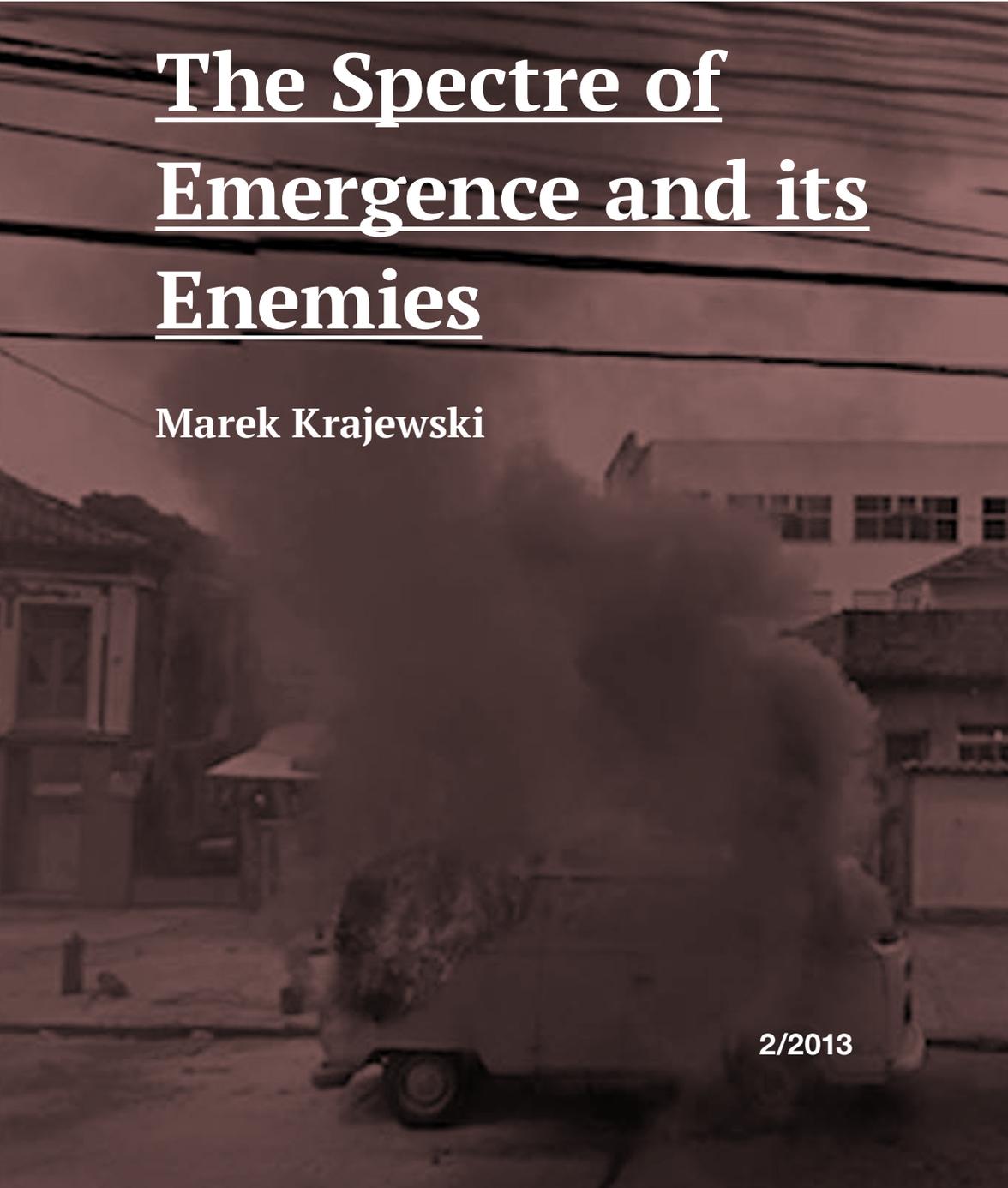


CzasKultury/English

**The Spectre of
Emergence and its
Enemies**

Marek Krajewski

2/2013

A sepia-toned photograph of a street scene. In the foreground, a large, billowing plume of smoke or dust rises from a vehicle, partially obscuring the view. The background shows buildings and utility lines. The overall tone is somber and historical.

The Spectre of Emergence and its Enemies

Marek Krajewski

The spectre of emergence is not haunting the world. It penetrates and creates the world. Regarded by some as a harbinger of a better tomorrow and a silver bullet, it is demonized by others as a powerful and destructive force that should be tamed and controlled. Notwithstanding the conflicting views surrounding the phenomenon and its effects, emergence is seen as a mysterious and semi-real process of an unrecognized nature, which does not so much “take place” or “happen” but rather manifests itself in the most unexpected situations. We fear emergence all the more when we realize that we are its source. At the same time, however, we – as individuals – do not exercise any influence over it. We fear emergence all the more when we realize that this process occurs in all places where there is life and relations, but that in each case it unfolds differently. Thus, emergence undermines a belief which is crucial for a modern identity. Namely that a human is a fundamentally

distinct being whose uniqueness is based on the ability to completely control reality; that a human is characterized by subjectivity and self-determination. So, the fascination with this spectral phenomenon is not accidental. Indeed, we have been experiencing its full force for at least two decades.¹ This fascination is ambivalent: it teeters between the realization that we have discovered the power that runs and forms our world and the sensation of impotence, the realization that it is impossible to control it and use it for activities that are consistent with our intentions.

Emergence as deviation

The spectre of emergence manifests itself in heart attacks and strokes, the greenhouse effect, stock market panics, traffic jams, power blackouts, fads and crowd behaviour, Internet lynching and pogroms, collective delusions, the lives of complicated urban organisms, the social economy and cooperatives, changes in the language used by a particular community and the transformation of its culinary tastes, the behaviour of insects forming structurally complex habitats, friendly conversations transforming into open conflicts and vice versa, the self-forming flight formation of birds and many other, at first glance, unrelated phenomena. What all of these phenomena have in common

¹ Of course the very notion of emergence appeared in science much earlier, in the mid-nineteenth century, but we are experiencing its renaissance today (apparently for a reason). Because it is today that we realize the complexity of the surrounding reality and experience the growing problems with its control. See: Juarrero A., Rubion C.A., (ed.), *Emergence, complexity, and self-organization: precursors and prototypes*, Litchfield, 2010; N. Johnson, *Simply complexity: a clear guide to complexity theory*, London 2012.

is that they occur within *complex systems*,² which are certain wholes which can be separated from the environment and which are comprised of inter-reacting elements. These open-ended wholes actively interact with their surroundings. These systems, as R. Keith Sawyer observes,³ are not completely random, nor are they fully subordinated to any universally binding rules. And new patterns of action, structures appearing within their limits, are created as a result of respective components inter-reacting. Thus, it can be said that complex systems are emergent in nature: they emerge from unpredictable relations, communicative acts, conflicts, cooperation, but they are not created by an “invisible hand,” divine intervention, conspiracy, or according to a given plan or the laws of nature. As can be seen, considering emergence as a spectre appears to be particularly relevant. Although this process has noticeable, often material, results, it does not sit comfortably with the typical scientific worldview of modernized societies either. Science, in fact, has tried to convince us for at least two centuries that thanks to its powers we are able to fully control reality. And instances in which reality eludes science are the result of accidents, human error, improper procedures, or ignorance. Indeed, it was for this reason that emergence was generally regarded as a deviation from the

² See: A. Nowak; W. Borkowski, K. Winkowska-Nowak; B. Manc-Bogdańska, *Układy złożone w naukach społecznych: wybrane zagadnienia*, Warsaw 2009; M. Mitchell, *Complexity: Guided tour*, New York 2009; J. Urry, “Globalne układy złożone” [in:] A. Wieczorkiewicz, A. Jawłowska, M. Kempny (eds.), *Kultura w czasach globalizacji*, Warsaw 2004; M. Kempny, “Socjologia ponowoczesnych form społecznych – wspólnoty i kultury „bez korzeni”, czyli o tym, jak próbuje się uchwycić naturę relacji społecznych w świecie ruchu i mieszania się”, *Kultura i Społeczeństwo* 1-2/2006.

³ K. R. Sawyer, *Social emergence: societies as complex systems*, Cambridge 2005.

norm: “contagion,”⁴ “virus of the mind,”⁵ “irrationality,”⁶ “social trap,”⁷ “illusion,”⁸ “the madness of crowd,”⁹ “hysteria and panic,”¹⁰ “deindividuation and herd behaviour”¹¹ and so on. The stigma associated with the phenomenon may come as a surprise because there is every indication that emergence is the main factor responsible for the form which our world takes. This stigma can be explained, however, when we see that the above-mentioned attempts at describing the spectre of emergence are not aimed at recognizing its true nature but rather at reproducing its spectral nature. Their goal is to undermine the reality of emergence and maintain the belief that it is deviant in nature, thus proving that the basic software of reality should be a scientific and technocratic worldview which reassures us that everything is under control. It can be observed that completely different strategies for making the spectre of emergence real are beginning to dominate nowadays. On

⁴ G. Le Bon, *The Crowd: A Study of the Popular Mind*, London 2002; G. Tarde, *Laws of Imitation*, New York 1904; K. Thiele-Dohrmann, *Psychologia plotki*, Warsaw 1980.

⁵ R. Brodie, *Virus of the mind*, London 2011.

⁶ S. Sutherland, *Irrationality*, London 2009; R.E. Bartholomew, *Little Green Men, Meowing Nuns and Head-Hunting Panics: A Study of Mass Psychogenic Illnesses and Social Delusion*, London 2001.

⁷ E. Hankiss, *Pułapki społeczne*, Warsaw 1986; R. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton 1994.

⁸ R. E. Bartholomew, *Little Green Men, Meowing Nuns and Head-Hunting Panics: A Study of Mass Psychogenic Illnesses and Social Delusion*, London 2001; H. Evans, R. Bartholomew, *Outbreak. The Encyclopedia of Extraordinary Behaviour*, New York 2009.

⁹ C. Mackay, *Extraordinary Popular Delusions and the Madness of Crowds*, London 2000.

¹⁰ S. Balaratnasingam, A. Janca, “Mass hysteria revisited”, *Current Opinion in Psychiatry* 19/2006; E. Goode, N. Ben-Yehuda, *Moral Panics: The Social Construction of Deviance*, London 2009.

¹¹ M. Earls, *Herd: How to Change Mass Behaviour by Harnessing Our True Nature*, London 2009; M. Krajewski (ed.), *Deindywiduacja. Socjologia zachowań zbiorowych*, Warsaw, 2013 (in print); S. Reicher, M. Levine, “Deindividuation, power relations between groups and the expression of social identity: the effects of visibility to the out-group”, *British Journal of Social Psychology* 33/1994.

the one hand, they seek to demonstrate the positive nature of the phenomenon and its potential to solve many social dilemmas; on the other hand, they investigate the truth behind emergence so as to predict, and therefore also control, the future states in which it will manifest itself.

Emergence as hope

In the first case, emergence is identified with the society's ability to self-regulate. The best example of this new form of interpreting the processes is undoubtedly the "social turn"¹² present in many spheres of life. It integrates individuals into building those spheres of life which have so far been regulated on the basis of expertise, hierarchical structures, and professional institutions. Such initiatives are positively based on the belief that people, who are potential beneficiaries of participatory activities, best know what they want and that the best means of solving complex social problems is collaboration,¹⁵ the activation of "collective intelligence,"¹⁴ inclusion, and cooperation. Meanwhile, critique of the state as a caring institution, treatment of the official political system as incapable of representing the interests of its citizens and fulfilling regulatory functions, and the belief that the primary task of experts is not so much to solve problems but rather to create a demand for their own services, constitute the dark side of the "social turn." There are many examples of actions based on such a self-regulating model: from participatory planning

¹² C. Bishop, *Artificial hells: Participatory art and the politics of spectatorship*, London, New York 2012.

¹³ M. Frąckowiak, L. Olszewski, M. Rosińska (eds.), *Kolaboratorium. Zmiana i współdziałanie*, Poznan 2011.

¹⁴ H. Rheingold, *Smart Mobs: The Next Social Revolution*, Cambridge 2003.

and design, through social economies, cooperatives and crowdfunding, the development of urban social movements, various forms of “direct street democracy”, the reclaiming the city, and lifestyle phenomena¹⁵ that all have their sources at the most basic levels of social life. What bridges and brings together all these actions is not only a belief in “people” and their ability to interact, but also a specific context within which these operations are becoming more and more popular. This context consists of two basic phenomena: the increasing dysfunctionality of state structures and the increasing complexity of social life resulting from the expansion of communication networks.

Simulated emergence

Taking into account these circumstances, one cannot claim that the “social turn” merely acknowledges that emergence is a crucial social process. The “social turn” is also an attempt to hand over the responsibility for solving many social dilemmas to the citizens themselves, as well as a manifestation of efforts to make this process a source of private profits.¹⁶ Attempting to transform emergence into a productive source implies that its only acceptable form is reduced to something emergence is not. And that is because it is based on a (business) plan, strategy, and design, while grassroots spontaneity is shaped by the

¹⁵ Such as, for example, fixed-gear bicycles, owling, planking, flash-mobs, guerrilla gardening, suspended coffee, food trucks and many other.

¹⁶ The best example is of course web 2.0. It is an attempt to transform the grassroots communication activities of network users into a free labour force feeding the flow of information, attention and interest – the resources needed for the functioning of the global cultural industry (see: S. Lash, C. Lury, *Global culture industry: The Mediation of Things*, London 2007).

structures within which it was located. Indeed, what is highly characteristic of various forms of the “social turn” is that they are initiated by experts (who announce public consultations and grant competitions for local communities, create new social networking sites, organize courses where you can learn how to be active, support the excluded and the marginalized). In many cases, such “simulated emergence” produces very beneficial results, strengthens public resources, or provides a solution to a specific problem. The point is, however, that this form of emergence does not have much in common with the self-regulating abilities of complex systems. It only constitutes a dramatically unconvincing example of the fact that emergence can be (ab)used in actions which treat the world in terms of plans and projects. It is a dramatically unconvincing example because the essence of emergence is its spectrality, contingency, and immunity to any form of control. Therefore, the “social turn” (as has been mentioned, regardless of the undeniable social benefits it brings) can be seen a sign of panic-like fear of what is grassroots, spontaneous, and relational. Not only does this fear produce simulated (and often aestheticized) forms of self-regulation, but it also leads to disregarding and devaluing emergence in its true form. Guerrilla gardening is a great example of this. Guerrilla gardeners seem not to recognize that what they are trying to achieve has for decades been accomplished by spontaneous micro-collectives of neighbours tending gardens near their apartment houses, planting trees and shrubs in “urban wastelands,” and regulating the behaviour of other residents by means of “keep off the grass”

signs.¹⁷ As a result, the social potential for change present in informal relationships between neighbours is reduced to yet another form in which a sophisticated urban lifestyle manifests itself. The point is not to belittle the “social turn,” the growing popularity of participation as a form of solving social problems, but rather to recognize the dangers associated with it. And these dangers involve above all ignoring society’s ability to self-regulate or using the “social turn” exclusively as a justification for financing artists, designers, and animators who create or amplify the phenomenon with public money.¹⁸ One more important issue should be discussed here. Namely the understanding of self-regulation as a means of solving social problems which can be used in a controlled manner. Using self-regulation in such a way may be very risky for political reasons because it suggests that exclusion, marginalization, violence, and discrimination affecting certain communities have their source in these communities. In other words, it suggests that these communities are somehow to blame for the situation in which they found themselves. Social order, unfair distribution of various resources, structurally conditioned marginalization, prejudice and hatred from the rest of society are not to blame because these communities lack proper relations between people, social activity and the will to cooperate. A too narrow and instrumental definition of emergence not only leads to “blaming the victim” syndrome or to blaming the marginalized for their

¹⁷ We analyzed these phenomena in the *Niewdzialne miasto* research project, see: Krajewski M. (ed.), *Niewdzialne miasto*, Warsaw 2012.

¹⁸ C. Bishop C., *Artificial Hells: Participatory Art and the Politics of Spectatorship*, op. cit., p. 13–15.

social condition but also to an erroneous understanding of the spectre of emergence as a process which takes place only between individuals. In fact, it always takes place between not only individuals but also other actors forming a complex system, including institutions, law, education system, cultural goods, technologies, natural world, etc. Its context is a “complex system”: an extremely complicated network of inter-reacting elements. Reducing emergence to narrowly defined social relations (those between people) is not accidental, because the “social turn” replaces those who regulate social life in a deceitful way (instead of states and experts we have NGOs, social workers, and social movements) and does not, in fact, radically change the terms in which we think about social life. In order for the radical change to take place, the spectre of emergence would have to be recognized as a real being and the processes in which it manifests itself would have to be recognized as actual activities. Indeed, we would have to realize that society can regulate itself and is made up of not only people but also objects, animals, plants, and technologies.

At war with the spectre of emergence

Let us now turn to the second form of dealing with emergence. Here, the spectre is analyzed in order to predict the future states of its manifestation. So, it is in fact analyzed in order to control it. In this second perspective, emergence is seen as a sinister and destructive force; it attacks suddenly and distorts the established order. It is seen as a force that not only undermines the routine of everyday life and the rules of its organization, but also as a force which makes

us discover in ourselves surprising potency, emotions, and sentiments. This kind of emergence manifests itself in distortions in communication (e.g. unpredictable traffic jams or short-term internet interruptions which leads users to try repeatedly to re-connect, which in turn makes the problem they are trying to solve worse), various forms of deindividuation and collective behaviours¹⁹ (e.g. panic, pogroms, revelations, or mass hysteria caused by the death of an important member of the community) or market crashes brought about by the individual pursuit of profits (the most famous example is of course the seventeenth-century *tulip mania*²⁰ but also the more recent dot-com bubble, the U.S. housing bubble, or the present financial crisis). The destructive force of emergence also manifests itself in more global phenomena: for example, problems with access to drinking water, the use of natural resources, and the growing problems with storing the waste generated by increasing consumer needs. It is important to remember that emergence leading to these negative phenomena, that is, emergence which disrupts the balance of a “complex system” and often leads to horrific consequences, is also the primary means of dealing with the negative consequences and restoring the system to a state of unstable equilibrium.²¹ The problem is that in order to achieve the latter one has to go through a kind of social purgatory, which involves conflict, violence, human dramas, and often victims. It is this intermediate moment – between one state of equilibrium and another – that scientists who study “complex sys-

¹⁹ N. J. Smelser, *Theory of Collective Behaviour*, New York 1998.

²⁰ See: C. Mackay, *Extraordinary Popular ...*, op. cit.

²¹ See: N. Johnson, *Simply complexity...*, op. cit. p. 19–39.

tems” try to eliminate, especially those scientists who use mathematical modelling, the computer simulation of social life, and dynamic models of collective phenomena.²² Such systems allow scientists to carry out various “virtual experiments,” which involve introducing new factors into a system they created. These new factors change the way agents forming the system function and inter-react and they also make new structures, wholes, and phenomena appear in this digital environment. In most cases, these experiments test theories based on observation and intuition created in advance but also reconstruct the processes which lead to the phenomena or conditions of social life experienced by us (e.g. the emergence of given standards or social structures) or look for solutions to social problems with which we tackle every day (such as “social dilemmas and traps”).

I identify three basic problems with this form of studying emergence. First of all, such systems are for obvious reasons forced to reduce the complexity of the real world so that it is possible to carry out the experiment. This means either isolating certain narrow “complex systems” from their social context (e.g. financial transactions, internet communication, competition for limited resources) or reducing the number of parameters that define the operation of agents (for example, to the pursuit of profit or attempts to maximize profit), or extreme simplification of the set of factors that trigger interaction.²³ Secondly, one assumes

²² I base their description and critique on Keith R. Sawyer’s book: *Social emergence: societies as complex systems*, op. cit., see especially chapter: “Simulating social emergence with artificial societies”; see also: K. Winkowska-Nowak, D. Batorski, H.-O. Peitgen, *Wprowadzenie do dynamiki społecznej*, Warszawa 2003.

²³ This kind of reduction does not have to be problematic as long as it only serves to test some

that complex systems are similar, so that it is possible to apply to real societies the results obtained in the laboratory with regard to “artificial societies”, or that it is possible to transfer the findings of an analysis of financial markets to the marriage market, and so on. Thirdly, laboratory attempts to tame the spectre of emergence may have ambivalent social consequences. Just imagine what the effects of identifying the mechanisms governing relations between people investing in the stock market might be or what might happen when we fully recognize the mechanisms of fashion, crowd behaviour, or collective intelligence. It can be assumed with a high level of confidence that this kind of knowledge will not be shared, but rather used to achieve private goals. In a world where societies compete for limited resources and fetishize profit maximization and dominance, who would not want to possess such a philosopher’s stone, which would make it possible to turn unpredictable consumers, investors, voters, or supporters into obedient subjects that can be easily controlled to achieve one’s goals.

The spectre of emergence and spatialisation of individuals

Such an approach (in the context of widespread bio-piracy, court-sanctioned gene patenting, employees being treated as “resources”, scientific systems that eliminate individuals from the categories of development and innovation) can be accused of excessive lyricism, cognitive naivety and

theories and not to explain or predict real phenomenon. In other words, as long as we do not try to apply research results to reality. See: *Wprowadzenie do dynamiki społecznej*, op. cit., p. 87–88.

reaction. However, it is worth noting that, as the history of the last two centuries teaches us, it is not certain that scientific progress is something undeniably good, and whether it should be a development priority. For this very reason, the spectre of emergence, though it worries and scares us, is so important to our self-awareness as a species. Its constant manifestation reminds us that we are not omnipotent beings, but rather creatures helpless in the face of a world that is a product of collective action. In this sense, emergence is similar in nature to other spectral phenomena – its unreal character, transience, ephemeral nature, and unpredictability not only frighten us but also make us more complex. Indeed, emergence adds a healthy dose of fatalism to our rational nature and demonstrates that our omnipotence is illusory because our life is in fact governed by uncontrollable forces. Emergence, understood as a spectre, fulfils its obligation to “spatialize” us effectively. Indeed, it makes us realize that although our complex world has a very simple cause – namely, the relations connecting us with others, the relationships we enter into daily with other people, objects and institutions – we are not able to fully comprehend its nature. Such a spectral lesson effectively cures us of our pretension to being a unique species. As a classic of sociobiology observes: “We are not unique in being unique,”²⁴ because like other creatures we are subject to forces over which we have no control.

translated by Małgorzata Olsza

²⁴ See: P. L. van den Berghe, “Why Most Sociologists Don’t (and Won’t) Think Evolutionarily”, *Sociological Forum* 5/2 (1990), p. 176.