



Technological indeterminacy: Medium, threat, temporality

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Abstract

For some time now technological determinism, a theory that, broadly speaking, explains the relation between technology and humans in terms of historical causation, has been the target of intense criticism. In this article, I reassess a few of these criticisms in light of what I consider constitutes a new temporal sensibility. Rather than explained in causal terms, I characterize this sensibility as a tendency to place causes in the future. Placing causes in the future means a conversion of technological determinism into an instance of indeterminacy. This then allows religious groups, political actors and global media corporations to act while an imminent future effects the present. Referencing the journalistic mediations by global news broadcasting corporations of events such as the 2011 Arab Spring uprisings or Pastor Terry Jones's threat to burn copies of the Quran on the anniversary of the 9/11 attacks, this study focuses on the temporal medium of threat to offer an alternative epistemology on time and mediation in politics, religion and media.

Keywords

Indeterminacy, medium, techno-determinism, temporality, threat

... no fact that is a cause is for that reason historical.

Thus he establishes a conception of the present as the 'time of the now' which is shot through with chips of Messianic time. (Walter Benjamin, *Theses on the Philosophy of History*)

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Introduction

Despite evidence to the contrary in recent scholarship, the fear of technological determinism as a causal element in the process of social change is still a very present reality. Ironically, some of the efforts made to counter the pessimistic claims towards technological determinism, as proffered in neo-Marxist debates in the 1970s, ended up intensifying the very presumptions they aspired to eliminate. By stressing that audiences are well-equipped to come up with their own subjective interpretations when engaging with media input, the Birmingham School aimed at doing away with the fear of techno-determinism as well as the sentiments of moral indignation associated with it. The inner logic of the 'interpretative turn' was that if audiences are actively involved in producing their own readings, then the medium should constitute no threat to their agentive creativity as message receptors. By highlighting the aspects of social construction of technology, the latter could be subdued or even overthrown by the creative and subjective qualities involved in the process of meaning-making. Techno-determinism, thus conceived, could not be reduced to an interpretative conception of human agency.

However, in the anxious compulsion to defend the message from the medium, the audiences from the producers and content from form, the interpretative turn ended up not only creating a false dichotomy between technology and culture but ultimately admitting the latent strangling effects of one over the other. This state of things partially explains the renewed interest in reassessing the term techno-determinism by scholars like John Durham Peters. As he recently put it in a presentation titled 'Two Cheers for Technological Determinism',¹ technological determinism, a theory that, broadly speaking, explains the relation between technology and humans and between society and nature in terms of historical causation, has become 'an unquestioned evil' in 'desperate need of a critical intellectual history and re-evaluation'. Like Peters, I am done with the fatalistic connotations of such notions and like him I would contend that it is not about 'defending a hopelessly muddled term, but defending the possibilities of inquiry it bars'. In a time when media has become all-pervasive in both private and public domains (blurring this very separation), we must move our analytical observations beyond either the reductionist determinations of the technological or the stress put on the cognitive ability of humans in resisting it. I suggest, instead, that we reconsider how technical materialities (form, matter, speed, force, transference, saturation and so on), in association with techniques and applications (of capturing, framing, processing, transmitting or archiving), are helping individuals to structure and make sense of their surroundings. In other words, it is not that one should not consider people's relationship to technology, but that one should not reduce that relationship to meaning alone, or at least include *in the very definition of meaning* the particular ontologies and materialities that likewise partake in its constitution.

At the same time, however, it is precisely the guise of the disposition to make more space for the meaningful possibilities of materiality that makes me realize anxieties concerning the technological might be not be as closely associated with its

deterministic potential as much as with the indeterminate structure that is becoming integral to the technological itself. In other words, *technological indeterminacy*, rather than 'technological determinism' might be a more useful term to conceptualize the contemporary medium. This is especially significant as forms of economic, political and religious power are increasingly incorporating a similar logic of the indeterminate in the process of mediating and conveying particular messages. At the center of this shift in media epistemology is the question of temporal causation, which lies at the heart of the reflections that follow.

In this article I will be reassessing the criticism of techno-determinism in light of what I consider to constitute a new temporal sensibility in our current culture of technological mediation. If techno-determinism conventionally organizes the relation between medium and message around a particular temporal logic, one that is notoriously attuned to linear causation, I argue that such temporality is being increasingly fractured. This fracturing of time in the material structure of the medium, I reason, is altering the aspect of anteriority, through which causation used to be defined, towards a new temporal logic. I characterize this as a tendency to place causes in the future, as causes to be. Placing causes in the future then means a conversion of technological determinism into an instance of indeterminacy. Subsequently this allows religious groups, political actors and global media corporations to act while an imminent future effects the present (Massumi 2005). Referencing the journalistic mediations of events by global news broadcasting corporations such as the 2011 Arab Spring uprisings or Pastor Terry Jones's threat to burn copies of the Quran on the anniversary of the 9/11 attacks, this study proposes to identify a generative indeterminacy that others, in light of a broader temporal shift, have seen as a feature specific, and perhaps limited, to the war on terror. In sum, in this article I suggest how a new temporal understanding is restructuring the often-troubled relationship between medium and message, signifier and signified, between appearing and what appears and, ultimately, offering an alternative epistemology on time and mediation in politics, religion and media.

The last years have seen a resurgence of interest in the topic of time and the re-fashioning of temporal models to account for forms of future anticipation and orientation. Discussions of this nature are expanding in scope to encompass themes such as biological matter (Cooper 2006; Lakoff 2008; Lowe 2010), religious temporalities (Schieffelin 2002; Robbins 2007b; Guyer 2007), eschatological treatises (Knowles 2012; Žižek 2011), nuclear futures (Gusterson 1999, 2008), military strategies (Massumi 2005, 2007; Weber 2008), market processes (Miyazaki 2003, 2006, 2007; Zaloom 2009) or information matter (Caduff 2012). This renewed interest in how the future is affecting the present has, in turn, inspired a series of ethnographic accounts on what Vincent Crapanzano (2003, 2007) designates as 'optative attitudes' (time-related moods or emotions like nostalgia, melancholy, expectation, desire, aspiration, reason, faith, fear or hope)² and their role in shaping new temporal horizons on a community and/or individual level. With this article I hope to contribute to an expanding scholarship on the anthropology of time by examining the temporality of threat. More specifically, my aim is to analyze how mediation in

techno-mediatic terms has come to host a rhetoric of indeterminacy that finds a highly potent expression in the temporal medium of threat. Conventionally evoked as an expression of an intention to inflict pain or punishment, or otherwise an indication of an imminent danger, threat has acquired a new semiotic status in post-9/11 militarized thinking. Implemented as a strategy of defense, it became the martial embodiment of a society against a possible imminent attack enacted through the force of a particular signification.³ This signification is particular because it is hollowed out of content. In the words of anthropologist Carlo Caduff, it is the kind of signification that invites us to ‘not so much rely on a theory of sign for the analysis of empirical matter’ but to ‘trace . . . what is already embedded in the empirical material itself’ (2012: 341). When it comes to threat, imminence and immanence are intimately entwined. My goal, therefore, is not to dwell on the contents of threat but to argue that in order to be effective, threat must be unburdened by any specific referential content. The purpose of this paper is to concentrate on the temporal ontology of threat itself: its quality of imminence, its indeterminacy and, finally, how such generative indeterminacy has gradually become encoded in the apparatus of the technological medium. With these goals in mind, I hope to contribute to the conceptual discourse currently taking place within the social sciences regarding notions of temporality, technological mediumship and the materialization of time.

Timely matters

In her important article ‘Prophecy and the Near Future: Thoughts on Macroeconomic, Evangelical and Punctuated Time’ (2007), anthropologist Jane Guyer writes about what she considers to be a major shift in our public culture of time. Guyer suggests that there is a propensity within – though not exclusive to – the ‘evangelized’ West to offset what she describes as ‘a strange evacuation of the near future’, the future that used to require a certain reasoning involved in the delineation of a target within a temporal relation of cause and effect. In other words, thoughts and actions struggling against each other in order to instrumentally attain specific goals. According to Guyer, the near future is ‘being re-inhabited by forms of punctuated time’, or, as she puts it elsewhere, ‘calendric time’ (2012), that is, temporalities framed around eventfulness as opposed to longer-term processes. As the follow-up commentaries on Guyer’s piece commonly express, an examination of the near future is both timely and necessary. They differ, however, when it comes to characterizing how this near future ought to be approached in its epistemological and ethnographic sense. Catlin Zaloom, for instance, quite rightly emphasizes that before one can state the demise of the near future we must first ask how, when and by whom the near future is being instantiated in the first place (2007: 445). Admittedly, Jane Guyer is using the term ‘near future’ heuristically to foreground a temporality that is calculable within a foreseeable range of time. Her reference is the temporal subject of scientific modernity that governs one’s life according to the logic of efficient causality. Based on this prime reference,

she then goes on to suggest how the demise of the near future is unfolding at the expense of two alternative temporal horizons, namely 1) an emphasis on the now in consonance with 2) a revalorization of a distant utopian messianic time. Be that as it may, Zaloom argues for the opposite. Far from 'evacuated', she claims, 'the terrain of the near future is teeming with activity' (2007: 444). But what looks like two contradictory views – in one, 'the near future is withdrawing', in the other, 'it is teeming with activity' – I would like to argue that not only are those views compatible but they are part of the same temporal logic. Interestingly enough, the missing link comes by way of yet another comment on Guyer's piece, that of Joel Robbins. While appreciative of Guyer's reflections on temporality, Robbins' principal critique is that it 'rigorously avoids causal argument' (2007a: 433). As he points out, 'There is no sustained consideration of why the near future should slip from view now' (2007a: 433, emphasis added). Robbins observes that 'by not making . . . causal argument, we participate in precisely the kind of evacuation of the near future and the recent past that Guyer documents' (2007a: 434). That is, there is an irony to Guyer's inconsideration of explainable causation considering that what is implied in her suggested alternative temporalities is precisely the demise of the logic of causation that traditionally sustained the models of the near future. Had Guyer opted to track down what has happened to the logic of the causal connection behind her temporal model, she might have agreed with Zaloom that the temporality of the near future as she/we once knew it is, indeed, 'teeming with activity'. Moreover, that the reason this is so is because of, rather than despite, the evacuation of the near future.

Thus I argue that the two views are not incompatible but instead are part of one and the same single process within our current culture of temporality. This is not because temporal causation is no longer relevant but because the logic through which projections of the near future were once made is itself changing. This article concerns the thinking through of this alteration in the logic of causation in our current (media) culture of temporality. Jane Guyer pays particular attention to monetarism and millennialism and I am myself currently articulating this relation elsewhere in the context of the financial crisis in southern Europe. Here, however, I will analyze what is at stake in the structuring of a new temporal orientation in technological mediation through the temporal medium of threat, as well as its role and impact on the shaping of new political and religious subjectivities.

Beyond and into techno-determinism

Whether in an explicit or diluted form, the fear of technological determinism still guides contemporary perceptions of the relationship between humans and technology (Smith and Marx 1994). Systematized by so-called 'post-essentialist' theorists, die-hard critics of techno-determinism have been espoused by the urge to mark the distinction between human and machine, subject and object (Grint and Woolgar 1997). Such a need was and still is symptomatic of a certain liberal piety held within academic discourse that emphasizes the capacity of humans to resist forms

of dominance, technology being one of them. Yet it was precisely the assumption that humans can and should resist technology that ended up reinforcing the myth of techno-determinism. It is not surprising that theories against techno-determinism, such as technological constructivism, gained ground around the same time in the 1970s and 1980s, when models of agentive resistance against domination and alienation were being applied to the study of social movements and minorities. Put simply, the discussion between determinism and constructivism hinged on a perceived incompatibility of technology's 'intrinsic properties' with the human capacity for negotiation and interpretation.⁴ In this process technology was invested with a realism that deterred proper attention to context and contingency. Both Marshall McLuhan (1994 [1966]) and, more recently, Friedrich Kittler (1990) have been indicted in this problem. Strangely enough, contingency is present throughout the work of both these authors. What is missing, however, is the rhetoric of resistance that constructivists stress as being inherent to human receptivity. But then again, the reason why both McLuhan and Kittler do without such rhetoric is not that they do not consider human agency to be important. On the contrary, they have the utmost interest in agency, which is why instead of simply presupposing its existence their main focus is on the material conditions that make agency possible in the first place: the conditions at work.

The problem with perceiving technology as an oppressive structure is not simply that it fails to address agency in terms of its material conditions of production. Rather, as John Durnham Peters suggests, it is 'a form of denial that humans are already technical beings' (2001). Thus, when McLuhan writes that 'the content of a medium is always another medium' he is not restricting analysis to the technological medium *sensu strictu*. Instead, he is referring to Saint Augustine's idea that 'we (humans) are apparatuses embedded in other apparatuses'.⁵ This is not to say that technologies do not induce historical change, let alone that McLuhan dismissed historical circumstances as unimportant, as one of his students would lead us to believe (Ong 1981). However, as Peters writes, 'To say that technologies make historical change is not to say that they cause it', just as 'to say that conditions are necessary does not mean to say that they are sufficient'. As such, technologies always incorporate attributes of its users and vice versa. Both user and apparatuses retain a degree of insufficiency through which emergence, rather than effect, is possible (Fischer 1999).

The alienating effects that techno-determinism has been accused of carrying were perhaps nowhere as strongly voiced as with the arrival and spread of virtual reality. In line with the apocalyptic undertones of technological determinism, 'virtual reality' was soon seen for its degenerative effects, particularly in its capacity to blur the distinction between subject and object, real and artificial, and in contributing to the denaturing of human relations. Ironically, what virtual technology increasingly came to determine – if that – was the programming of the impossibility to clearly predict the outcomes of events. As technologies are becoming ever more invested in building up their own structures of modification, rather than just being applied in order to modify or represent, they no longer just produce events but are

themselves emergent and eventful. This has important implications for the notion of mediation, namely the paradoxical situation whereby what technology mediates is the matter of its own eventfulness. Brian Massumi has been perceptively capturing this change in the logic of causation and the political and aesthetic effects of its incorporation in the technological apparatus itself. Referring to the example of architecture software to illustrate the wider potentials of virtual technologies, he observes how:

Digital techniques in architecture added a new twist that changed the terms in which this question could be asked. . . . Rather than using traditional CAD software, where basic geometrical forms are reproduced and then modified or rearranged, architects employ special effects software where you start by programming a set of modifications before you have an object to modify – a potential modification. That could be a definition of a force. So you begin by programming forces rather than forms. You can program a virtual environment with certain forces, for example basins of attraction analogous to gravity. Then you can program virtual objects with their own forces that enable them to resist or deform in certain ways in the presence of the environmental forces. When you run the program, the objects are transformed, and sometimes fuse together or split to create odd geometries. But because of the complexity of the system, you can't predict exactly what the outcome will be. The form emerges from the interaction.⁶

Accordingly, it is not so much that technology cannot determine due to the inherent ability of human culture to subvert causation through creative interpretation. Rather, techno-determinism does not relate because *the very notion of causation has itself been undergoing a vast transformation* within the domain of the technological. That is, the question of determinism/indeterminacy itself is now being actively explored by, and incorporated into, the technological apparatus itself. As readers of Marshall McLuhan would argue, none of this, per se, is entirely new. After all, in McLuhan's world causation has never been sufficient *enough*. Its applicability is closer to the Aristotelian sense of 'formal causation', which allows room for emergence and flexible systems. Still, the electronic age has made the paradoxical resources of logic that so fascinated writers like McLuhan or Niklas Luhmann (1986) more legible than ever before. This is the kind of legibility that will shape and be shaped by post-9/11 militarized thinking, notably, by providing western politics with the grounds to articulate a systematized obsession with temporal modes of imminence, which threat so powerfully typifies. By making the substance of threat diverse and incongruous the western world has come to exist under what Catherine Lutz (2001) and Andrew Lakoff calls a 'permanent state of unpreparedness'.⁷

If not Pastor Jones . . .

'The story', writes Andrew Lakoff when questioning how a norm of preparedness came to shape perceptions of threat, 'is a complex one involving the migration of

techniques initially developed in the military and civil defense and other areas of governmental defense' (Lakoff 2008).⁸ The adoption of tactics of pre-emption in the ensuing war on terror implied abolishing causal anteriority in the act of aiming at a target. As with new experiments in virtual architecture or virtual technologies, the 'war on terror' unfolded by programming a set of modifications before one even had an object to target or modify. After being presented with the image of Osama Bin Laden, the focus quickly shifted to Saddam Hussein, then to weapons of mass destruction, and so on. What is significant is that this sliding of targets, this fractured aiming, by no means worked as a limitation to what constituted the enemy. On the contrary, vagueness provided the very grounds on which the conditions of articulating the enemy as an ongoing threat became possible. That is, what defined the enemy was and still is precisely its indeterminacy and, most importantly, its mobility. Not able to localize it in space, the enemy assumed a particular form of temporality: it loomed at large.⁹ On account of this imprecision, it was possible for George Bush to declare that America and the western world are at war as well as to 'urge the American people to return as much as possible to "normal"' (Kohn 2009: 180). War became articulated around threat, an imminence that, so it goes, put 'the military at war and America at the mall'.

Now, inasmuch that targeting indeterminacy risks ending up in failure, the tactic is to use that indeterminacy to one's advantage – to incorporate the means one wishes to combat. In short, to have one's object become one's methodology (Miyazaki 2006; Massumi 2007).¹⁰ That means that indeterminacy is no longer simply one's target. It has become the very opportunity. As Samuel Weber (2008) puts it, 'In theaters of conflict that had become highly mobile and changeable, "targets" and "opportunities" were linked as never before' (2008: 4). Accordingly, threat as such isn't simply the end effect but has become the means as well. Not only is it the message, it is also the medium. Implied in this self-referential logic between object and methodology, message and medium, target and opportunity, is the production of a new temporal sensibility that short-cuts continuity and sequence in favor of discontinuity and permanence within a highly flexible medium. Indeed, as I am about to exemplify, it is on such flexible grounds that the counterfactual narrative of the 'if' – the 'if' that animates threat's performative power – can be launched indefinitely from its foggy shores. But more importantly, as it becomes internalized by the medium, threat loses its focus, its indexicality and its external referent. Gradually the system no longer just generates threat. Rather, it perpetuates itself by threatening its own systematicity.

When, in September 2010, BBC World News and CNN International tuned into Florida Pastor Terry Jones's plan to declare an 'International Burn the Quran Day', those networks were not dwelling on the contents of a threat. Rather, Pastor Jones proved to be a good mediator because of how his message staged an idealized conception of mediumship in contemporary terms. Terry Jones first came to worldwide attention on 12 July 2010 when he started a twitter feed, followed by a Facebook campaign dubbed 'Islam is of the Devil'. This campaign, named after Jones's book, called for people around the world to set fire to copies of

the Quran. On 25 July, Jones posted a YouTube video where we see him holding a copy of the Quran, claiming, 'This is the book that is responsible for 9/11'. The circulation of this video among evangelical groups set the stage for his threat. When speaking, Jones would enunciate his *ifs*, stressing the fact that he had his conditions: '*if*', he said at some point, 'Islamic officials in New York City agree to move the planned Islamic center from a site near ground zero, I will not burn the Quran. *If* not, in the name of God All Mighty, I will *have* to do so.' Thus, by employing the subjunctive *if*, Jones managed to release that nebulous and toxic combination of Fear, Obligation and Guilt (FOG) that social psychologists describe as being the main components of threat.¹¹ He kept everyone in suspense for days, from local to national and international actors, religious communities, state representatives, the military and the media worldwide. Jones had created a network running on the power of *if*.

Vague, unpersuasive and in some instances without even an argument, Pastor Jones was not just targeting an opportunity, he was acting on opportunities so as to make their anticipation another opportune event. This is the logic of pre-emption that allowed him to change the direction and particulars of his targetings time and again: He was going to burn 200 copies of the Quran, then only one, then only maybe. He said: 'We thought twice about it!' He was going to shred it, no, shoot it, no, dunk it in water, wait – 'not yet', 'let us . . . just put it on hold'. The TV cameras were on him from all angles, absorbing and broadcasting a state of deep suspension and virtuosity. Tuned! Terry Jones made himself into a man of the age of information. Not only was his rhetoric of threat infusing the medium of television with the kind of liveliness and immediacy often claimed by contemporary regimes of mediation, but the interruptions, punctuations and twists through which such rhetoric was maintained presented us with the temporal mechanisms of fragmentation and delay, of flow and arrest (e.g. editing, framing, cutting) involved in the process of montage and image-making in the studio. In sum, not only were we being presented with a real-time event. We were able to access the now-in-the-making. Walter Benjamin's 'messianic task' is up for grabs!

Terry Jones handles threat as something more than simply an instrumental message to inspire fear. Rather, threat has become the very temporal medium disguised as content. Threat, one could say, is the 'spicy piece of meat' that in McLuhan's accounts works to distract the 'watchdog of the mind'. In an era when television culture strives to compete with the temporalities of social and digital media, the temporality of threat offers a template for event-ridden forms of emergence that, in the words of Marshall McLuhan, "'drives home the message" not by opinion but by involvement' (1994 [1966]: 13). This is nowhere truer than in news reporting where time rides on novelty, not to say messianic logic, of the *now-time*. Adopting the kind of militarist reasoning of 'pre-emptive emergence' (Cooper 2006), news reporting incorporates the temporal idiom of threat to foreground an event at the core of mediumship. By doing so, it conflates mediation with real-time events, whereby the former assumes a kind of incompleteness or mediation-in-progress that puts viewers on hold indefinitely. In other words, the near

future is evacuated precisely so the path can be indefinitely open to new shifting futures. This aesthetic of mediation implies that ‘reality out there’, not producers behind studios, does the editing work.¹² The camera only has to capture it, thus allowing effects to produce their causes, not the other way round.

Waves in-information

Along similar lines, we might consider the general feeling of surprise concerning the uprisings in the Middle East and the role of social media in levering the revolution as though ‘out of nowhere’. Time and again, the Egyptian uprising was described by media and social analysts as ‘a revolution without a script’, gripping the world, the nation and many present at the Tahrir Square to a kind of radical present or history-in-the-making. By virtue of its presentism, however, such descriptions seemed to exclude not only the road that led to the square but the road beyond it as well. It is as though the vortex-like effect of the crowded square itself compressed time and space, which up to now was invested in – if for the most part invisibly and inaudibly – the sedimentation of its very ground.

And yet, as Charles Hirschkind (2011) explains in his essay ‘The Road to Tahrir’, the road to the square has not only been long but also bumpy and twisted, painstakingly engineered to counter the bulldozers of state oppression by the various local actors through forms of (media) activism, political intervention and censored direct re-action. As with the nodal function of networks that are themselves multivalent, many of these political activities may have, somewhere in the middle of that road, been potentially dissociated from any clear outcome or definite actualization; and in many cases, such fuzziness may have, in fact, even been part of the aesthetic visual economy of the political message itself, as Hirschkind also describes in his recent work on the Egyptian Blogosphere (2010). However, this is not to say that the use of social media happened outside of a particular political horizon. As Saba Mahmood (2011) points out in her piece ‘The Architects of the Egyptian Revolution’, while the demonstrations cut across the Egyptian political spectrum, they were firmly built upon several fundamental demands that together formed the foundational pillars of such a revolutionary architecture. Form may have emerged out of interaction but the programming for change was long on its way.

Nevertheless, what one seemed to receive on the western side of events was a highlighted, even spectacularly moving, sense of indeterminacy. Such effect was itself generated by the capacity of global media, journalistic in particular, to transmit, mediate and reproduce among its viewers, listeners and readers the promise of sliding a wave indefinitely in-information. Breaking news kept on flowing in for weeks. Yet, what was newsworthy and eventful was the breaking itself. This aesthetics of imminence was made possible by deploying strategies of suspense combined with the prolonging and renewal of uncertainty, which aptly fed into the time-value of journalistic newness (Doane 1990). I have in mind here the use of ‘real-time’ slots facilitated by technology like email, Facebook, Twitter, blogging or phoning, technology which proved to serve as determining tools in

the unfolding of the revolution and, last but not least, the systematic inclusion by global media broadcasting corporations of footage captured and/or circulated by individuals or groups locally and around the world in the very process of the *making-of* 'breaking news'. In this process, whereby the mediums of the revolution and of social interaction themselves become embedded in the message of journalistic mediation, the historicity of facts that paved the path towards the actual revolution, including the horizons against which it aspiringly withstood, became almost imperceptible. Precisely because of the immediate and reproducible possibilities offered by these technologies, the indeterminate character of the revolution – *if* President Mubarak steps down, *if* power will be seized by the Muslim Brotherhood, *if* democracy does not prevail – became all the more affective.¹³

While 'social media' was determinant in helping local activists, both men and women, towards the square, the western media used the opportunities offered by such technology to keep on generating 'breaking news', thus heightening anxieties not directly related to the indeterminable potential of such technologies but to the possibility of indeterminate, accessible and scalable means being used by an Islamic society and, perhaps, a future Islamic state. Who knows? Considering how, especially in the aftermath of the Second World War, fears of technological determinism became associated with the power of technology to be used against human reason, what happens when, as argued, not only the notion of causation and linearity that structured those fears is no longer technologically operative but, moreover, the groups using such new technologies occupy an inauspiciously captive place in the western imaginary as essentially opposed to human reason? How are we to control the indeterminate potentials of technology so effectively deployed by an equally 'indeterminate religious force', as a pro-Israeli commentator put it during a BBC World News platform, within the contemporary geo-political international arena?

The ill-informed associations of Islam with emotional thrall, irrationality and fundamentalism persistently surface in discussions I have with fellow (academic and non-academic) European citizens during my travels between Lisbon and Amsterdam. They bring into focus the anathema of techno-determinism as though the capacity of Muslims to think rationally and predictably would be automatically invalidated by their religion. Such 'religious determinism', by the way, not only fails to acknowledge the internal contradictions of such rationale as one that is profoundly biased to, and at the service of, a long-standing politics of domination within the West towards other socio-religious architectures and cultural geographies. It also fails to attend to the materialities of technology while trying to find means of prevention expressed in various key concepts such as social function, cultural meaning or ideological interpretation, which are extraneous to a more materialistic engagement with technology. Accordingly, the indeterminate power of media will either lead to new forms of alienation and a lacking sense of directionality or, in the more optimistic terms of the Birmingham School, the use of such technologies will compel users to mobilize their own forms of resistance. But what happens when the materialities of technology are becoming integral to

their own constitution and the ground of the technological itself becomes a potential platform for new emerging forms, rather than a stable frame for representational thinking? Is it within the logic of a practice-based approach to avoid reducing research to the practice of interpretation, no matter how creative it may be, and to promote a logic of embodiment that rises out of, and in resonance with, the very ground that simultaneously sustains it? Perhaps our understanding of religion, media and politics today has much to gain from such technological *matters*.

Time frames: Anthropology around the clock

The deployment of the counterfactual 'if' has been adopted in the past by a number of social anthropologists. Its epistemological force comes across in the works of Gregory Bateson (1972) and Edmund Leach (1970 [1954]), or in the ethnographic filmmaking of Robert Flaherty, creator of the docu-fiction *Nanook of the North* (1922), and Jean Rouch, creator of *Moi, Un Noir* (1958). They had in common a wish to revise the typological stability of social systems and to depict society as a dynamic process that does not just happen in time but is itself temporal and changeable. Just as living systems replicate themselves, Bateson insisted that no single component of the system is permanent. Leach, in turn, adopted the analytical force of the 'as if' to question models of perceived stability about society proposed by structural functionalism. In his words, 'Unlike most ethnographers and social anthropologists, I assume that the system of variation as we now observe it has no stability through time. What can be observed now is just a momentary configuration of a totality in a state of flux' (Leach 1970 [1954]: 63). For Edmund Leach, however, social systems were formal abstractions based on reality where the fictional model of the 'as if' merely constituted a means to an end. Referring to his fictional depictions of the *Nanook of the North*, Robert Flaherty famously observed that 'sometimes you have to fictionalize in order to better tell the truth'. This is because for Flaherty, as for his contemporary Franz Boas, the flux of life always overwhelms what one could objectively call the truth. An awareness of the infinite complexity of time, however, created a counter-tendency within post-war anthropology to contain time within the boundaries of social life. Social anthropologists became concerned with how time is measured by frames like calendars, schedules, seasons, daily rhythms and punctuations, as in Evans Pritchard's cattle movements. Time-reckoning worked as a form of orientation through punctuation, as temporal points of reference in the daily and seasonal activities of communities (Munn 1992: 102–3).

A different understanding of punctuated time is involved in Jane Guyer's (2007) temporal model. As she proposes, nowadays 'punctuated time' comes precisely at the expense of the withdrawal of referential time around which social life could be organized. Formulations of the foreseeable future are being replaced by what she calls 'event-driven temporal frames' (2007: 409). Increasingly, time is punctuated by 'emergent socialities rather than ideational forms' (2007: 410). This analytical stance implies a restaging of punctuated time and does not presuppose an external point of reference. Instead, its temporal signifier is embedded in the structures of

signification, which spur rather than eschew indeterminacy. Much is at stake in such a reformulation and, as others have pointed out, a great deal of ethnographic work is needed to sustain it (Robbins 2007a; McGovern 2012). The philosophical stance in question, however, is one that deals with the ontology of presence and the reduction of possibility to the logic of actuality. To a great extent this is the question that occupied thinkers like Bateson and Leach. What changed, though, is how the subject is positioned in relation to time and possibility (Butler 1993; Berlant 2011). Thus Miyazaki's interest in the productive force of the 'as if' (Miyazaki 2003: 261), Lakoff's use of 'imaginative enactment' (2008: 402), or Connolly's (2011) invocation of Nietzsche's 'powers of the false', to mention just a few recent examples, are not meant to signify an abstract beyond concrete human actions but acknowledge the gap or incongruity between real and ideal as the system's own creative force. Indeed, it is in the gap where the boundaries of this temporal incongruity are marked and where Jane Guyer's 'near future' ends up. Yet, as Miyazaki points out, this is the temporal gap that 'also creates prospective momentum' in a distinctive era oriented towards speculative thinking.

Contrary to what has been argued by influential social analysts like Anthony Giddens (1990, 1999) or Ulrich Beck (2007), our increasing difficulty in predicting outcomes does not result from a *limit* of knowledge but rather from its manifold *potentials*. As a growing literature on risk and decision-making reveals, knowledge is increasingly built not around answers but through response capability. The flowing of later elements in the process of anticipating the future has reached such systemic proportions that causal explanation implodes and rewards in the form of potential. Within this framework, actions are not caused by. Rather, causes are en-acted upon, so these never solidify around a single core but remain open-ended. Causes do not lead to effects, they are actualized by them. For this is how imminence can be reiterated and incorporated into media structures, bodily disciplines or financial systems under the normative justification that we better stay alert, even as we go on with our lives.¹⁴

Conclusion

Recent studies on technological innovation in such fields as biotechnology, financial analysis, or environmental changes have been rethinking temporality, particularly by way of the question of future-value. Following leads introduced by these studies, this article set off to elaborate on this current debate and expand into the domain of media practices. I have argued that, contrary to assumptions held by dominant media theories, technological determinism and causal thinking are not necessarily, if at all, interdependent theoretical assets. McLuhan's determinism has never meant to be associated with such premises. For what defines the medium are the possibilities it determines, not the effects to be resisted. As new forms of media are incorporated into practice, pressure is exercised on other media to adjust to dominant technological ecosystems. If this rhetoric allows older media like television, film and even radio to adopt an aesthetic of emergence and interactivity that characterizes the material

determinations of new media, then these technological determinations are refashioning political, religious and techno-mediatic subjectivities around new dynamics of protest and intervention activism.¹⁵ Furthermore, while I argue that indeterminacy is becoming part of the temporality of contemporary broadcasting, I am not suggesting that it was absent before, only that the medium is structuring indeterminacy in ever more explicit ways. Trying to find forms of prevention against determinism is to overlook the inbuilt capabilities or applications through which mediums are programmed to structure their own indeterminacies, even their own forgetting.

That the power of threat lies primarily in its potential – something that mass media is all too aware of – is attested to by the fact that hardly any mediatic coverage was given when, on 20 March 2011, Pastor Jones carried out his threat. Dressed in a judicial robe, Jones staged a trial against the Quran. Acting as though addressing a defendant from his pulpit, he spoke to the ‘book on trial’ in the following threatening terms:

*if you are found guilty, if you are convicted of murder, you don't get to go home. It does not matter if we love you, if your mommy loves you, if your daddy loves you-you do not get to go home, because you have killed someone.*¹⁶

With 30 other members and a fireman on duty, Jones finally judged the Quran as ‘guilty of crimes against humanity’ and sentenced it to be torched in a portable pit. The only camera capturing the scene, however, was Jones’s own. ‘It’s like people forgot us’, a perplexed Jones later said. ‘But we’ll keep doing what we do’.¹⁷ The protests and violence that followed in retaliation for the trial and burning of the Quran were being described by guest speakers as ‘disproportionate rage’ on the side of Muslims, triggered by a ‘one man show’.¹⁸ Now that threat had actualized and the unknowable had reached its assignable limit, even the media was ready to dismiss the entire event as insignificant. Only a lunatic pastor desperate for some attention!

As with other socio-political realities, media technologies are establishing a new affective relation with the future. I have tried to show here how this temporal proclivity forms a special bond with the temporalities of threat in that, like the future, it affects the present without actually presenting itself.¹⁹ Increasingly drawn to partake in the life-like nature of events instead of simply recording them, the medium of the camera adjusts its temporal alignments towards ‘preparedness’. In this process, the medium materializes a bifurcated temporality. It conflates event and eventuality, happening and probability. This shift in the positioning of the future in relation to the present, I have argued, brings the old critique of techno-determinism and its associated logic of sufficient causation under new scrutiny. After all, as McLuhan wrote in ‘Challenge and Collapse’, ‘No society has ever known enough about its actions to have developed immunity to its new extensions or technologies’ (1994: 64).

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Notes

1. The paper was presented at the conference ‘Media Histories: Epistemology, Materiality, Temporality’, Columbia University, New York, 24–26 March 2011. Courtesy of the author.
2. See Crapanzano (2003), Berlant (2011), Lakoff (2008), Massumi (1993, 2005), Miyazaki (2004, 2007a, 2007b), Möllening (2001), Zournazi (2003).
3. As Andrew Lakoff writes, threat has mobilized American politics to a ‘vigilant readiness for emergency’ (2008: 402).
4. See Ian Hutchby (2001) for a discussion of this duality and his suggestive incorporation of James Gibson’s (1979) concept of ‘affordances’ as a way to overcome the two sides of the debate. Used primarily in design studies, Gibson defines ‘affordances’ as ‘all actions possibilities’ that the encounter between an object and a human person allows for.
5. The quote that John Peters uses from St. Augustine is: ‘We, however, who enjoy and use other things, are things ourselves’.
6. Interview with Brian Massumi, ‘Transforming Digital Architecture: From Virtual to Neuro’ (Thomas Markussen and Thomas Birch), *Intelligent Agent* 5(2). Available at: http://www.intelligentagent.com/archive/Vol5_No2_massumi_markussen + birch.htm (accessed 12 July 2012).
7. The growing literature on the politics of threat in the post-9/11 context (see Cooper 2006; Lakoff 2007b; Caduff 2012; Gusterson 2008; Massumi 2005) supports the point I am elaborating here, namely, that threat feeds on a protean capacity to spread and transform itself into new threats. In threat, imminence (time) and immanence (space) are fellow-travelers: that which is about to happen is what ends up exerting a material force on the structure through which threat re-emerges.
8. See also the studious account by Richard Kohn (2009) on the history of militarization of American life. See Carter (2002) and Cooper (2006) for a fascinating account on how the war on germs becomes incorporated into the strategic discourse on the war on terror.
9. As Kohn observes: ‘This will be a war, predicted scholars and politicians, unlike any the United States has experienced: indefinite duration... fought against an ill-defined and shifting enemy, and so far, without a clear explanation of American strategy, a specific definition of victory, or even a way to measure progress in the struggle’ (2009: 180).
10. In Miyazaki’s account of Tada’s transferences from dreams to actions in the world of trade business the reverse happens, that is, ‘the conversion of his own method (trust) [ended up becoming] his object of logical reasoning’ (2006: 160).
11. The use of the acronym FOG to describe threat’s main components of manipulation is described by psychotherapist Susan Forward (1998). Where ‘fear’ highlights the perception of having one’s security or well-being in the hands of another, and ‘obligation’ presumes a debt towards the blackmailer, ‘guilt’ enhances the sense of responsibility to solve the problem regardless of who or what really is to blame.
12. According to Kohn (2009), this shift in targeting defines the transition in the concept of ‘war on terror’. As he writes, ‘In 2004, the struggle changed from a war on “terrorism” to “war on terror”, implying not conscious decisions by editors or speech-writers’ but often ‘unnoticed changes in the way people perceive the world’ (2009: footnote 9).

- see Zito (2012) on the relation between “what we see and what we get” in regard to editorial processes.
13. See Leins (2011) for an interesting analysis and graphic depiction of how the Egyptian revolution became incorporated into financial analysis.
 14. As Lakoff cites in his analysis of how the Americans became ‘unprepared’ for an imminent epidemic biothreat, ‘preparedness’, according to the words of the US Assistant Secretary of Health, ‘is a journey, not a destination’ (2008: 400; Kohn 2009; see also Beard 1935).
 15. This includes new dynamics of activism such as the ‘Occupy Movement’ and what we define by ‘emergent “forms of activism” or by “occupation”’ (Razsa and Kurnik 2012; Juris 2012). See also Nugent’s (2012) commentary in the same volume.
 16. David Silberg, posted 22 March 2011, *Digital Journal*. Available at: <http://digitaljournal.com/article/304937>.
 17. Kevin Sieff, 3 April 2011, ‘Florida Pastor Terry Jones’s Koran Burning Has Far Reaching-Effect’, *The Washington Post*. Available at: <http://truthspeaker.wordpress.com/2011/04/04/florida-pastor-terry-jones-koran-burning-has-far-reaching-effect/>
 18. Nor did the media cover the dozens of desecration incidents around America that occurred, inspired by, and in the course of, Pastor Terry Jones’s threat.
 19. In Luhmann’s own formulation: ‘In what ways does the future become manifest in the present?’ (1998: 63).

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