On the importance of a certain slowness

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Abstract

In the analysis of complex systems there is often an emphasis on the plasticity and adaptability of the system. Coupled with perspectives from chaos theory — like the sensitivity to initial conditions, critical organization, bifurcations, and fractal complexity — this has led to a general understanding of complex systems as something in constant flux and susceptible to rapid change. Although these may indeed be important characteristics of complexity, it has led to descriptions that neglect the stability and the enduring structures necessary for the existence of complex systems. In order for a system to have any identity whatsoever, it cannot merely reflect its environment and the changes therein, it must also resist some of these changes. This is not always recognized in a culture where speed is linked with efficiency, and has become a virtue in itself. This paper argues for a certain "slowness." It is not necessary to follow every trend in the environment; as a matter of fact it can be detrimental. This has implications for the way in which we interact with each other, and for the way in which we use new technology, especially the technologies for media and communication. Being too "quick" also has implications for our understanding of important notions like integrity and reliability. The way in which complexity theory is used to analyze the contemporary cultural landscape by certain theorists, particularly Mark Taylor, will be criticized. In the process reference will be made to novels by Sten Nadolny and Milan Kundera.

"In philosophy the winner of the race is the one who can run most slowly. Or: the one who gets there last."

Wittgenstein (Culture and Value)

Introduction

As a result of a whole range of what one could call "pathologies" in contemporary culture, the idea of "slowing down" has of late been mooted in a number of contexts[1]. A few can be named briefly. The "Slow Food" movement, which started in Italy but has a worldwide following, extols the virtues of decent food made from decent ingredients without compromise. The resistance shown to "junk food" is not only based on aesthetic considerations, but also on ethical (and nutritional) ones. The movement promoting "Slow Cities," also of Italian origin, fosters an understanding of cities that is more humane. Such cities should encourage walking rather than driving, have small shops with local products rather than shopping malls, and, in general, provide opportunities for the community to interact, not to live in isolation. "Slow schooling" is a movement that questions educational processes in a world geared for instant results. It emphasizes the contextual nature of knowledge and reminds us that education is a process not a function. On a more personal level, "slow sex" involves attitudes that try to prevent that the values of the marketplace ruling in our intimate relationships. We need to recognize that the journey is more important than the destination, and that takes time. An immediate or perpetual orgasm is really no orgasm at all.

There are a number of very important issues at stake in these examples. In what follows, however, the focus will not be on these social movements as such, but on some of the underlying principles that make the debate on slowness an important one. Through an analysis of the temporal nature of complex systems, it will be shown that the cult of speed, and especially the understanding that speed is related to efficiency, is a destructive one. A slower approach is necessary, not only for the survival of certain important values or because of romantic ideals, but also because it allows us to cope with the demands of a complex world in a *better way*.

The argument will be made initially by briefly analyzing current distortions in our understanding of time. These distortions result, on the one hand, from the rational and instrumental theories we have about a modern world, and, on the other, from the effects of certain technologies, especially communication and computer technologies. In order to show why these are "distortions," or at least to show why these distortions are problematic, the temporal nature of complex systems will be discussed. The relationship between memory and anticipation will be central to this discussion, but attention will also be paid to the importance of delay and iteration. These characteristics of complex systems have important implications for our understanding of the formation of identity, both individual identity as well as the identity of groups[2]. In closing, a number of general cultural issues involving the fast and the slow will be looked at.

It is important to realize that the argument for slowness is *not* a conservative one; at least not in the political sense of the word. It is not merely backward looking nor a glorification of what has been. Although it emphasizes the historical nature of knowledge and memory, the argument for slowness is forward looking: it is about an engagement with the future as much as with the past.

Slowness is in itself a temporal notion, and in many ways the opposite of the notion “static.” In point of fact, it is actually an unreflective fastness that always returns you to the same place.

It should also be stated up front that there is no argument against an *appropriate* fastness. A stew should simmer slowly, but a good steak should be grilled intensely and briefly. The argument is against unreflective speed, speed at all cost, or, more precisely, against speed as a virtue in itself: against the alignment of “speed” with notions like efficiency, success, quality, and importance. The point is that a system that has carefully accumulated the relevant memories and experiences over time will be in a better position to react quickly than one that is perpetually jumping from one state to the other.

Perhaps “slow” and “fast” are not exactly the correct terms to use. Terms like “reflective” and “unreflective,” or “mediated” and “unmediated” may be more accurate. Nevertheless, the debate taking place uses “slow” and “fast,” and the terms do have a certain rhetorical significance. If we stay with their use, it is done in a metonymical way. The whole point of this paper is to give them a richer meaning.

Living in the present

In *Time: The Modern and Postmodern Experience*, Helga Nowotny (1994) argues for a certain shift in our experience of time. In short, in my paraphrase, and incorporating insights from Bauman (e.g., Bauman, 1992), the argument is the following: One of the main aims of the instrumental rationality flowing from the Enlightenment was to create conditions in which we are not controlled by contingency. To achieve these conditions, it is necessary to understand, and preferably *control*, the future. This demands co-ordinated and goal-oriented action in the present. Modernism becomes a project that demands our total commitment against the forces of irrationality and chaos.

The modernist project has two important effects on our understanding of time. In the first place, our actions need to be coordinated. This can only happen if time is universalized in such a way that we all live in the “same” time. This was achieved mainly through technology — that is, the construction of accurate clocks — and by regulating time globally. Instead of each person or local community living in their own time, it was necessary to synchronize time in such a way that activities in, say, New York and Paris could be correlated. The effects of this, however, go much further than merely synchronizing time in different parts of the globe. It also means that private time and public time are synchronized. We have to live our lives according to a generalized and controlled understanding of time. A subjective, or should one say phenomenological, experience of time has to be sacrificed in order to generate a universal temporal framework in which we can operate efficiently.

The second effect of instrumental rationality on our understanding of time is a result of the desire to control the future; for the future to be made knowable. This would only be possible if the future, in some essential way, resembles the present. We cannot anticipate what we do not know, and therefore we should do everything in our power to create a future that does not disrupt the steady progress we are making toward a better world. This modernist strategy is perhaps exemplified best in Hegel’s dialectic of history, which is supposed to converge toward an ultimate solution. The actual result of this ideology is to extend the present into the future, causing us to live in a perpetual “present.” This collapse of the diachronic into the synchronic allows instantaneous interaction between everybody; it creates a world that is fast and efficient. The sacrifice made in order to achieve this, however, is nothing short of sacrificing the very notion of temporality. Nowotny (1994: 16) calls it “the illusion of simultaneity.”

The way in which contemporary society lives in an eternal present, or what Eriksen (2001) calls the “tyranny of the moment,” is made possible, and augmented, by the surge in technology, especially computer and telecommunication technology. We are instantaneously in contact with everybody, everywhere. Not only has the distinction between home and the workplace collapsed, but also the distinction between work time and private or leisure time. It is expected of many of us to be available, always and everywhere[3]. This state of affairs may have been less detrimental if it did not also demand instant response. The very reason for mobile phones and email lies in the fact that immediate response is possible. It is in this “immediate” that the main problem lies. There is less and less time for reflection. Reflection involves delay, and in a cult of speed, delay is unacceptable. This move away from reflection to immediate response has profound implications for our understanding of what it is to be human (see Parkins, 2004: 376—379), to which we shall return.

The “illusion of simultaneity,” the idea that if we live quickly and efficiently in the present we are somehow closer to reality, is nevertheless exactly that: an illusion. We cannot escape our temporal nature, and our persistence in trying to do so can only lead to pathology. The necessity of delay and reflection needs to be re-evaluated. This can be done from a number of perspectives. A Freudian analysis would show that instant gratification is actually a destruction of pleasure. More sublime pleasure can be found only if desire is delayed, anticipated as a memory of something still to come, yet something that should also in principle be able to surprise us. Derrida calls the illusion of living in the present, of thinking that we have access to an objective understanding of reality if we live “in” it, the “metaphysics of presence” (Derrida 1976: 49). He introduces the notion of *différance* specifically to undermine the metaphysics of presence (62). *Différance* is a notion that intertwines difference (as a spatial notion, one could say) and delay (to defer, a temporal notion) as the engines of meaning (Derrida, 1982). The present consists only as a combination of memory (of what has been) and anticipation (of what is to come).

In his novel *Slowness*, Milan Kundera (1996) uses the metaphor of somebody riding on a motorcycle as being constantly in the

present. Speed and the demands of the machine reduce his horizon to something immediate. Someone walking, however, is moving at a pace that allows for a much wider horizon. The stroll unfolds in time in a way that opens up reflection about where we are coming from and where we are going to as we walk. This theme of both the past and the future being present in a meaningful experience of the present could be pursued in much more detail from both a Freudian and Derridean perspective — and several others too — but the argument for a meaningful temporality — that is, something slower — will be made here from the perspective of the dynamics of complex systems.

Complex systems, temporality, and memory

An important aspect of complex systems, one that certainly complicates our understanding and modeling of such systems, is their temporal nature. Complex systems unfold in time, they have a history that co-determines present behavior and they anticipate the future. Moreover, as we know at least since the work of Prigogine, the behavior of complex systems is not symmetrical in time. They have a past and a future that are not interchangeable. This being "situated in time" does not always receive adequate attention in our analysis of complexity.

The central notion at stake when we talk of time and complexity is that of "memory." Memory is the persistence of certain states of the system, of carrying something from the past over into the future. It is not merely the remembering of something in the past as if belonging to that past, it is the past being active in the present. We should therefore not think of memory in abstract terms, but of memory as something *embodied* in the system. In many respects the system is its memory. If one accepts an understanding of complexity that emphasizes the relational nature of the system, it is useful to think of systems as networks where the connections between the nodes are more important than the nodes themselves. The nature of these connections is a result of which states of the network are "retained," thus the structure of the system is a result of the sedimented history of the system[4].

It is important to remember that memory is not merely a cumulative process. The structure in the network of relationships can only develop if certain states of the network are *not* maintained. Memory is a result of a process of selection. The states that are significant are repeated more often and therefore form more permanent links in the network. Less significant states will fade away over time. Memory is only possible if the system can also forget[5]. What is important to note at this stage is that memory is not an instantaneous thing, it takes time to develop, it is slow.

If one characterizes memory as the past being carried over into the future, it follows that the future can only be anticipated in terms of the memory of the system. Anticipation is *not*, or at least should not be, simply an extrapolation of the present. It is a complex, non-linear process that tries to find some trajectory, some way of "vaulting" from that which has already been experienced to that which has to be coped with. The quality of the anticipation is a function of the quality of the memory. A more varied, richer, deeper, and better-integrated memory will open up more sophisticated anticipatory capabilities.

The obvious question now would be to ask *how* such a rich memory is formed. This is a complex issue, but for the sake of the argument at stake here, one can say the following: Memory is information from the environment that has been filtered, it is that which has been interpreted — by the memory already sedimented in the system — as significant. The identity of the system is, in some sense, its collection of dynamic memories. The implication is that the system cannot reflect, or act on, everything that is going on in the environment at a given moment. If that were the case, the system would always be merely a reflection of its environment and would have no identity of its own. In order for it to be a system at all, a system that has its own identity, that can react to the environment and not merely mirror it, a certain hysteresis is required. The system must be slower than its environment[6].

The notion of hysteresis is an important one[7]. It links to the notions of delay and *différance* discussed above. An event in the environment of the system does not have inherent and immediate significance for the system. Its significance is established in time as it is re-enacted in the system and carried over into the future. In a way, the significance of an event has always already been established (in terms of the memory of the system), but never completely or finally, since the significance is always also to be determined by what is still to come. The system has to hang on to some aspects with a certain tenacity: not let go of them too quickly. There is risk involved in this, of course. The system has to invest resources in this process. It cannot maintain everything; it has to select. If too many of the wrong things are carried over it will impair the system's performance. However, if not enough is carried over, it will also fail.

To put it in slightly different terms: The system has to find a way to discriminate between information and noise[8]. If it follows every trend in its environment, it will also be following noise. If it reacts too slowly it will only follow the low-frequency trends, which may also be just noise. The system must be stable enough not to be buffeted around by every fluctuation, and it must be flexible enough to be able to adapt when necessary. Where this optimal point lies is not a question that can be answered from an objective viewpoint. The balance between stability and change is a contingent thing that plays itself out in time. What one can say, though, is that merely to be fast will destroy the system.

The argument for a certain slowness should start to take shape now. A viable system has to be able to *resist* some of the dynamics in its environment. There should be a temporal space in which the past is allowed to play itself out in interaction with the present. There must be time for reflection and interpretation. The faster the system becomes, the shallower its resources will

be. Ultimately quick behavior will be no more interesting than Brownian motion.

It must be stressed again that the argument for a certain slowness is not a conservative argument. A certain amount of conservation is a prerequisite for a system to maintain itself, of course. The important point, to which we shall return, is that a "slow" strategy is not a backward-looking one. If a somewhat slower tempo allows a system to develop a richer and more reflective memory, it will allow the system to deal with surprises in its environment in a better way. The argument of slowness is actually an argument for appropriate speed. There is no objective or immediate rule for what that speed is. If anything, it is a matter of experience, and experience (as Aristotle urged) has to be gained, it cannot be "given" in an immediate way. It is experience that determines which piece of meat should be fried quickly and which should simmer slowly in the stew. She who fries everything quickly will only have something nice to eat now and then, and then purely by chance.

Integrity, identity, and reflection

In his novel *The Discovery of Slowness*, Sten Nadolny (2003) gives us a fictionalized account of the life of John Franklin. Franklin, a 19th century explorer primarily obsessed with finding the Northwest passage, is slow. His advance (in the Royal Navy) is also slow, mainly because being slow is confused with being stupid. Since he is not stupid he is gradually awarded command, and those working with and under him discover the advantages of being slow. Franklin is persistent, dependable, and trustworthy. Even in war, thorough reflection pays dividends that are not always immediately apparent. His political career, as governor of Van Diemen's Land (now Tasmania), ends badly only because he is disgraced by those out for quick and selfish results. His principles are not negotiable.

Franklin is a worthwhile human being because he has integrity. There is a substance to his personality that may seem opaque at first, but eventually shows itself as solidity. The nature of his integrity is directly coupled to his slowness. He assimilates, integrates, and reflects before he acts. This is sometimes a ponderous process, and he pays a price for it. Under normal circumstances it is easy not to notice someone like this, or to pass him by, but when there is a crisis, it is him people turn to. He can be trusted, he will come up with something. This is most significant. It is exactly when one would think that being fast is what is required that slowness proves its worth.

The link between slowness and integrity is also an issue in J. M. Coetzee's (2005) novel *Slow Man*. Here we have a character who resists change, despite the cruel demands being made on him. He clings to a set of values that are important to him, and this gives his personality substance. However, he is too stubborn, and eventually he cannot adapt to new circumstances. One has tremendous sympathy for him, but he turns out to be too slow, and pays the price for it. Even so, it is clear that when there is a choice between the loneliness of the slow and the superficial companionship of the quick, the author sides with the slow. Integrity is more important than a certain kind of success.

Despite Coetzee's darker view, there is no reason why slowness should be solitary and sad. Quite the contrary is true. In his novel Slowness, Milan Kundera (1996) shows with great conviction how a certain slowness is a prerequisite for being fully human. What is at stake in this novel is not moral integrity, or a kind of Calvinist dependability, but the sensuality of human interaction, the beauty of a relationship that unfolds in time, the ecstasy of a love that has a history and a future. Being human implies having a body, something with its own rhythms and demands. If we reduce all of this to something merely instrumental, to transactions written in legal terms (not in lyrical prose), if we demand results *now*, then we will stop being human. Language cannot be reduced to a code; it plays itself out in a certain context. What is more, even if we immerse ourselves in the context we have to wait beyond the last sounds. When all is said, the meaning has not finally arrived yet. It is the anticipation of what it could yet mean that draws us forward. Einmal ist keinmal.

Many may feel that the novel is an outdated art form, something to be replaced with the fast and immediate communication of the digital code. In his book *The Moment of Complexity*, Mark Taylor (2003) seems to lean in this direction. For him, something of a paradigm shift has occurred in the last few decades. We live in a new world with new forms of communication and new forms of learning and human interaction — something he seems quite willing to sell. He resonates with a fast world, something new and exciting.

Taylor's emphasis on the new goes hand in hand with a nearly interchangeable use of the notions "noise" and "complex." This problematic conflation is the result of an understanding of complexity primarily informed by chaos theory and of information as entropy. Such an understanding, inspired by the theories of Shannon and Chaitin, will attribute the highest information content to a purely random sequence[9]. Although these notions are important in the context of computation, they are less useful when talking about complex systems in general. Living systems, including the social systems that Taylor explores, are neither random nor chaotic. Despite the fact that they are constituted through non-linear interaction and that they are capable of novel and surprising behavior, they are well structured and robust. They persist through time and maintain themselves. When we encounter behavior that we do not understand, or cannot decode, it often looks like noise, but once it is understood we can see the patterns. These patterns are not merely or only an order imposed by the observer, but also characteristics of the system itself. Complexity may look like noise, but all noise is not something complex waiting to be decoded. Sometimes noise is just noise[10].

Taylor's argument is seductive, but, to my mind, wrong if not harmful. In his fervor to embrace the posthuman, he looks at the

history of being human with a certain disdain. It seems as if he thinks that complexity is a recent discovery and forgets that being human has always been complex. He embraces the present and wants to deal with it quickly and efficiently. We can be educated instantaneously by electronic means and thus we should make a radical break with old methods. In his excitement he forgets that complex systems, even those in our postmodern world, are constituted historically, that they develop and change, and that one of their primary functions is to distinguish between information and noise. This cannot be done at the press of a button.

The ideas of the posthuman and the cyborg are of undeniable importance[11], but in our enthusiasm to embrace new modes of being we should be careful not to effect a transformation into something inhuman[12]. Machines are fast, but they are machines. The present argument is not for an *a priori* rejection of the possibility of machines with human capabilities, or one that denies the intimate relationship that humans have always had with technology. Our cultural existence presupposes the use of tools. The difference between using a quill and a word-processor may have huge implications on a practical level, but they also share some essential features[13].

The notion “posthuman” is thus an ambiguous one. If it signifies a tight coupling between the body and technology, we have always been posthuman. If it signifies the obsolescence of the body, perhaps in the sense that a “person” could be downloaded instantaneously as software and run on a machine, it becomes a problematic notion at odds with the idea that human identity is also the result of a certain temporal embodiment. The general argument presented here maintains that any complex system, organic or not, would have to incorporate a certain slowness.

The need for slowness, and a warning against the embracing of the fast, can perhaps be motivated best from the perspective of philosophy. Philosophy, in its most general form, is essentially the art of reflection. Wendy Parkins (2004) analyses contemporary culture as one moving away from reflection, and argues that what we need is an “ethics of time.” She does not elaborate much on what such an ethics should look like, but it is something that needs careful attention, not only from a moral perspective but also from the purely pragmatic perspective of how to live and survive in a fast world. Such an “ethics” will be complex in itself. It will have to unfold in time and be conscious of its own temporal nature.

For now, instead of rushing around like the Red Queen in a world where change is virtuous merely because it is change, we can start by taking some time out to reflect. At this point the argument for slowness becomes a political one: We should put up some resistance to a culture in which being fast is a virtue in itself. We should say “no” with a little more regularity.

Notes

[1] See Honoré (2004) for a discussion of the emergence of several movements that challenge the “cult of speed.”

[2] The fact that complex systems demand plural descriptions is in itself something that takes time. Although the link between plurality and delay has to my knowledge not been made explicit, it is implied where there are arguments for multiple descriptions and when “process” is emphasized. See for example Richardson, 2005.

[3] When arrangements are made for more flexible working hours to facilitate parenting, for example, this is already a form of resistance to speed and efficiency.

[4] This argument can also be made using the example of the brain, and links with many Freudian arguments in an interesting way. See Cilliers (1998: 45–47, 92, 108) for further discussion.

[5] This process is known as the “use principle” or Hebb’s rule. For more detail see Cilliers (1998: 17–18, 93–94).

[6] Perhaps this claim needs to be qualified somewhat. Strictly speaking, the system must change at a different rate than its environment. There are many activities within as well as outside the system (without introducing the problem of boundaries here; see Cilliers, 2001), thus it is difficult to talk of the “rate of change” as a single measure. Some processes in the system may be faster than the environment, but they are possible only within the context of more general structures that have been formed through iterative processes that involve recycling and delay. One could perhaps say that the system should be slower than its environment “on average,” but this could lead to other confusions since “average” is a problematic notion in this context. At the very least one could say that processes involving delay are crucial in identity formation.

[7] Hysteresis is the “lagging of effect when cause varies” (Oxford Concise English Dictionary).

[8] The distinction between information and noise is, for the system, a strategic choice. There is no pre-determined criterion by which they can be separated. This, however, does not imply that all noise is information just waiting to be framed in the appropriate way. See the discussion of Taylor below.

[9] See Hayles (1999) for a discussion of these issues. Primary sources are Shannon (1949) and Chaitin (1987).

[10] A similar, and more detailed argument is made in Cilliers (2005).

[11] See Badmington (2000) for a collection of philosophical essays on the posthuman.

[12] See Hayles (1999) for a detailed discussion of cybernetics, the development of the posthuman, and the importance of embodiment. See Braidotti (2005) for an affirmative discussion of the posthuman that is neither a euphoric, uncritical acceptance of advanced technology, nor a nostalgic lament for the decline of classical humanism.

[13] There would definitely be a lot less drivel to wade through if it were not possible to write so quickly.

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