that Craig Calhoun has recently called the “imaginary of emergency” (2004: 376). Within this imaginary, the temporality of the future appears solely as a discontinuous sequence of sudden events, which are as much unexpected as they are inevitable. It is because of a future characterised by unexpected and inevitable events that scenarios appear to be the most appropriate form of knowledge production; at the same time, the scenarios themselves tell stories that tend to favour narratives of sudden emergence and emergencies. For example, the Pentagon Study about climate change, undertaken for the US government by the two well known scenario planning specialists Peter Schwartz and Doug Randall, warns that the climate will not change gradually, but abruptly: “This report suggests that, because of the potentially dire consequences, the risk of abrupt climate change, although uncertain and quite possibly small, should be elevated beyond a scientific debate to a U.S. national security concern” (Schwartz and Randall

2003: 1). A less dramatic, albeit equally telling example of this way of understanding the future can also be found in a brochure of the reinsurance company Swiss Re, which defines the future with the following words: "The future is not a question of distance in time. The future is what radically differs from the present." (Swiss Re 2004: 11). In this temporal frame, even the many deaths of elderly people during the hot summer in Paris 2003 assume the form of an unexpected event in a discontinuous future, rather than being a consequence of very accessible parameters of social security and familial habits (*ibid.*: 24). The understanding of the future as being replete with discontinuous events, which are as much unexpected as inevitable, might simply actualise a prevalent template of temporality, whose political and social implications itself remain hidden from view. Further research that combines the perspectives of economic sociology with cultural sociology would have to explore such templates and their effects.

### Turning catastrophes into grounds of knowledge: Maps, collectives and grounds of investment

Scenarios not only fare prominently in business strategies and organisational communication. They have also been an integral part in the production of knowledge about catastrophic risk. Collier and Lakoff have chronicled the genealogy of catastrophic modelling from its early uses in civil defence planning to its most recent application by insurance companies in calculating the risks of natural disasters, terrorist attacks and outbreaks of epidemics (Collier and Lakoff 2008; Collier 2008). In the risk modelling of these companies, scenarios assume an important role: they provide an imaginative rendering of a particular catastrophic event, for example, a car bomb in Manhattan, an anthrax attack, or a bomb delivered in a cake box (RMS 2004). These catastrophic imaginations form the basis for assessing the impact of such imagined events allowing for measurement of the potential vulnerability of particular objects or "urban elements" like infrastructure (Collier and Lakoff 2008: 18-20). A multiplicity of geographical maps is produced that renders the impacts, vulnerabilities and losses visible. These maps of territorially distributed vulnerabilities feed into calculations of loss ratios (Ericson and Doyle 2004: 138). They allow for the specifying of insurance policies and insert catastrophes into the machineries of risk assessment. This has been vital, as Philip Bougen explains, for enabling reinsurers to access capital markets as a source for financing and distributing risks (Bougen 2003).

Catastrophic modelling both uses and exceeds probabilistic techniques of calculating risk: imaginative scenarios are integrated in techniques of calculation that keep aspiring to offer a "fully probabilistic framework" (Air Worldwide Corporations, cit in Ericson and Doyle 2004: 149). The rationalisations and the "taming of chance" (Hacking 1990), which probabilistic risk calculations offered, hence, are not dispensed with. In recent discussions, such uses of post-probabilistic instruments of gauging risk have been brought to bear critically on Ulrich Beck's claim that contemporary catastrophic risks lie beyond modern forms of rationalising risks (1999). As Power, O'Malley, Bougen and Ericson have suggested, uncertainty of catastrophic events does not simply lie outside mechanisms of social redress, economic calculation and political rationalities. Rather, they are integral to their modification.

Two aspects appear to be particularly interesting. The first concerns the specific spatiality of risk that is produced in these models: scenarios of catastrophe partake in fashioning a specifically geographic or territorial template for ordering knowledge about risk. This territorial logic of catastrophe models has already been pointed out by Peter Galison (2001) in his discussion of civil defence planning during the Cold War. It also has been lucidly explored by Collier and Lakoff (2008) in terms of a "spatial understanding of vulnerability" in discourses and practices of national security. But the impact of such territorialized ways of assessing risks in economic calculations remains to be investigated as part of the "geography of finance" that "highlights the spatialities that may be configured by the embroidery of financial calculations" (Pryke 2006: 8). The second aspect, intimately conjoined with the first, pertains to the shifting articulations of collectivities of risk. The old model of calculating and distributing risks, especially those underlying the logics of social welfare, sought to achieve widest distribution of costs by articulating large and diverse (national) collectives of risk bearers (Ewald 1986: 481). The spectre of catastrophic risks and the novel lines of territorial differentiation they spark, invites a different logic of drawing up collectivities: "Compulsory insurance schemes are one way of setting up risk collectives, although their coercive nature makes them controversial. More attractive are communities which offer all their members a higher degree of security and substantially reduce their risk-related costs. The greatest possible homogeneity and transparency are helpful here: the more similar the individual risks are the more equitable the distribution – both of the total loss burden and the value added – will be." (Swiss Re 2004: 7). Such reflections on risk communities confirm

Pierre Rosanvallon's (2000: 4) observation that it has become "much more problematic to consider the whole nation as a single class facing identical risks." To what extent these statements are paradigmatic for shifts in rationalities of governing and imaginaries of collectivities remains to be seen. At such an early stage, the young and still emerging ramifications which have come to be tied to the "imagining of catastrophe" do not allow for the drawing of firm conclusions. They only indicate the necessity to watch and understand the effects of such shifts in the "material systems of representation" (Power, in this issue).

### Conclusion: Imagining catastrophe and regulating through transparency

As the foregoing tried to show, the dramatisation of an uncertain future and its catastrophic imaginary entail a particular mode of epistemic certainty production aimed at emotional affirmation. These ways of tying catastrophes to certainty resonate in surprising ways with the very old meaning of the word apocalypse: the etymology links the occurrence of a catastrophic turn to the revelatory moment of seeing the truth (Müller-Funk 2002: 252). Understanding this link makes it less surprising to find that catastrophic scenarios are often taken to provide guarantees for an improved risk assessment, capable of detecting risk exposures – such as toxic credits – that have gone unnoticed before. Paradoxically, imagining the future and connected uncertainties through scenario planning, therefore, does not destabilise, but bolsters regulatory policies that take transparency as ultimate anchor for making the financial world stable and resilient. Recent documents from the Bank of International Settlement or the G20 give the impression as if this rationale of regulation remains firmly in place. The declaration made by the G20 members at the summit on the financial crisis in November 2008, for example, proclaims transparency, accountability, risk management and information sharing as the "common principles of reform" (G20, Full Text of Declaration 2008). As the document from the BIS, quoted in the introductory paragraph of this essay, confirms, such principles are served, inter alia, by opening risk management towards post-probabilistic modes of knowledge. Scenarios of the next catastrophe might remedy certain "failures of the imagination", but they certainly do not wonder about possible failures of the political imagination.

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interests include historical epistemology, history of economic thought, cultural economy, and political theory. She is currently working on a book manuscript titled *Liberal Imaginaries of Economy – Population, Money and the Displacement of Politics*. She has published on economic temporalities, governmentality, biopolitical foundations of the economy and market discourses.

### Endnotes

\*This article emerged out of a larger comparative research project, jointly conducted with Sven Opitz (Institute of Sociology, University of Basel) on the imaginaries of catastrophe in the fields of economy and law.

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