Two of the fantastic-metaphysical stories making up the text of Italo Calvino’s *Invisible Cities* are speculative fables directly related to the topic of this paper. The first story that I have in mind describes the infrastructure of Octavia, the spider-web city, suspended over an abyss, whose foundation is “a net which serves as passage and support” (75). According to the narrator, the fictional Marco Polo in conversation with Kublai Khan, the net secures this fantastic city in a way that does not eliminate the inhabitants’ sense of existential threat. Octavia is shown not to be infinitely sustainable; its inhabitants are thus made more certain of the finite character of their world. What is made evident, via the narrator’s observation, is that the net works primarily as a temporal structure, even as it specifies the difference between the systemic form of the city and its spatial environment, the precipice. In the following section of the book – story 2 -- Marco Polo (Calvino’s fictionalized observer) takes the theme of the network in a different direction. The distinguishing mark of Ersilia, described in this section, is the peculiar practice through which its people create and represent social relations: “the inhabitants stretch strings from the corners of the houses, white or black or gray or black-and-white according to whether they mark a relationship of blood, of trade, authority, agency” (76). Social ties become visible to both inhabitants and external observers; they form a visual field that enables the distinction between various types of connections, and which, at the

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1 A version of this talk was given as a lecture at Harvard University, Department of Comparative Literature, March 7, 2014.
same time, shows that the configuration of Ersilia’s social web can outgrow the space of the city. In this case too the temporality of the network comes into play, yet not in any predictable way. When the complexity of the social network increases, as the result of multiplication of social ties or intensification of economic activity (after all, the description of Ersilia comes under the heading “trading cities”), “the strings become so numerous that you can no longer pass among them” (76). As a result of this situation -- of development, or modernization -- the inhabitants leave, after destroying their houses, abandoning there the strings and their support. The process of building and then (at some certain point) destroying Ersilia occurs as a recursive operation, an act requiring a commitment to both nomadic life and to settling down in another place with the goal to create a “new pattern of strings ever more complex and at the same time more regular” (76). As in the case of imagining Octavia, yet perhaps even more spectacularly so, the fiction of Ersilia projects a world that finds its correlate in the contemporary artistic practices that combine the eco-aesthetics of architecture and design with bio-technology: I have in mind the work of New York based artist Sarah Sze and of Argentine-German artist Tomas Saraceno. In this newly invoked artistic context, Ersilia comes to represent the ruins of social networks’ uncanny (and un-homely) materiality before they became translated into the digital format of sociality and are now acting/active representative of a more banal type of utopia, the site without a place of online communication: “when travelling in the territory of Ersilia, you come upon the ruins of the abandoned cities, without the walls which do not last, without the bones of the dead which the wind rolls away: spider-webs of intricate relationships seeking a form” (76).
I must confess that, from the viewpoint of the argument I intend to outline today, this initial example from Calvino’s imaginative description of networks may appear abandoned, an underdeveloped reflection on the literary representation of intricate relationships in search for a conceptual form. Calvino’s poetic world-cities make evident that what we have instead of unambiguous conceptuality is the metaphorics of “network”, a term employed in a variety of contexts as “designation for technical infrastructures, social relations, geopolitics, mafia, and, of course, our new life online.”² Given that networks do not fully identify with their contexts (such as urban infrastructure and social organization), we ought to consider them as techno-allegories, that is, networks mediate between materiality and meaning³ on the one hand, and, according to Pierre Musso, between connectivity and separation, on the other. Approaching technology through the multiple valences of its material utility, its power of mediation and media and its deployment as metaphor, allows us to identify how various forms of connectivity and interdependence confront, as techno-allegories, what Niklas Luhmann referred to as the communication system of world society. This confrontation is inevitable the very moment the metaphorical extension of technological networks obscures specific functions networks have had in sustaining the dialectical process underlying the morphogenesis of social complexity: “advances [such as telecommunication networks] reduce complexity in order to organize greater complexity on the basis of restriction” (Luhmann, TS Vol. I, 306).

³ We need to avoid two extremes: the use of “media-concepts that can be subsumed under purely hermeneutic premises” as well as “media concepts that tend to completely absorb the dimension of meaning” (Gumbrecht, “Intermediality” 176)
It is known today that networks encompass the reticulary formations “observed in nature [and] its geometrical abstraction” before conveying the “artificialization conducted by engineering” (my translation; Musso 9). As techno-allegories, networks do not simply reveal their operational effectiveness, but ideological concerns: they evoke the modern horizon of transformation for the world, society or history but are also equated with the subversion of modernity. Let us consider two different anxieties regarding the legitimacy of representative democracy to contemporary societies in the age of mass communication and global media: on the one hand, the universality of the community made possible by the democratic revolution and the constitution of the public sphere could be dismantled by the subversive power of a well-organized secret group; and, on the other hand, the weak universalism embodied by representative democracy can be replaced with the post-human administrative machine. The two hypothetical visions are not opposed to each other but present scenarios that confirm the possibility for democratic power and popular sovereignty to be determined (or, even worse, compromised), in the last instance, by the power of networks. Of course, at the beginning of the 20th Century, Edward Bernays, public relations pioneer, would make the opposite claim: modern democracies would fall into social chaos if an invisible government would not create cultural and political coherence, that is, if invisible networks of leaders would not be there to shape, through complex communication techniques, our opinions and behaviors. Even though Bernays does not use the term network in his writings, he does mention the “invisible,

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4 I am talking about weak universalism because “[d]emocracy faces the challenge of having to unify collective wills in political spaces of universal representation, while making compatible such universality with a plurality of social spaces dominated by particularism and difference.” Ernesto Laclau, “Power and Social Communication,” *Ethical Perspectives* 7, 2-3 (2000), 139.
The intertwining structure of groupings and associations [as] the mechanism by which democracy has organized its group mind and simplified its mass thinking.” Bernays’s conception of “invisible government” does not simply endanger liberal-democracy and, more specifically, the public sphere, as it is an effort to legitimize a class of experts that can foresee and administer the messy character of democratic politics as well as the confusing developments of capitalism. The apparent anachronism of this first scenario can easily accompany the futuristic vision in which the network-machine asserts its power to dismantle the field of politics. In other words, social and technological networks project an imaginary of power and violence that exposes the limit of the political. In light of this point, we should be wary of overstating the character of the Internet as a new space of freedom while we examine the role of digital media in recent political uprisings around the world, and the self-empowering potential of sharing our opinions online. Some skepticism is indeed needed even when evoking here the catchy title of Wael Ghonim’s *Revolution 2.0* or the Arab Spring as the media story of the “Facebook Revolution.” At the same time, as we manage to be suspicious of network-utopianism -- as pertaining to communication practices, through old and new media-- we also need to

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6 To evaluate the role Facebook and Twitter played in the various stages of the 2011 Arab Spring revolutions, we need to consider the “complex ecologies” through which “the technical properties of electronic interactive domains deliver their utility” to the formation of networks of meaning and action, that is, to discursive articulation. My remarks follow Saskia Sassen’s insightful analysis of the Arab Spring uprisings. Saskia Sassen, “The Global Street Comes to Wall Street,” *Possible Futures: A Project of the Social Science Research Council* (Nov. 22, 2011). See also Habibul Haque Khondker, “The Role of the New Media in the Arab Spring,” *Globalizations* 8.5 (2011), 675-679.
identify what ideas lie behind it, both in the terms of its potential links to political thought and in terms of the political and media history that made it possible. 7

In order to address this point, I will focus on the discursive practices that contributed to the creation of network culture 8. My argument requires several steps:

1. I will begin by showing how and, more importantly, why ideas of network power are replayed in techno-allegorical narratives contained in contemporary media artifacts about information systems.

2. How do theories of network power, I will then ask, attempt to control these techno-allegories? The answer lies in interpreting the way connectivity and separation emerge as the constitutive polarity of our world society as it relies on technology to provide the ontological

7 Writing to legitimize mass communication tactics, Bernays unwittingly adapts key elements of social utopianism (Saint-Simon) and positivism (Comte). In these views, we discover “a class of experts --scientists, industrialists-- [who need] to work out a new doctrine capable of bringing enduring social and political stability. The scientists would turn their observational skills onto the social and political realm, revealing its law of development. The industrialists would then reconstruct institutions in such a way that their operations were in harmony with these laws.” 7 Even if our declared task (as media scholars, philosophers, or cultural critics) were simply to use both rhetoric and knowledge “to resist the rule of experts and machines, the bureaucratic-technocratic society foretold by Saint-Simon and championed by Marx and Engels” this ‘ideal’ society today is no longer one that imagines the replacement of “the government of persons by the administration of things,” 7 but of both politics and administration with the management of information networks. Wouldn’t this management of networks, as fictional or hypothetical as it may sound, require at times (most likely, at times of crisis) popular-democratic decisions rather than engineering solutions? This narrative, in which, “any management of the community [is] in the hands of a techno-bureaucracy located beyond any democratic control” only offers a unilateral view of how democratic experience is affected by postmodern media technologies. Ernesto Laclau, “Power and Social Communication,” Ethical Perspectives 7, 2-3 (2000), 139.

framework through which it may appear, among varied historical narratives, as the result of over-determined globalization processes.

3. Discourses about networks today aim therefore to translate ideas of global connectivity into the language of the polarization emerging between social communication (playing an essential role in sustaining democratic politics) and global media (playing a crucial function in supporting the world-system). The difficult question is then the following: Can this polarity be historicized, can it be seen as an episode in the historical narrative of war and, more importantly, of the Cold War?

This last question may come as a surprising argumentative move, so in order to set the stage, I would like to look at two media artifacts that exemplify the overcoming of Cold War discourse, and thus a re-figuration of their original allegorical relation to its ideological, geopolitical and symbolic form. The recent revival of the 1978 TV series *Battlestar Galactica*, for example, tells us of how we envision the future age of global media networks. Galactica is the only ship that survived the invasion of the Cylone Empire, a post-robotic machine technology and super-hybrid race, because its captain had refused to have its computers liked to the Network that controls all life and culture-supporting systems of this fictional human world. The cultural, technological and political system of the battlestar is thus immune to the cyber-attack, to the virus implanted by the Cylones, but not to the various power networks that emerge in the social world of the fleet. The messier the politics of this lost and lonely vessel, the more likely is the post-apocalyptic revival of the human civilization. While the show’s first episode in
1978, “Saga of a Star World,” composed a plot derived from a clear Cold War metaphor, the 2003 show presents an adaptation of global (military) strategy to the regime of media-computer networks. In a sense, the implicit claim is that the true source of collective insecurity today (or, in fact, tomorrow) is no longer in the geopolitical but in the technological sphere. More specifically, the failure of technological systems, if connected in an all-encompassing network, is more likely to create, at least in the world of fiction, the apocalyptic vision that the Cold War once projected through scattered images of nuclear blasts.

Galactica claims here an exception to the connecting systems that produce the dystopian future of the age of inter-global media, which unsurprisingly is both the source of life and of political sovereignty; this position of exception is replayed in other post-Cold War media artifacts as they enact the possibility of retreat from technology. Take, for instance, Skyfall (dir. Sam Mendes) the most recent film in the James Bond franchise, in which the final battle with the terrorist John Silva happens at Bond’s childhood estate in rural Scotland. This is a place with no modern technologies, far away from the sexy and dangerous world of global cities such as Shanghai and London, but also unconnected to the invisible global network system that proved itself vulnerable to cyber-terrorism. If

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10 Media artifacts should be considered post-Cold War only if they directly engage or displace, various discursive elements of the Cold War. In other words, they mediate between the Cold War era and the epoch that emerges in its aftermath and is searching to build a historical identity.
Cold War Bond flaunted his technological superiority, his cool cars and magical communication gadgets, the new protagonist has figured out that to defeat the cyber-savvy terrorists he needs to use old weapons and very old media.

The emphasis in these media narratives on cyberwar betrays not simply our culture’s concern with the security of computer systems, but a deep-seated anxiety about the power of networks, their capacity to create new global conflicts, to create an expansion of Cold War that is pervasive both geographically and socially. Netwar is the concept widely used today by social scientists and by the US military to explain current developments in the nature of warfare; it is thus defined as “emerging mode of conflict (and crime) at societal levels, short of traditional military warfare, in which protagonists use network forms of organization and related doctrines, strategies and technologies attuned to the information age.”11 After the fall of the Berlin Wall and, in the aftermath of 9/11, netwar encompasses today modes of violent conflict and subversion of international law as well as civil disobedience and revolutionary activism: “transnational terrorist groups, black-market proliferators of weapons of mass destruction, drug and crime syndicates, fundamentalist and ethnonationalist movements, intellectual property pirates, immigration and refugee smugglers” are part of a socio-political spectrum that also includes a “new generation of revolutionaries, radicals and activists who are beginning to create information age ideologies, in which identities and loyalties shift from nation state to the transnational level of global civil society.”12 One of the challenges we face in comprehending netwar refers to the complicated relation network groups have had with

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12 Ibid., 6-7.
traditional state hierarchies and to hydrid formations made up of state/non-state actors. At the same time, we need to recall that netwar is an offspring of the labyrinthine complex of power-ideology and military technological might of Cold War discourse, not only in the context of the media-technological revolution but also in that of political and military interventions in the Third World by the two superpowers.

Theorists of network power such as Manuel Castells adapt Arquilla and Ronfeld’s conceptualization of netwar to show that in contemporary societies, “both the dynamics of domination and the resistance to domination rely on network formation and network strategies of offense and defense.” In other words, “The conflicts of our time are fought by networked social actors aiming to reach their constituencies and target audiences through the decisive switch to the multimedia communication networks.”

The military discourse on networks emphasizes the opposition between hierarchical power structures such as armies and government bureaucracies and networks, a code name today for terrorist organizations and their capacity to de-centralize and, at times, disconnect from global communication flows in order to create zones of secrecy where political and military operations are no longer easy to track and control only by means of surveillance technology. In his theory of network power, Castells needs to flatten the distinction between hierarchical and networked structures since he starts off from the premise that we live in a network society -- the implication being that the social is now identified with networks as well as subordinated to the excessive production and circulation of information. If we interpret this point from a meta-theoretical perspective, we see that as networks become allegorized, the techno-allegories referred to by the rhetoric of network

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power reflects a conception of dynamic connectivity -- presupposed by the constantly-moving state of information flows -- rather than the presumably more rigid social rationality proposed by Niklas Luhmann’s systems theory. Yet by addressing the differentiation between forms of power that operate in the network society, Castells’s argument produces its own version of what Luhmann coined, in his analysis of meaning, as the “‘rentery’ of the distinction into what it distinguishes” (Luhmann, Theory I 21). If the implied distinction in Castells’s paper is between modern systems and global networks, this distinction becomes a marker of the global network society. In other words, the global is that state of modernity wherein networks and systems are part of a continuous process of semantic articulation and rhetorical mis-appropriation. To put it simply, no network holds all power in the system of world society.

The problem with Castells’s argument is that it makes analytical description of a goal in itself because, for him, all power ultimately goes to the networks. At the same time, his analysis does not go beyond affirming a definition of power that only resides in domination, and, more importantly, does not show whether material and metaphorical structures of meaning and actions, against which any theory of network power would have to test its claims, reflects discursive formations that are socio-historically specific.

As an alternative to Castells’s theory, we need to consider whether existing notions of political communication or the Aristotelian-Arendtian view of politics and power as communication are today not simply affected by media-technologies, but by processes of mediation that emerged in the world-at-large after the end of World War II. How to understand these processes from a philosophical-historical perspective? One intriguing option is to focus on the ideological role war has played in the historical drama
of globalization within and beyond the geographical expansion of the traditional logic of war. As Roland Vegso points out, “after World War II, the spatial universalization of war was met by its simultaneous temporal universalization. Thus, the temporary outbreak of “world wars” was turned into the militarized construction of permanent worlds, what we could call … as the move from the era of “world wars” to that of “war worlds.” The thesis we need to consider is the following: At least since World War II, the production of the world primarily relies on the logic of war.”

To this intriguing hypothesis, we may add the point that this logic of war is itself produced by discursive networks developed through the Cold War. If we are to consider the Cold War as a historical-theoretical problem and we aim to tease out the ‘philosophical’ power of its discourse, our inquiry needs to move beyond epistemological stakes, while at the same time affirming that we are not simply interested in developing a new ‘research’ procedure. This is not to say that the Cold War did not create or utilized knowledge in a concerted effort to dominate political or cultural statements or that it did not willingly or unwillingly altered the relation of the spheres of knowledge, law and power. Perhaps, because it determined both democratic and totalitarian societies, not only in order to showcase their separation, the Cold War constitutes itself as global power, the power to produce a meaningful representation of the global, even though this representation is produced through a logic of security that aims to organize and control the world. In an effort to name this logic, Paul N. Edwards calls the Cold War a “closed-world” discourse. More importantly, however, he shows that computer systems and technological networks were intricately linked to other aspects of its global power: “techniques drawn from engineering and

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14 Roland Vegso, “Being / Planet / World (The Metaphysics of the Cold War),” unpublished paper.
mathematics for modeling aspects of the world as closed systems; *practices of mathematical and computer simulation* of systems…; *experiences* of grand-scale politics as rule-governed and manipulable…; visions as global mastery through air power and nuclear weapons; a *language* of systems, gaming and abstract communication and information that relied on formalisms to the detriment of experiential and situated knowledge, [involving] a number of key *metaphors*, for example that war is a game and that command is control.”

Considering the complex language-games through which mathematical theories of communication (or information theory) affected the build-up of computer technologies, we need to ask whether traces of Cold War discourse are affecting the ways computer systems and information networks participate today in the configuration of new global representations. In other words, we need to ask the following questions: If the Cold War managed to function as a global discourse (albeit one with a high degree of unevenness, heterogeneity and irregularity), how do we understand the post-Cold War rhetoric of global communication focused on ‘free’ networks? In other words, has the rhetoric of “the internet as critical” managed to fully overcome the Cold War, by “transforming the internet from [being] a mainly academic and military communication network into a global medium”?

What do we then learn about the political dimensions of social communication from examining the *age of global media*?

These questions make an implicit claim about contemporary world by focusing on *global media* (and its network power) as marking a specific representation of our age. We now live with digital media, a media form that possesses a *global* identity, while *we* are

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merely in relation to the global; that is, we are only in connection to complex relations enabling (and enabled by) global systems of communication and circulation. At the same time, as global media partakes in the production of the contemporary world picture -- not a representation of the world, as Heidegger put it, but the world as representation\textsuperscript{17} -- their role in defining the world picture’s temporality and historicity is tied with the birth of new technological networks out of global military strategies that dominated the second half of the 20\textsuperscript{th} century. This is, I argue, a crucial moment in the genealogy of the network in that it shows that the Cold War expresses itself beyond its firm chronological identity and that certain elements of its discourse have been updated (or reprogrammed) to fit the information imperatives of digital capitalism and the new security paradigms of 21\textsuperscript{st} century global competition and conflict. One seems to promise political freedom (the web being seen by many as a way of reimagining the public sphere) at the cost of social servitude to online networks designed to extract information out of communication flows; the other promises social security at the cost of losing political rights to massive surveillance systems whose legitimacy is only provided by the cloud of secrecy. According to Friedrich Kittler, Cold War networks shape the current development of the world-system; in other words, Cold War discourse has played a central role in defining the age of global media, that is, in providing the sense for the current stage of electronic globalization.

We are often reminded of the lasting effects of the Cold War on democratic culture in the United States: apocalyptic rhetoric, militarization of public discourse and populist demonology. Perhaps, not even a keen and prudent reflection on contemporary

rhetoric does justice to the idea, counterintuitive historically, that the Cold War age is not yet over (not yet complete) or that it is still shaping the interplay of society and technology in the global present. What role has the Cold War played in the extension of the network, a process involving, in Bruno Latour’s terms, the adding of “digital networks to the already existing water, sewage, road, rail, telegraph and telephone networks”?\(^{18}\) In answering this question, I have relied so far not simply on a deep understanding of the historical period 1945-1990, but on reinterpreting the significance of the Cold War to the modern age.

At a closer look, the network links the ideology of progress to organized practices of rationalization and efficiency that had originally been at the heart of civilization -- the power of the city not only to function as political power for empires or nation-states, but also to operate as nodes for regional and world-wide economic or cultural systems. What the Cold War succeeded was not simply to feed the city/civilization with messages and stories of doom, but also to test the adaptability of civil society to the fruits of war and military technology. For historians of technology like Mattelart, this test is key to understanding the dynamic of the conflict between US and USSR and its eventual outcome. Soviets “did not think in terms of deriving their products for civilian use from their military systems. Based on withholding the information, the political system continued to be spurred by the priority and exclusive logic of defense… Although the Soviet industrial machine was capable of producing in 1947 the famous Kalachnikov … it was incapable of conceiving an object such as the transistor.”\(^{19}\) The ability to produce

\(^{18}\) Latour, Ibid., 1.

the (technological) network proved to be a decisive factor in the articulation-translation of the Cold War as a mode of being-in-the-world beyond the historical period determined or bracketed by the fiction of bipolar ordering of global space. The analysis of networks (in their techno-allegorical dimension) as territorial localizations of universality needs to be supplemented with the temporal dialectic identified by Friedrich Kittler’s astute analysis of the Cold War networks. Kittler underscores an onto-technological argument that exemplifies the already-deciding event that freed globalization from the shackles of geopolitical and ideological constraints: “if Sysmotekhnia as the leading technology of the Warsaw Pact worked on IBM standards, the domination of the world market of tomorrow was already guaranteed.”

This argument, too, has its treacherous path. Kittler easily gets caught up in rhetorical tropes pointing at some inevitable, or always acting logic through which media is riveted by military technology. If media and information systems take contemporary global picture to be determined by a perpetual Cold War, it is because of a new planetary thinking, a new nomos of the Earth that emerged in the 1950s. In this metaphor --the Cold War as indefinite state of global conflict, articulated today by a plurality of discourses about security, surveillance and the ‘containment’ of terrorist networks --the relation of Being to war appears to consume itself as well as to provide us with the example of the properly consummate thought, as Levinas very well knew when he wrote in 1961 (the Preface to Totality and Infinity): “The visage of being that shows itself in war is fixed in the concept of totality which dominates Western philosophy.”

What is then, we can ask rhetorically, the face (visage) of being showing itself in Cold War?

Let me keep away, for now, from the vocabulary of Levinasian-Heideggerian philosophy and recall another moment in Kittler’s argument through which the Cold War is networked into a set of interconnected concepts, practices, events and phenomena that expose a genealogical narrative: “The great decentralization now celebrated as the civilian spinoff of so-called information society began with the building of a network that connected sensor (radar), effectors (jet planes), and nodes (computers)”22 The birth of the information-network-society from the Cold War laboratories of computing and defense systems can thus easily find a concrete chronology, 1951-1953, when IBM built SAGE, the Semiautomatic Ground Environment Air Defense System. This was a crucial achievement in terms of military security, in spite of its short lifespan, that is, in spite of its technological limitations. As Thomas Watson Jr. put it, “SAGE … could guard us against attacks by bombers, but not missiles, so when the Russians launched the Sputnik in 1958, SAGE became passé.”23 As the response to Soviet military capabilities, SAGE was only a short-time solution, yet it introduced the network at the heart of Cold War global strategy, even though as material-institutional net and communication-transmission infrastructure it remained within the spatial logic of the semaphore telegraph, that is, within the conceptual matrix of securing a national territory.

If the ‘face’ of being showing itself in Cold War is not simply fixed in the concept of totality, the totality of the planetary antagonism between two superpowers, it is

22 Ibid., 183.
because what underscores the separation, the once-apparently indefinite cage of ideological polarization, is the emerging new power of social-technological networks. In order to grasp this idea, I have suggested that the Cold War inaugurates a new imperative for global modernity: All Power to the Networks! This slogan suggests a certain adieu to the mass popular networking machines of the Russian revolution. At the same time, the universality of the prophetic message made apparent by the Leninist call to social order needs to be addressed in today’s political climate. Unlike the internationalization of the network, its globalization -- emerging in the Cold War and making possible its role in the creation of the global picture -- was not only based on crossing the borders of nation-states. The globalization of the network begins indeed in the 1850s with undersea cables and is then enhanced by radio waves, yet its proper identity (the elusive identity of the global) does not simply necessitate international cooperation or the application of utopian principles of Saint-Simonism to world politics. In other words, the globalization of the network has been, in fact, a response to the universalist scene of the Cold War, a scene though which the universe is seen as the New Frontier and modernity finally settled on a myth through which the slow war games and geopolitical tactics could be elevated to global strategy.

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24 Lenin’s slogan was “all power to the Soviets!”