The third major engine of change driving the development of the network society is the transformation of the “relationships of power.” Power, as defined by Castells in classic Weberian terms, is “the relationship between human subjects which imposes the will of some subjects on others.”¹ The capacity of imposing one’s will is “founded upon the ability to exercise violence.”² The control over the means of violence is the root of power. Still in line with Weber, Castells sees the state as the primary locus of power, defined by its exclusive control over the means of violence, within a given territory. Consequently, Castells’s treatment of the “relationships of power” revolves, first and foremost, around an analysis of the state as a set of institutions holding a territorially bounded monopoly of legitimate violence. Castells examines what happens to this “bordered power-container,” to use Giddens’s expression,³ in an environment where borders of all sorts have become leaky, and control over the means of violence is slipping out of the hands of the state. As we will see, this focus on the state is both productive and problematic. Productive because it brings into sharp focus how the historic constellation that produced the nation-state as the apex of power is coming to an end, and how this is putting the institutions of liberal democracy under considerable stress. Problematic because by focusing on the transformation of the existing institutions of the nation-state, Castells remains vague on the new sources and forms of power arising in the network society.

In 1648 the Treaty of Westphalia ended 30 years of religious wars that followed the Reformation and established a new international
system centering round the nation-state. This new type of state was a territorially fixed entity whose borders marked unambiguously the domain of its absolute control, and governed by a secular authority which also represented the state beyond its borders. Power was based on territory which provided the resources to maintain a standing army. The nation-state was the pinnacle of power, with no authority, secular or religious, above it. The separation of domestic and foreign politics was established, as well as the principle of non-interference with the internal affairs of other states.

Castells concurs with what is now the mainstream view among scholars of international relations: all of these principles, and the institutions of the nation-state which embody them, are fundamentally challenged in the globalized world. However, he rejects the notion of the “end of the nation-state,” which had gained popularity in the exuberant 1990s, as “a fallacy.” Clearly the nation-state does not go away. Rather, the nation-state, as Castells puts it, “seems to be losing power, although, and this is essential, not its influence.” Unfortunately, he does not expand on the difference between power and influence, even though that would be crucial. Sticking, like Castells, to standard definitions, we can say that influence is the ability to shape outcomes (rather than impose them). Influence, in this view, is a weaker form of power, one which is not sovereign. It is power that cannot act alone. In this sense, the fate of the state in the network society is a dual one. On the one hand, there is a loss of sovereign power. States can no longer manage their affairs, internal or external, alone, not even the US. On the other hand, there are attempts to create new arrangements, which Castells dubs “the network state,” through which state institutions continue to exercise influence over the fate of their citizenry. In short, what Castells sees is a transformation of nation-states from “sovereign subjects into strategic actors.” In the process of this transformation, the political institutions of the nation-state are thrown into a crisis.

In the following I will outline Castells’s argument of how the nation-state has been weakened (loss of power) and how it is reaffirming itself in a new role (asserting influence). On this basis, I will examine what I perceive as some serious shortcomings in Castells’s account, which ultimately remains centered round the nation-state and the Weberian definition of power. But first a look at the theory of the state which Castells offers, somewhat hesitatingly, in a brief sketch in the revised version of the second volume of The Information Age trilogy.
The Theory of the State

Castells’s theory of the state is expressed most crisply in the following two sentences:

The state [is] the institutional system that mediates and manages the dual relationships between domination and legitimation, and between development and redistribution, under the influence of conflicts and negotiations between different social actors. This set of relationships is territorially differentiated, so that each state institution in each locality or region expresses at the same time the dynamics of the local and regional society . . . as well as the overall set of relationships present in the nation-state.  

What Castells means is the following. The state is a system of domination. Some values and interests are promoted whereas others are suppressed, by various means, based on the historic ability of some groups to inscribe their particular interests into the institutions of the state. This is a continuous and ongoing process. Political power struggles are never really won, domination is never complete. Even in non-democratic states, a system of legitimation is necessary to justify the privileging of some interests over others. Having to fall back on overt violence (as the Chinese government was forced to do with the students’ movement in 1989) leads to significant friction. Even if it is successful in terms of the short-term survival of the dominant elites, it cannot be maintained over a longer period (hence, as Castells argues, nationalism is promoted as an “ersatz” ideology by the Chinese rulers). In sum, the balance between domination and legitimation determines the stability of the state.

The more the values embodied in public institutions lose their legitimacy, the more fragile the state becomes. This is not only an objective question of their actual performance, but also, perhaps even primarily, a subjective question of the acceptance of the fundamental values expressed through the state by the population at large. These subjective aspects, as always in Castells’s theory, are personal and collective at the same time. They are shaped by the confluence of tradition (the state as carrier of a historic national project), charismatic leadership (the exceptional personality), personal expectations (the state’s influence on one’s own future), and, I would add, propaganda (management of collective perception).
Managing this dialectic of ensuring domination while building legitimation is a complex and expensive task. In order to carry it out, the state needs access to resources through which to finance itself. Today, the most successful means of increasing the pool of available resources is to foster economic development, that is, the growth of material wealth. Since territorial expansion is no longer an option, the preferred way to foster economic growth is to strengthen the position of a country as a node in global economic networks. Once raised, the state’s resources are allocated to various social groups that have been able to institutionalize their interests with regard to the state. This redistribution is an important source of legitimacy, particularly for the welfare states created in the second half of the twentieth century. The management of these “dual relationships” is carried out through a layered (“territorially differentiated”) set of institutions, each shaped by their own internal balance among different social groups and by their relationships to the institutions on the other layers. The modern nation-state has typically been structured in three layers – local, regional, and national. They were ordered hierarchically, like Russian dolls. The localities were fully contained within one region, the regions were contained within a single state. There were relatively few horizontal connections (say between regions of different nation-states). This ensured the domination of the interests organized at the highest, the national, level over those organized below.

Somewhat surprisingly, Castells has begun to draw again explicitly on the Marxist theory popular in the 1970s, though now his main reference is no longer the structuralist Poulantzas. Rather, he goes all the way back to Antonio Gramsci. In particular, he uses Gramsci’s concept of the “power bloc,” by which he means the aggregation of heterogeneous actors which together control the development of the state’s institutions. In the same way as the institutions are territorially differentiated, so are power blocs. Contrary to what the term “bloc” might suggest, Castells (following Gramsci) points out that the “power bloc” is not monolithic, but a result of negotiations between social groups – sometimes smooth, sometimes conflictive. Not all of them represent dominant values (for example, unions, environmentalists), but their inclusion helps to achieve the balance of domination and legitimation on which the state is based.10

Despite his renewed references to Gramsci, Castells has moved away from Marxism for good. His use of existing theory, here as elsewhere, is very pragmatic, and not particularly faithful to
the original source. For Gramsci, there was a direct relationship between the notion of a “power bloc” and the theory of “hegemony.” By the latter he meant the comprehensive system by which the dominant social group is able to inscribe its values into the culture at large and thus make the dominated groups accept their fate as “common sense.”

As detailed in the previous chapter, for Castells contemporary culture is precisely characterized by a lack of any such “hegemony.” Through the increasing fragmentation of cultural codes, common sense is eroded. For Castells, then, the idea of the “power bloc” is a way to put the complex relationships between social groups that shape state institutions into a black box – whereas for Gramsci the notion of the power bloc served as an entry point to the analysis of its composition. Furthermore, contrary to Marxist assumptions, and jarring a bit with the idea of the “power bloc” as the force shaping the state, the state is now seen as an actor in its own right, with relative autonomy in relation to the social groups that constitute it. For Castells the state is still crucially important for the economy, and vice versa. Rather, the state is not now seen primarily as supporting capitalist exploitation, but the economy as providing the basis for the state’s ability to support social welfare. In this sense, it is in the state’s own, genuine interest to support the expansion of the (capitalist) economy to finance redistribution. Politically speaking, even though Castells is careful to maintain a distance, this analysis supports the “third way” approach advocated by center left politicians (Clinton in the US, Blair in the UK, and Schröder in Germany) in the late 1990s.

In Castells’s view, the historical development of the nation-state can be read as an overall increase in the power of those interests that were organized at the highest, that is the national, level over those incorporated in local and regional institutions. Additionally, the institutions of the state have been adjusted continuously to the changing composition of the power bloc, allowing new values and interests to be integrated in an evolutionary fashion. This centralization of the power was legitimized by arguing that the most significant forces operated at the national level, and hence that it was at this level that the dual relationships could be managed most effectively. Additional, or perhaps even primary, legitimation for this particular power structure arose from fusing the cultural concept of the nation with the administrative structures of the state, or, as Castells puts it, from combining “identity” with “instrumentality.” This has been extraordinarily successful, to the degree that today it is still hard to think of the two as separate entities. This fusion
extends all the way down to the conventions of grammar, inserting a hyphen between “nation” and “state” to add extra emphasis on their connection: nation-state. One of the key contributions of Castells’s discussion of power is to show how this pair of nation and state is coming under stress, and sometimes even coming apart, with very mixed results.

In a nutshell, this is Castells’s theory of the state as it pertains to the nation-state as a sovereign entity. Its crisis stems from the erosion of the central claim of the nation-state – that it can effectively manage these “dual relationships.” The most significant social forces no longer operate on a national level and the claim of national institutions to represent the people rings hollow as citizens articulate increasingly diverse interests, values, and demands for institutional reform through social movements. There is a fourth layer emerging, above the nation-state, which is calling into question the efficacy of the institutional arrangements on all three levels, at the same time as their legitimacy comes under attack from below.

**The Crisis of the Nation-State**

The crisis of the modern nation-state in the network society stems from two sources. The first is the loss of sovereignty. Many of the key processes (economic, social, political, cultural) are no longer contained within the nation-state; rather they operate on a global, or at least interregional, scale through the space of flows (see the next chapter). The other factor in the crisis, which is only partially related to the first, is the loss of legitimacy of the institutions of liberal democracy. This loss occurs despite the fact that, since the collapse of the Soviet Union, representative democracy has become the only template for legitimate government throughout the world. In other words, while the institutions of democracy are in a state of crisis, other forms of governance – political Islam (Iran), absolute monarchy (Saudi Arabia), Communism (Cuba), one-party rule (China), or military dictatorships (Burma) – have even less legitimacy. The national institutions of liberal democracy may be bruised and battered, but, for Castells, there is no serious contender to replace them, for better or worse. This perhaps helps to explain why his analysis of power remains focused so thoroughly on the state.

For national governments, the process of globalization has dramatically undercut their ability to act autonomously. Yet, as Castells points out again and again, they still play an important role in
shaping the fate of their citizens. However, they do so in an environment that is very different from, say, the 1960s. The key difference is that many of the most central aspects of national policy are now determined by processes shaped as much, or even more, outside than inside its national borders. Yet policies have traditionally been formulated, and legitimized, within these borders. Highly visible are the economic dependencies through the global financial markets. They seriously constrain the sovereignty of national governments in managing their monetary policies. Traditionally the main determinant of monetary policy was the national economy; today it is the global financial markets. This loss of sovereignty is most explicit in the European Union. National governments of the eurozone have delegated monetary policy and the setting of prime interest rates to the European Central Bank, a transnational institution explicitly set up to be beyond the reach of national governments. As a consequence, “the budgetary autonomy of nation-states is limited to allocation of resources between different items of the budget within parameters . . . imposed by the independent monetary authority.”

What is explicit within the eurozone is also, though not as formalized and strict, the case worldwide. Not even the US, the most self-sufficient economy in the world, can set its monetary policy without regard to the global financial markets, though its room for maneuver is much wider than that of other states. Yet, even for the US, the state of the financial markets is a key determinant of monetary policy.

The nation-state’s control over the economy is further weakened by the globalization of production, not just by multinational corporations, but by production and trading networks that exist on all scales. They create a “contradiction between internationalization of investment, production, and consumption, on the one hand, and the national basis of taxation systems on the other.” This contradiction makes it increasingly difficult for national governments to locate within their territories the productive basis from which to generate taxes. Not just because of the existence of fiscal havens offering their services for tax evasion to corporations and wealthy individuals, but also because of the general difficulty in accounting for value added in global flows of money, goods, and services. This induces systemic financial pressures on governments which have been increasing their borrowing on the international financial markets (with Japan and the UK as notable exceptions), and hence their exposure to global financial flows. While this argument is supported well by statistical indicators, it remains unclear if this sys-
emic pressure on government budgets is really such a new reality. Niall Ferguson’s historical analysis of the financial structures of governance suggests that budget deficits and dependence on the financial markets have been pervasive, if not crucial, features in the development of advanced nation-states over the last two centuries. The question, of course, is whether the financial markets of the nineteenth century were not more dominated by governments than those of the twenty-first century. According to Ferguson, the answer is less clear-cut than the dichotomy between economic sovereignty and its loss would suggest.

Castells points out convincingly that the difficulties in raising revenue on a national basis from a global economy put pressure on the state either to increase productivity dramatically (thus creating a surplus that can be taxed without reducing competitiveness), or, if that is not successful, to cut labor costs (social benefits) and government expenditure (social welfare costs). The globalization of production creates “negative competition” between states to provide the most favorable environment for capital investment (either through low labor costs, or through high productivity, or both). This competition has accelerated sharply over the last two decades because it can no longer be offset by protectionism (tariffs) or reliable productivity differentials between developed and developing countries. What used to be “third world” countries, China and India most prominently, have increased their international competitiveness dramatically, not just by providing cheap labor, but also through an expanding pool of highly skilled labor. Both strategies for economic development – increasing productivity and entering the race toward the bottom, in whatever combination – push the national economies deeper into the global economy by increasing their exposure to competition and reducing government control over the conditions under which they operate.

Politically, Castells relates the loss of sovereignty to the rise of problems which cannot be addressed effectively on a national basis, ranging from environmental degradation to migration, the global criminal economy, and global epidemics such as AIDS or SARS. These are not issues of traditional foreign policy, yet they all contain significant cross-border components. They demand internationally coordinated action in a widening range of areas, though prevailing national interests make such coordination exceedingly hard to achieve. As a consequence of the inability of nation-states to act effectively in these areas, which broadly concern a new class of “global common goods,” a host of new actors, NGOs such as
Greenpeace, Médecins sans Frontières (MSF), Amnesty International and scores of others, have entered the international domain, challenging the nation-state’s historical monopoly on international policy making. By doing so, they are undercutting the claim of advanced democracies to be the locus of humanitarianism, draining another, important source of their legitimacy.

 Militarily, the loss of sovereignty has two main aspects. With the major exception of the US, no national government can fight an external war without major international support. This international support is not only a question of coalition building for the pursuit of war, but extends deep into the makeup of high-tech armed forces. They rely on technological infrastructure that only the US can generate domestically. For Castells, this technological self-sufficiency is a major reason why the US can justifiably be called the last superpower. Yet the loss of sovereignty in the area of violence is not just a question between states. Rather the control over the means of violence is increasingly slipping out of the hands of governments and into the hands of nonstate actors. The main new actors controlling relevant means of violence are the terrorist networks and organized crime. The latter is supporting guerrillas whose original political goals have been replaced by, or fused with, their new economic function to secure the ground for criminal operations. To retain its monopoly of violence, the state has to use it more and more against its own population, from which terrorists and criminals are hard to separate – not least because the categories can be a matter of contested definition. However, establishing internal and external warfare as a permanent *modus operandi*, Castells points out, seriously threatens the state’s legitimacy, in relation to its own citizens and as an actor in an interconnected political system. I will return to this last point later in this chapter. For now, I’ll continue with Castells’s account of the erosion of national sovereignty.

 The final element that contributes to this trend is the state’s loss of control over the media. Up to the mid 1980s, the mass media, particularly television, were everywhere closely regulated, if not directly controlled, by national governments. A relatively small number of media outlets, for example three major TV networks in the US, controlled the markets, which were national or regional. In the course of a decade this changed radically because of the intertwined dynamics of technological change and political deregulation. Media markets became global, new players emerged, and competition became more pronounced, despite the fact that the market is
dominated by only a few global conglomerates. So far, so good. However, Castells’s analysis of the relationship between political power and the new media environment is more specific, and, in my view, problematic. To survive competition, he argues, the media need to gain a certain distance from the political process, that is, they need to appeal to a market segment that is broader than any clearly defined political camp. If they become too closely associated with a particular political position, they will not remain attractive to advertisers, who are their main source of income, and who want to reach the broadest market possible. From this it follows that “independence and professionalism are not only rewarding ideologies for the media: they translate into good business.”

This conclusion is contrary to almost everything the political economy of communication has been arguing on this subject for the last two decades. Herman and McChesney, for example, in the subtitle to their book on the global media, call the newly formed conglomerates *The New Missionaries of Global Capitalism.* They highlight the close alignment of the main actors in the media, economy, and politics. Scores of studies have pointed out the bias in the way the mainstream media present political issues. If anything, political economists tend to argue, the range of opinion in the mainstream media has narrowed rather than widened, and the opinions published there consistently promote certain values over others. Here, Gramsci’s concept of hegemony might still be useful for an analysis of the political role of the media. Thomas Frank, for example, argues that the idea that (financial) markets are fundamentally democratic has been repeated so often on television that is has become “hegemonic,” establishing a new common sense that leads people to favor economic policies that are against their own material interests.

Castells is on stronger ground when he argues that the loss of control stems from a particular kind of diversification of the media landscape. One aspect of the diversification is the rise of non-Western satellite TV, most notably the Arab news networks *Al Arabia* and *Al Jazeera,* challenging the domination both of national, government-controlled TV stations in the Arab world and of Western globalized media. The other aspect is the rise of ethnic local TV. These channels are bypassing the standardized national/global media and are only addressing very particular constituencies, fostering their experience and expression of cultural particularity. For Castells, “the new pattern of interaction between media and the state is characterized by the tension between globalization and...
identification.” The state is seen as unable to match the reach of the global media outlets and unable to match the specificity of the local, ethnic media channels.

This is complemented by the fact that computer-mediated communication flows are largely outside the control of the state. While states are trying to establish control over this domain, they are forced into a dilemma. When they disconnect their population from the internet (or fail to connect them), they interfere with their ability to foster economic development, yet when they promote the use of new technology, they abdicate control over what their citizenry reads or writes. Of course, just as the control was never ironclad, the loss of control is not absolute, but overall Castells sees attempts to (re)establish state control over the information citizens can access as a “lost battle.” Unfortunately, it remains unclear over what timeframe Castells imagines this battle to be lost. This vagueness makes his assertion problematic, not least because the empirical record on “open networks, closed regimes” has so far been much less straightforward.

These, then, are the four key areas in which nation-states have lost sovereignty in the network society: domestic economic policy, international policy making, the military, and the media. While some of the points of this analysis are problematic, the general conclusion is unquestionable: the nation-state is no longer a sovereign political actor. The weakening of state authority has led to, and is aggravated by, a loss of legitimacy of some of the key institutions of political democracy, namely political parties and governments. They are caught in a double bind. On the one hand, more and more problems vital to their constituencies are negotiated on an international level. On the other hand, as the cultural realities of their constituencies fragment, they are confronted with ever more specific, and contradictory, demands. Yet in order to be able to act effectively in an international arena, governments need a certain degree of independence from their constituencies, otherwise there is not enough room for maneuver. “Thus, the more states emphasize communalism, the less effective they become as co-agents of a global system of shared power. However, the more they triumph in the planetary scene, in close partnership with the agents of globalization, the less they represent their national constituencies.”

The loss of sovereignty of the nation-state is reflected directly in the politicians’ inability to represent the particular interests of their constituencies, which, from the point of view of the people who vote for them, undermines their legitimacy as their representatives.
Informational Politics

The crisis of the state, Castells stresses, is also caused by the transformation of politics from party politics – centered around political parties with diverging ideologies representing different social classes – to “informational politics,” that is politics “fundamentally framed, in its substance, organization, process and leadership, by the inherent logic of the media system, particularly the new electronic media.” And this “inherent” logic corrodes politics in the traditional sense, for two main reasons. First of all, media politics is extremely expensive. Buying advertising time, staging spectacular yet highly controlled events, continuous polling, information processing, and maintaining rapid reaction capacities require substantial resources, not just in the US but everywhere. Politicians need to spend a significant amount of their time on fundraising, for themselves and their political parties. This not only gives monied interests undue access to politicians, but it also creates systemic corruption. Without private donations, no politician (or political party) can survive. The ensuing practice of fundraising at the edge of legality creates the popular assumption that politicians can be bought, which is, Castells concludes, by and large accurate. Even though, in advanced democracies, the motive is rarely personal financial gain, but securing the resources necessary to compete for power.

Systemic corruption, in a competitive media environment that is not under state control, creates material for endless scandals. And the media thrive on scandals, of any kind, because they sell media products. The scandals are neither, as Castells stresses, because politicians were more virtuous in earlier times, nor because the media are fulfilling their roles as independent watchdogs. Rather, they occur because “scandal politics are the weapon of choice for struggle and competition in informational politics.” This struggle is carried out as a complex game of leaks and counterleaks, with political actors trying to instrumentalize the media as much as the media turn politics into a show, competing with entertainment and sports, in the pursuit of audiences and profits. However, since the politician who replaces the one who has been caught in illegal fundraising is subject to the same pressures, the situation is unlikely to change, and hence the status of the entire classe politique is undermined. This is one side of the problem of informational politics.

The other side is that all politicians, irrespective of their positions, must communicate through the same medium: commercialized
television (and other commercial media channels). This forces them to speak the language of television: short, personalized statements ("sound bites"), supported, or even driven, by powerful images. All of this makes them more vulnerable to the corrosive effects of scandals which are as personalized as the politics they engulf. However, for politicians there is not much choice. Without mastering the basic language of TV, it is impossible to reach a relevant size of population in pursuit of the next electoral victory. Other media, print or the internet, still play only an auxiliary role (even if the internet is becoming an important tool in organizing and fundraising). Politicians can bring up certain issues, but unless TV picks them up and digests them into short punchlines, the issues remain politically marginal. Politicians, aided by professional "spin doctors" who help them to operate under these constraints, are not only becoming more and more alike, but the showlike aspects of politics are more visible, further undermining their credibility. The showlike aspects are reinforced by TV shows about the practice of selling politics and media manipulation.28 The circle closes.

Up to this point, Castells's analysis of informational politics is solid, if somewhat conventional. That television transforms politics has been argued since Kennedy won the first presidential TV debate against Nixon in 1960. However, Castells's argument is more specific, and the many issues that made his analysis of the media in terms of the loss of political sovereignty problematic reappear in his analysis of informational politics. The media, while introducing a set of structural constraints, are more or less agnostic about the interests of the politics for which they provide the stage. Indeed, there are supposed to be strong commercial interests in staying above politics, and thus Castells argues that "mediacracy is not contradictory to democracy because it is as plural and competitive as the political system is. That is, not much."29 Castells knows that he is on thin ice here, and he hedges his bet on both sides. Media provide the all-important stage for politics, a stage that has very particular constraints, yet the fact that pluralism in politics is at an all-time low is unrelated to the media system. For Castells, the media shape the message they transmit but are profoundly disinterested in the content of these messages.

Castells remains here essentially within his McLuhanite reading of electronic media, and their culture of "real virtuality," as "a multi-semantic text whose syntax is extremely lax."30 This is a worthwhile observation about TV in general (which is what McLuhan spoke about), because it can help to highlight the transformation of the
style of political communication (independent of the political goals) into shorter and shorter sound bites and symbolic images, as news meshes with entertainment. This leads to a style of communication far removed from the reasoned debate in the public sphere that is central to the theory and legitimacy of liberal democracy. This observation is hardly new.31

Yet this kind of analysis is insufficient for understanding the concrete relationships between TV and politics in the media-saturated network society. The fact that the medium of TV affects the format of all messages equally does not preclude the owners of TV channels having an interest in, and a certain degree of influence over, how the content of those messages is framed. Form and content, the medium and the message, are two very different levels of analysis. Castells has little to say about the fact that the media corporations are themselves major economic actors, either in their own right, or as part of even larger conglomerates, with very distinct economic interests in a broad range of political issues.32 It is not a coincidence that corporate scandals are much less reported than political ones, or labor interests far less present than those of financial investors.33 Furthermore, for Castells the main effect of the high cost of media politics is the endless string of scandals over fundraising, and not the narrowing of political opinions conducive to raising significant amounts of money.34

This is not the place to assess the political bias of the news media, but to note that for Castells this is simply not relevant for the analysis of informational politics. Indeed, he dismisses the argument that mass media can significantly influence their audience. To support this thesis, he refers to cultural studies which have pointed out that audiences actively and subjectively interpret media messages, rather than passively receiving them. With respect to critical theory and its critique of “culture industry,” he goes so far as to conclude that “it is one of the ironies of intellectual history that it is precisely those thinkers who advocate social change who often view people as passive receptacles of ideological manipulation.”35 As an analysis of the actual dynamics of “mediacracy,” this does not suffice.

In certain ways, Castells’s analysis of the media is similar to his analysis of the financial markets. He sees them both as highly particular environments, with their own internal dynamics and constraints which produce systemic volatility (rapid price fluctuations there, scandals here). Nevertheless, he sees them as basically politically neutral as to what happens through them. Both the media and the markets are independent of politics because they are so
internally differentiated and competitive as to be, by and large, beyond the control of anyone, particularly national governments. They both contribute to a sphere of global information flows which is, in essence, determined by its internal, blind dynamics rather than by any particular political will or strategic action. He writes: “the flows of power generate the power of flows, whose material reality imposes itself as a natural phenomenon that cannot be controlled or predicted, only accepted and managed.”36

In both areas, this conclusion that global flows are beyond the reach of political actors directly relates to Castells’s conceptualization of power, which is still seen as primarily working through direct control and coercion. I will come back to this point at the end of this chapter.

The Reaffirmation of the State

The basic principles of the nation-state – set out in the mid seventeenth century and still operational deep into the second half of the twentieth century – are coming apart. They are increasingly ineffective and are losing legitimacy. Yet, Castells stresses, nation-states are not passively descending into obsolescence. On the contrary, they are still very resourceful actors, nationally but also internationally, and as such their response to these developments is an essential aspect of the developments themselves.37 They cannot withdraw from the global networks because outside these networks there is only marginality, yet they can and do act within and upon them in a variety of ways, determined by the resources they have at their disposal, accumulated in the course of their history.

For Castells, there are really only two sets of strategies available to states, and they are both a direct reaction to the new global realities. Economically speaking, the options are either to integrate into the mainstream of global exchanges, or, bypassed by the global flows of wealth and opportunities, to establish informally a “perverse connection,” that is, to allow the most aggressive segments of society to enter the global criminal economy. Politically speaking, the choice is between becoming adept at managing the messy processes of competition and cooperation in the arenas of international/interregional policy making, or opting for a unilateral strategy, usually based on a renewed form of aggressive nationalism, or a redefinition of “national interest.”

Of course, and Castells is clear about this, these options are not mutually exclusive, nor is there, for many states, much of a choice.
For poor developing countries, for example, integration into the mainstream global economy is either not possible (because they are treated as “redundant producers”), or often possible only on disadvantageous terms (as producers of “high volume” or “raw materials”). Weak states may not have the capacity to prevent the growth of the perverse connection, even if a newly elected government initially may have the will to do so. However, within the ambit of these two directions, there is enormous variety in the way states reorganize themselves in order to keep and even increase their influence, in what Habermas calls “the postnational constellation.”

When Castells speaks of the need to integrate into the global economy, he positions himself against both the right-wing doctrine of deregulated free trade (that all countries will profit from free trade, and the less state intervention, the better) and the left-wing dependency theories (no sustained economic growth is possible for dependent states). For Castells, the empirical record points in a different direction. Those states that have been most active in supporting their economy so that it can enter the global economy at its own pace have been the most successful in strengthening their national economies to become powerful nodes of the global economy. Castells distills two models from this observation, both with clear positive connotations: the “developmental state” and the “informational welfare state.”

The developmental state – chiefly the “Asian Tigers” (Hong Kong, Singapore, South Korea, and Taiwan) but also Japan and China (since the 1980s) – “establishes as its principle of legitimacy its ability to promote and sustain development,” in the sense of economic growth. By using a mixture of state intervention and deregulation, of protectionism and free trade, the developmental state

focused on linking up the country with the global economy to industrialize and dynamize the national economy . . . The developmental state was based on a premise of a double edged, relative autonomy. Relative autonomy vis-à-vis the global economy by making the country’s firms competitive in the international realm, but controlling trade and financial flows. Relative autonomy vis-à-vis society, repressing or limiting democracy and building legitimacy on the improvement of living standards, rather than on citizen participation.

This strategy was, by and large, very successful, securing the state’s legitimacy despite high social costs in terms of systemic corruption, cronyism, and sustained autocratic rule. Castells stresses that this model has been successful because its aims were not just economic
but served simultaneously as a "nationalist project of self-affirmation of cultural/political identity in the world system." 41

A nationalist project also underlies the successful creation of the informational welfare state, for which his prime example is Finland, but which arguably applies to all northern European states (and the Netherlands). Here, the welfare state has been able to transform itself into a key factor in increasing productivity. Extensive social policies in the areas of education, health care, cultural development, and social security contribute to providing the human resources necessary to compete successfully in the global economy. In Finland, in particular, the transition toward an informational economy was the result of a comprehensive political strategy, initiated and coordinated by the state, connecting policies in a wide range of areas into a common national project. This was facilitated by a strong national identity, based on language, geography, and a tradition of cooperation against outside forces that are seemingly overwhelming (the climate, the neighbors). It is this increase in productivity that enables an extensive social welfare system to be financed without reducing global competitiveness. In fact, the informational welfare state is what sustains its competitiveness. 42

In sum, "the state survives by connecting the nation to the global context, adjusting domestic policies to the imperatives of global competitive pressures.... This requires that the state becomes interdependent within a broader network of economic pressures out of its control." 43 This creates the contradiction that the more deeply the economy is integrated into the global flows, the less the underperforming sectors of the economy can be shielded against the "whirlwinds of the space of flows," as was indicated by the structural problems of the Japanese economy throughout the last decade, or the Asian financial crisis of 1997. In addition, relying too much on nationalism as the "legitimizing identity" to hold society together against the centrifugal forces of transition brings the danger of xenophobia, leading to cultural closure at a time when multiculturalism has become a key source of competitiveness. As Castells and Himanen write in their analysis of the Finnish informational society, "Finland cannot choose a non-multicultural world, but the multi-cultural world can choose a world without Finland." 44

Castells argues that the state remains a crucial actor in the informational economy, and that there is a range of different models for the informational economy. Silicon Valley, he insists, is not the future of all advanced economies. However, the ability of the state
to play an expansive role relies on above average productivity in the economy (that is, an above average rate of profit for investors, after taxes), thus forcing the state to accelerate the transition to the informational economy. In a sense, the best defense for the state is offense. Castells’s argument for a diversity of models of equally advanced informational societies, adapting to and driving forward the development of a globalized informational economy, is convincing and original. He is able to demonstrate that different forms of governance, drawing from distinct national cultures, can survive and even prosper in the globalized economy.

Yet the structural reality of pervasive economic integration does not necessarily create the will for the political integration characteristic of the developmental and informational welfare state. On the contrary, a range of states are opting for renewed political unilateralism. To understand this movement as a constitutive part of the contemporary dynamics (rather than an anachronism), it might be worth reviving a line of analysis that Castells proposed in the late 1980s but has not taken up since. Focusing on the US at the end of the Reagan era, he diagnosed a shift “from the welfare state to the warfare state.” For Castells, the concept of the warfare state, introduced by Herbert Marcuse for somewhat different reasons, signals “the replacement of the state’s principle of legitimacy as an economic regulator and social redistributor [with] the old conservative justification for the strength of the state as the rampart of national security and domestic law and order.” In this view, the warfare state is the (neo)conservative answer to the crisis of the liberal welfare state, a crisis that manifested itself in terms both of accumulation and legitimacy. The military (and the other security apparatuses) are put at the center of the state, not just in terms of its legitimacy, but also in regard to its economic policies. Large budget deficits, abhorred by traditional conservatives, are justified on the basis of “national security.” These, in turn, provide the need to cut back social redistribution even further, and thus weaken its role in legitimizing the state. But this does not imply a generally reduced role for government. In fact, the defense spending provides the basis for renewed state-led economic policies – what Castells calls a “perverted Keynesianism” – made up of military expenditure and a regressive income distribution.

It seems in line with Castells’s general argument, though he does not say it explicitly, that this transition – somewhat obfuscated during the 1990s, with its optimistic ideas of a social democratic “third way” and hopes for democracy in post–Soviet Russia – has
sharply accelerated after the recent series of terrorist attacks. Governments around the world, most explicitly in the US and Russia, are using the “war on terror” to relegitimize authoritarian, nationalistic policies, centering round a broadened notion of national security. For Castells, this is a direct reaction to what are seen as the negative consequences of a world that has become too integrated, and individuals, that is terrorists, who have become all too powerful. On a smaller scale, the transition from a welfare to a warfare state could also be seen in Serbian politics under Slobodan Milosevic during the 1990s. Here too, the state tried to relegitimize itself as the guarantor of national security, that is, the integrity of the national territory. Indeed, a renewed authoritarianism, which, particularly in Europe, goes hand in hand with multilateralism, might be one of the most powerful reactions to the crisis of liberal democracy.47 Thus internal violence of the state against some of its own citizens might not be, as Castells supposes, a factor in the erosion of the legitimacy of the nation-state, but, on the contrary, a key aspect of its resurgence under the guise of security.

Castells’s conclusion is clear: There is still room for national policies and they can make a decisive difference, for better or worse. Yet states no longer create their policies, even unilateral ones, as a sovereign actor, but as part of a new power-sharing constellation which forces their transformation from (modern) nation-states to (postmodern) network states.

**The Rise of the Network State?**

In terms of Castells’s theory of the state as an integrated set of institutions organized on three layers (local, regional, national), what has happened over the last decades could be characterized as the emergence of a fourth, supranational layer. What differentiates the situation today from what political theorists discussed in the 1970s as “interdependence” is not just the density and intensity of the cross-border relationships.48 What is really new is that nation-states are no longer alone in the arena of international policy making. The arena has become crowded. Yet the states’ tasks have not changed. They still have to manage, with respect to their domestic constituencies, the dual relationships between domination and legitimation, and between development and redistribution. However, they have to do so within a constellation that is “characterized by the plurality of sources of authority, the nation-state being just one
of these sources.” Unfortunately, Castells is less than clear what these other sources of authority and power are. As far as his conception of the network state is concerned, this plurality is rather limited. Its components are primarily “other states, or fragments of states, or associations of states.” Most interesting here are the “fragments of states,” by which Castells means local and regional institutions which no longer accept being represented internationally by national governments. Rather, they pursue their own interests in horizontal associations with other local or regional governments, sometimes in support of their national governments, sometimes to lobby against them. They can do so not only because their legitimacy has risen – being closer to the citizens, they are better able to represent specific identities – but also because many national governments, particularly in Europe, have delegated competences back to the regional and local level as a way to increase their own legitimacy.

Castells observes that in Europe, for the first time in 300 years, there is room for a positive expression of the difference between the nation and the state. Renewed regional identities, be they Catalan, Scottish, or Northern Italian, are gaining power by networking among themselves and intervening directly at the supranational level. Whereas the nation-state is in crisis, Castells sees the potential for a renaissance of local and regional governments, which, in the best of cases, are being reinvigorated by a combination of the power of identity (representing the specificity of their constituency) and the power of networking (by creating new forms of lobbying and resource sharing). This is a hopeful development, because

the articulation of society and economics, technology and culture in the new system can be arranged with greater efficacy and fairness on the basis of reinforcing local societies and its political institutions. The global and the local complement each other, jointly creating social and economic synergy, as they did back at the beginnings of the world economy, in the fourteenth to sixteenth century, a time when city states became centres for innovation and commerce on a worldwide scale.

This renewal of local autonomy offers, for Castells, the most promising prospect of a positive transformation of the state as a bottom-up recreation of democracy in the network society. By comparison, the establishment of a global civil society (in Gramsci’s sense, as the space where state and society intersect) is a much more complex
undertaking and one that requires new forms of articulation and representation, currently being developed, with uncertain success, by social movements and NGOs.52 Yet it is also clear that not all regions benefit equally from this renewed subsidiarity. On the negative side, local autonomy can be interpreted as a desolidarization of national societies, at a time when fiscal pressures are high and certain problems (for example, the fate of immigrants in the large housing projects) are tacitly regarded as unsolvable. Abandoned local minorities are pushed further into developing their own communal identities, defending themselves against this renewed, and highly effective, marginalization by exclusion. As an effect, the integrative capacity of the national level is decreasing, further weakening the legitimacy of the national institutions.

At the supranational level, we now find all kinds of state institutions, not just national governments, immersed in complex games of alliances, trying to use their position within the network as a whole to advance their own specific goals. The result is “the de-centering of the nation-state within a realm of shared sovereignty.”53 The Russian doll has been transformed into a chess game. The fact that power is shared among all actors in the network state, Castells stresses, should not indicate that it is shared on equal terms and that the internal constellations of the network state do not reflect power differentials between the various nodes of the network. They do. But the power of the network, he maintains, trumps any particular actor within it. This forces nation-states into a situation in which they have to accept the dominant interests formulated within the network (often, but not always, aligned with the interests of the dominant nodes), irrespective of how they relate to the interests of their own constituencies. This is a condition of gaining access to, or remaining in, the network.

This is a crucial point about the contradictory nature of power in global networks. On the one hand, global networks are defined by rules – say, the trade agreements of the World Trade Organization – that can override national policies and national law. On the other hand, major nodes in these networks, particularly the US and the EU, have a disproportionate weight in determining those very rules. Whether this amounts to a weakening of the major powers, who have to negotiate continuously, or whether this indeed extends the power of the G8 countries, who are now able to reach deep into the national policies of other countries, is a matter of considerable debate.54 Castells does not really address this question, but by focusing on the loss of autonomy he seems to imply the former.
Global governance is a problematic issue in Castells’s theory of the network state because he uses the concept in two different ways. On the one hand, the network state is understood as the practice of power sharing in which nation-states are continuously engaged in an attempt to manage global problems. However, at times, he also equates it with “the international system of governance built in the aftermath of World War II, centered around the United Nations.”

Unfortunately, Castells puts very little emphasis on the institutions and instruments of global governance, which he sees as little more than the effect of “the negotiated convergence of national governments’ interests and policies.” Yet he also argues that international institutions, such as the World Bank, take on a life of their own and “tend to supersede the power of their constituent states, instituting a de facto global bureaucracy.” Such a contradictory stance is repeated several times in the very few paragraphs which he devotes to questions of global governance. For example, he argues that it would be wrong to think of the International Monetary Fund as an instrument of American political domination, while also maintaining that it is not a coincidence that the economic theory underlying its policies is labeled the “Washington Consensus” because of the influence of the US government. He goes so far as to state that during the 1990s “most of the developing world, as well as the transition economies, became an economic protectorate under the IMF – which ultimately meant the US Treasury department.”

Clearly something is happening here that is both empirically novel (a global bureaucracy) and theoretically complex (heterogeneous actors of global governance, shared sovereignty). Yet surprisingly, despite the enormous scope of Castells’s work, there is not a single case study, however brief, of a branch of this global bureaucracy – not of the United Nations (or any of its organizations or programs), not of the World Bank, not of the World Trade Organization, not of the World Intellectual Property Organization (WIPO), nor of any other. This is certainly not due to a lack of knowledge or access. Castells frequently speaks and consults at this level. He personally knows some of the most senior staff quite well. Yet all of these organizations appear only in passing in Castells’s theory of the network society. And then they are often lumped together in a single paragraph, leading to entirely uncontroversial conclusions such as “the growing role played by international organizations and supranational consortia cannot be equated with the demise of the nation-state. But the price paid by nation-states for their survival as nodes of states’ networks is that of their decreasing sovereignty.”
If this sounds confusing, it is. The confusion arises from deep tensions between Castells’s theoretical model of the state applied to global/transnational governance, and the empirical reality he observes. Within the theoretical model, the trajectory of development would be, loosely speaking, toward a federal superstate. In the same sense that regions banded together to form a nation-state (for example, in Switzerland in 1848, or in Germany in 1871), nation-states are now forced to cooperate intensively and extensively. It is their recognition, however insufficient and obscured by ideology, that many problems need to be managed on a higher level which leads to the creation of governance structures above the nation-state. Instead of three, we now have four layers of government. Castells goes as far as hinting at the existence of a “global power bloc” – in an analogy of the regional/national power blocs that dominate the institutions of governance – he does not elaborate on its constitution. Similarly, in the same sense that national civil societies create a zone in which the logic of power making and the logic of experience can meet and adapt to one another, he sees it as an urgent matter to support the emergence of global civil society to fulfill the same function supranationally.60

If there is one case that fits the trajectory of this model, then it is the development of the European Union. Of all the international governance mechanisms, this is the one most resembling a nation-state. And, indeed, it is the only empirical case in which the supranational elements of the network state are examined at all. In a revealing offhand remark, while sketching the theory of the state, Castells sees the EU as evolving toward a “super nation-state.”61 This is a surprising remark which reflects neither Castells’s personal political views, nor his actual research. Rather it seems driven primarily by the internal logic of his theoretical model, which conceives the network state as a set of governance institutions operating on different layers (local, regional, national, global).

Characteristically, the conclusion he draws from his empirical study is quite different. Rather than detecting the rise of a “United States of Europe” – despite the fact that the EU has a president, a parliament, a currency, and a court – he finds that the actual arrangements are better characterized as “neo-medievalism.”62 This term, coined in the late 1970s,63 indicates that political power is, again, becoming territorially ambiguous. Member states of the EU no longer have exclusive control over their territories; rather they have to share and negotiate it with the claims of others, some formulated at a regional, some at a European, and others at a global
level. In short, governance functions are no longer monopolized by
the vertically integrated nation-state. In short, also on this level,
we have the transformation of vertically integrated hierarchies
into flexible networks, a development fully congruent with what
Castells has identified as the general trajectory characterizing the
rise of the network society.

The new political reality is incompatible with traditional notions
of national sovereignty, and it makes it almost impossible, or even
redundant, to distinguish between foreign and domestic politics.
Multiple power claims and regulatory regimes coexist at the same
time, and their interrelation is a matter of continuous negotiation.
The resulting indeterminacy of the institutional arrangements char-
acteristic of the EU is a critical, constitutive feature. It creates the
necessary flexibility to accommodate the endlessly shifting coali-
tions and interests. Castells notes that “the network state, with its
geometrically variable sovereignty, is the response of the political
systems to the challenges of globalization. And the European Union
may be the clearest manifestation of this emerging form of state,
probably characteristic of the Information Age.”

This conclusion that the European Union is the clearest expres-
sion of a far more general trend is, however, problematic. On a very
general level – governance functions are shared among nationally
based institutions of governance in a process of flexible and con-
tinuous negotiation – it is consistent with the empirical record pre-
sented by Castells. On a more specific level – the EU as a model for
other regions, or perhaps the globe – it directly contradicts Castells’s
own conclusion that the kind of integration characteristic of the EU
would be impossible, for historical reasons, elsewhere. Asia, he
maintains, will not integrate under the leadership of Japan (or
China), nor will Latin America under that of Brazil, as Europe did
under the leadership of France/Germany.

It might well be justified to characterize the EU as a new form of
state, a network state. However, it is entirely unclear how the insti-
tutions of global governance, the UN and the countless branches of
the global bureaucracy, are to be integrated into this notion of the
network state. Particularly since Castells still sees the capacity to
impose legitimate violence as its hallmark, something that not even
the EU is capable of, with no army or community-wide police force
(though that might change in the future).

All in all, Castells’s analysis of the evolution of power, centered
round states in process of transformation, is highly uneven. It is
best at the level of the region and the nation-state. Multiple and
seemingly contradictory trends, such as the crisis of democratic institutions, the split between nation and state in some regions, and a rise of aggressive nationalism and informational welfare states, are convincingly related back to what have been identified as the fundamental tension of the network society: the tension between the dynamics of global networks of economic, cultural and political relationships, and the particularities of local identities. His argument that the network society is simultaneously shaped by global and local dynamics, and that it is consequently a multicultural reality is convincing and the conclusion is certainly valid: national politics can still make a difference, for better or worse.

Most wanting is an analysis of global governance, which is, by and large, simply absent. Above the level of the nation-state, Castells’s theory of power loses its purchase. It yields little beyond relatively chaotic, ad hoc arrangements reflecting the tenuous balance of national agendas. In such a context, sovereignty is lost, power diffuses and politics becomes powerless, because the “flow of power” is overwhelmed by the “power of flows.” This is theoretically unsophisticated and the lack of empirical grounding is fatal, all the more because of Castells’s basic methodological premise of grounding theoretical abstractions in an iterative process of empirical research. What we are left with is a set of overly general propositions. Somewhere in between sits his account of the evolution of the EU. This is not surprising, since the EU is the supranational project that is the most like a traditional nation-state. But even here the theory of the state only partially fits the analysis of the empirical processes (“super nation-state” versus “neomedievalism”). All in all, the analysis of the weakening of the old levers of powers, particularly the nation-state, is not balanced by an analysis of the new character of power operating not through national hierarchies but through global networks.

Power and Networks

This is not the first time we have reached the conclusion that the treatment of the new forms of power, broadly understood as rule setting and governance in networks, is the single most problematic part of the theory of the network society. The same problem has already been encountered in the analysis of the “relationships of production.” As I have argued, the economic analysis is most convincing at the level of the firm and networks of firms (including the
associated changes in the constitution of labor), but weakest in regard to new global regulatory regimes, private or state-supported. For Castells, the most significant aspect of the global economy is that it is driven by fierce competition among global production networks. Many are dominated by multinational corporations which act as networks of tight coordination within networks of loose coordination. Yet even global corporations are found to be powerless relative to the chaotic fluctuations of the global financial markets, conceived as a faceless enforcer of relentless profit-maximizing. These markets are more powerful than any actor, or even any group of actors (say, national banks trying to support a currency). Yet, for all their force, these markets are conceptualized as blind, as an efficient “automaton.” Such a perspective stresses the out-of-control nature of the processes at the global level, described by Castells with a recurring metaphor as “whirlwinds.” This is an important point, characteristic of the new global landscape created by complex systems. In such self-adjusting systems, as John Urry puts it, “change can occur without a determining ‘agency’ producing different outcomes.” True enough. Nevertheless, this is hardly a complete picture of the (political) forces shaping the network society.

Of course, Castells’s sprawling work is more complex and empirically sensitive (not to say, contradictory), so that elements of what is missing can be glimpsed here and there. For example, he is quite clear that economic globalization has also been a political process that has been forced on many countries by the most powerful ones. Unfortunately, not the mechanisms, nor the arenas, nor the actors of this political process are explored. All we get are generic references to the deregulation spearheaded in the 1980s by Thatcher and Reagan, and to pressures brought to bear in negotiations in asymmetrical networks of states. Or there is a casual remark that there is a global bureaucracy emerging, yet it is not investigated at any length. So the glimpses remain just that, tantalizing allusions to otherwise absent processes, hidden actors, and unexplored realities.

The point here is not to criticize the empirical grounding of the theory as incomplete. Per se, this would not be problematic. On the contrary, if the theory lent itself to exploring areas neglected so far, its explanatory value would be increased. As we will see in the next chapter, this is the case with Castells’s rudimentary analysis of the transformation of time. However, here, in respect to questions of power, the opposite is the case. Castells’s definition of power is particularly unsuited to the very process he focuses on: the
transformation of institutions of governance from fixed hierarchies to flexible networks.

Let us recall Castells's definition of power, here in a slightly different version: "the action of humans on other humans to impose their will on others." He insists on a very strict separation of "power" from "influence," and then proceeds to focus on power exclusively. There are two things that are problematic in this definition of power when trying to understand network processes. First, power is conceptualized as being applied by one person and directly affecting another one, as, for example, a police officer arresting a suspect. The problem is that this notion of power does not lend itself to investigating how power operates in the absence of a person exercising it. Second, power is thought to be unidirectional in the sense of flowing from the person who exercises it to the one who is subjected to it. Again, this is hard to apply to network processes characterized by feedback and mutual adaptation.

It is worth remembering that such a definition of power, even though it has become entirely standard and can be found in every handbook and dictionary, was developed some hundred years ago by Max Weber for a very precise purpose: to analyze administrative bureaucracies, which he saw as the hallmark of modern societies. As such, Weber was interested in formal processes and the chains of command through which orders could be relayed without much regard to the will of the particular person receiving the order. These chains of command were held together by an explicit or implicit threat of violence in the sense of "if you don't obey me, I have the authority to punish you." The key here is the direct, ultimately physical connection between two subjects, one coercing the other. In short, power operated through (the threat of) repression.

Weber was offering less a universal definition of power (which, one can assume, would be relatively meaningless anyway), and more something more precise: an operational tool to analyze the formation and processes of integrated, hierarchical bureaucracies. Castells, of course, is right that this kind of power, based on the legitimate means of violence to enforce formal orders, remains ultimately within the hands of the nation-state, even though the state may have growing troubles exercising it. From this emerges one of the contradictions of the network state, precisely identified by Castells. The power of international institutions remains dependent on the support of the nation-state. Because of this, Castells seems to imply that the nation-state remains the beginning and the end of governance. What has changed is that its sovereignty is no longer
absolute but shared. This, as we have seen, is not a small matter. But is it all there is?

The central argument of the theory of the network society is that the role of such formal hierarchies is decreasing, and the role of flexible networks is increasing. This has a substantial impact on the relationships of power, as Castells argues, because power

is no longer concentrated in institutions (the state), organizations (capitalist firms), or symbolic controllers (corporate media, churches). It is diffused in global networks of wealth, power, information and images, which circulate and transmute in a system of variable geometry and dematerialized geography. Yet, power does not disappear. Power still rules society, it still shapes, and dominates, us. Not only because apparatuses of different kinds can still discipline bodies and silence minds. This form of power is, at the same time, eternal, and fading away. It is eternal because humans are, and will be, predators. But in its current form of existence, it is fading away: the exercise of this kind of power is increasingly ineffective for the interests it is supposed to serve.70

What Castells maintains is remarkable: There are fewer instances in which a representative of a formal organization can tell someone else: “You must do this, or else . . .!” If accurate – and it seems like a conclusion that is reasonable but hard to substantiate empirically on such a general level – this constitutes a very significant reversal of the secular trend that Weber identified as central to modernity. Weber feared bureaucracies would lock society in an “iron cage” of instrumental rationality. For Castells, informationalism has shattered that cage. Whether that is to be seen as an improvement is less than clear. Weber was undoubtedly very worried about the growth of administrative bureaucracies, whose cold rationality would lead society into a “polar night of icy darkness.” This is no longer the primary danger. As Castells details in his tour through the “fourth world” and the “black holes of informational capitalism,” large sections of the world population are not so much repressed – rather they are abandoned, declared worthless, and bypassed, as he states repeatedly, by the global flows of wealth and power. The time of gulags is over. The intense, if repressive, attention totalitarian regimes paid to their citizens has been replaced by the extensive neglect of informational capitalism, which has declared entire populations to be “redundant,” to be ignored or treated as undesirable migrants if they show up at the gated communities of the rich.
The latter issue, however, remains underdeveloped. Castells barely mentions how the state intervenes in the lives of ordinary citizens, whether in the form of the “prison-industrial complex,” or through the various means of regulating transnational migration, or more recently, through the extensive measures connected to “homeland” security. Rather, Castells, in line here with a growing chorus of analysts, argues that power today operates more through exclusion than through repression. But if the Weberian definition of power is based on repression, and if contemporary power’s most potent threat (and practice) is exclusion, would that not indicate the need for a new definition of power, rather than simply arguing that power has somehow diffused into processes, or automata?

Unfortunately, Castells has very little to offer on this crucial point. In his account, processes are indeed autonomous. The bypassing has no agency. It is not done by identifiable agents, say, multinational corporations managed by tightly knit networks of board members, consultants, and public bureaucrats. Rather, he uses the passive voice, referring to flows of power and wealth. While this can seem like the reification of processes as actors, as Peter Marcuse argues, for Castells this is justified because even these corporations are disciplined by the intense pressure to maximize profits imposed on them by their dependence on the global financial markets. Consequently, the chief executive of a pharmaceutical company is not to blame for not investing resources in finding a cure for malaria. After all, it is a disease that predominantly affects people who are too poor to buy medicine. Under pressure to create profits, it would be unwise, and untenable in the long term, to address a demand where there is no market. Nothing personal, just deadly.

Such a perspective is not so much incorrect, as incomplete. What it fails to grasp is how the very dynamics which constrain the players in the global markets are following certain rules that have been written, and are enforced, by specifiable agents to serve particular ends. Whereas Castells seems to imply that free trade is indeed trade under the absence of rules, shaped primarily by direct, raw competition, a burgeoning literature on global governance has been analyzing the new regulatory mechanisms that underpin, and decisively shape, the global economy. These authors report a number of noticeable shifts which do not confirm the picture of “deregulation” in the sense of less regulation. Rather, there are new and different regulations, less nationally based and more globally coordinated.
For example, Saskia Sassen points out that a new kind of global governance regime is emerging, so that “we are headed for a situation where international law will be predominately private law, that is, international economic law.”\textsuperscript{75} In parallel to the globalization of the economy we have also a globalization of law. One of the institutional loci of this reregulation is the WTO, which is based on a very expansive notion of international trade. The issue is not whether this regulatory regime is fully coherent and fully enforced. For now, what needs to be noted is that it comprises extensive legal agreements between transnational production and service networks, a proliferating number of international treaties and organizations, and multiple global enforcement mechanisms. Of course, particularly the latter remain ultimately tied to the nation-states, but in their day-to-day operations they cannot be reduced to that. Even for the US, the room for unilateralism in trade issues is limited, more so than in military affairs (because in the area of trade the US is not the sole “hyperpower,” and hence one could argue that the WTO is more important as an arbiter than the UN).

Consequently, the fact that it can be justifiable to call certain networks “automata” does not preclude that they operate under specific rules that are far from arbitrary or simply emergent as unintended consequences. In one remarkable passage Castells writes that

\begin{quote}
It all depends on the goals of a given network and the most elegant, economical, and self-reproductive way to perform these goals. In this sense, a network is an automaton. \textit{In a social structure, social actors and institutions program a network.} But once programmed, information networks, powered by information technology, impose their structural logic on their human components.\textsuperscript{76}
\end{quote}

This section is noteworthy not only because it is a rare reference to the programming of networks, but also because the key idea is sandwiched between two sentences that talk about something rather different. Are networks programmed or are they autonomous? This passage reads like a crime report that focuses on ballistics and the path taken by the bullet as constrained by the laws of physics, only to mention, in passing, that someone aimed and pulled the trigger. What Castells refers to in this one short sentence is that networks are programmed to be specific automata, and the programming is done by social actors and institutions. But he goes no further. If the issue of programming were developed, it
would help to clarify the nature and organization of power specific to the network society.

The key concept in grasping the new constitution of power, I would argue, is the protocol. In general, a protocol is “any code of conventional or proper behaviour” to use the definition of the Oxford English Dictionary. In diplomatic circles, where the term originated, it also refers to a set of behavioral norms regulating the interaction between the head of state and foreign ambassadors. A protocol is necessary because there is no formal hierarchy between the two. Indeed, what is distinctive about ambassadors is that they are not subject to the power of the foreign state in which they are located. Because the head of state cannot simply impose his will on the ambassadors, a protocol has to be agreed on which allows the two sides, each independent of the other, to interact smoothly. In computer science, where the term is currently most used, a protocol is a set of standards which enables computers to interact with one another. Or, as Galloway puts it metaphorically, a protocol is “the etiquette of autonomous agents.” This is the core of the matter: a protocol regulates the interaction of social and technological actors which are formally independent of one another. In short, a protocol enables interdependence on the basis of independence.

Networks are held together by protocols. The internet, for example, is based on a technical protocol called TCP/IP (Transmission Control Protocol/Internet Protocol). Any application, be it a file-sharing client or a corporate intranet, that wants to run on the internet must adhere to this protocol. This “must” does not stem from Weberian coercion: this is the key point. Rather, it flows from the simple fact that outside this protocol, there is no internet. Take it or leave it, that is if you can afford to leave it. In the same sense, free trade is based on a set of rules defined by, among others, the WTO. Any country that wants to participate fully in the official global economy needs to accept these rules and regulations, just as any developer of internet applications needs to accept the TCP/IP standards. Put generally, a protocol is what allows autonomous agents to interact in a network, thus “without a shared protocol, there is no network.”

A protocol is very different from a chain of command. Whereas a hierarchy defines the role and functions of all its elements – there is no member of a military organization without a rank – a protocol structures the space in which each actor needs to decide for itself what to do. Despite the autonomy of the network agent, the protocol is crucial, because it is what enables actors to constitute the
space, a network, through their interactions. Thus protocols, even though they are simply a formal set of rules, are never neutral. Rather, by defining the “rules of engagement” they are an important aspect of the quality of the engagement itself, even if they do not prescribe the content of the interaction. Protocols are the grammar, not the syntax of communication. They are constraining and enabling at the same time, constituting another conflation of the distinction between structure and agency so characteristic of networks.

Actors in networks are simultaneously autonomous and highly constrained. This is what is specific about the network form of organization and marks its difference from a formal hierarchy. In this narrow sense Castells is right when he argues that even powerful corporations and states are no longer sovereign actors, but subject to the logic programmed into the networks through which they operate. Yet, despite pointing out that that networks are programmed by social actors, which, I assume, have their particular social agendas, Castells pays no attention to how this programming is done. He stresses relentless, if not Darwinian, competition which forces all actors to adapt, yet the conditions under which this competition takes place remain unexamined. However, it is through setting the rules of the games and then letting the individual actors figure out for themselves how to deal with the constraints – rather than in old-fashioned command-and-control hierarchies – that power operates in a network. This is precisely the point where we can locate the transformation of power operating through repression to power operating through exclusion. Actors are no longer told what to do. Rather, they are left to fend for themselves in the network created by the protocol. If they cannot do that within the constraints of the protocol, they drop out of the network. Plain and simple, and there is not even anyone actively pushing.

Only very recently has Castells begun to recognize the problematic conceptualization of power within the theory of the network society. He has taken the first steps in refining his analysis precisely to focus on this question of how systems of domination can be self-organizing and designed at the same time. He writes:

Perhaps the question of power, as traditionally formulated, does not make sense in the network society. In the world of networks, the ability to exercise control over others depends on two basic mechanisms: the ability to program/reprogram the network(s) in terms of the goals assigned to the network; and the ability to connect
different networks to ensure their cooperation by sharing common goals and increasing resources.79

These processes of setting the rules of interaction in a network (“programming”) and of connecting the different systems of networks (“switching”) are extremely complex and require the ad hoc coordination of a large number of people and institutions. This complexity seems to be the main reason why Castells argues that it makes no sense to speak of a capitalist class, or a power elite, anymore. In other words, rather than being concentrated in the hands of a few, power is constantly reconfigured in changing networks and strategic alliances, formed around, and held together by, short-term projects. So, he concludes,

it is precisely because there is no power elite capable of keeping under its control the programming and switching operations of all the important networks that more subtle, complex and negotiated systems of power enforcement have to be established, so that the dominant networks of society have compatible goals and are able, through the switching processes enacted by actor-networks, to communicate with each other, inducing synergy and limiting contradiction.80

This certainly points in the right direction and is testimony to Castells’s willingness to rework his theory when it comes into conflict with empirical observation. However, there has not been a real test so far of any of Castells’s theoretical conceptualizations. Neither he – nor any of his close collaborators81 – has (yet) followed up with research on any concrete programming of a major global network generating wealth and power. In terms of an empirical analysis of power operating in networks through protocols, the basic questions are: Who writes the protocol? What are the rules codified in the protocol? And what are the cumulative effects of these rules enacted by autonomous agents in the field created by the protocol itself? Without such studies, it has to remain an open question how subtle, complex, and flexible these arrangements really are, and whether they do not, in fact, point to the formation of a global elite, or capitalist class.

In the literature on the design of technological networks, it is commonly understood that some of the most significant decisions are taken when protocols and standards are defined. Or, more generally, that the specifics of the architecture itself matter. Indivi-
dual decisions taken later on are often much less effective (hence the difficulty for governments in trying to censor the internet on top of the prevailing architecture). Lawrence Lessig has forcefully argued that “technical codes” are often more effective in shaping people’s behaviors than “legal codes,” despite the very real threat of violence that stands behind the law.82 Technical codes exercise power that is not based on the threat of physical violence, but on the ability to set the conditions for interaction, for access to the network.

The vast literature on the social construction of technology has convincingly pointed out that the setting of standards and design decisions are themselves political processes.83 The medium might be the message, but this message has a grammar, and authors. A similar analysis can be done, and has been done, on the social construction of the protocols that shape the global networks, and the turbulent, chaotic competition that unfolds through them. One of the most impressive of these studies, Peter Drahos’s Information Feudalism, has already been mentioned. In minute detail he analyzes empirically how, and by whom, a particular notion of intellectual property has been inscribed in multiple international agreements, most importantly in the 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). It is true that this treaty is about free trade and global flows of wealth largely outside the control of the nation-states, but it is free trade that results, not coincidentally, in “a huge structural shift in the world economy to move monopoly profits from the information-poor to the information-rich.”84 This is not a conspiracy that secretly controls the world markets. Rather, these are conditions which structurally favor some independent actors over others. The whirlwinds are still blowing, and they can take down the most powerful corporation if it is unable to adapt to the changing currents. Yet the structural bias of the protocols that enable competition to be chaotic and relentless virtually guarantees that the fall of a mighty corporation will be most profitable to other mighty corporations, rather than to those who suffer from structural violence.

Castells is, of course, aware that economic globalization is not a self-unfolding process. “Neither technology nor business,” he writes, “could have developed the global economy on its own. The decisive agents in setting up a new, global economy were governments . . . and their ancillary international institutions.” Yet, in the very next paragraph, he dismisses this question, saying: “How and why it happened is a matter for historians.”85 This is odd, particularly since he dwells happily on the historical minutiae of
technology in his discussion of the internet. What we have here is a strange combination of a poorly fitting theoretical tool, the Weberian definition of power in hierarchies, and a tacit lack of interest in exploring certain research questions. Whatever the cause of this concurrence might be, the results are crippling to Castells’s analysis of power.

Rather than concentrating on issues of network programming, Castells has tried to sidestep the constraints of the Weberian notion of power by using a different notion of power in his analysis of global social movements. In terms of coercion and control, they have no power at all. Particularly as, Castells stresses convincingly, they are not interested in “the long march through the institutions.” How can they exercise any influence? Well, there is old power and new power, and

the new power lies in the codes of information and in the images of representation around which societies organize their institutions, and people build their lives, and decide their behavior. The sites of power are the people’s minds. This is why power is at the same time identifiable and diffused. We know what it is, but we cannot seize it because power is a function of an endless battle around cultural codes of society.

For Castells’s social movements are the primary producers of cultural codes and images, and governments’ “mighty, rigid apparatuses will not be a match, in any reasonable timespan, for the minds mobilized around the power of flexible alternative networks.” Again, this is not so much incorrect as incomplete. Castells does not consider the state, or large institutions generally, as producers of cultural codes, or to be more precise, he asserts that the only types of cultural codes they produce – those leading to legitimizing identity – have lost their grip on the minds of the people. The question here is, can the state not produce any other codes? Do advertisements and state-induced propaganda, while clearly not brainwashing people into total submission, have any symbolic power? Not for Castells, because the structure of media politics – as we have seen – is taken to make sustained propaganda impossible, or at least ineffective.

Additionally, Castells does not analyze the production of cultural codes as a material process, one in which resource-rich institutions might have advantages over resource-poor institutions or social movements. It is not clear how the Weberian type of power relates
to this new symbolic power. The two seem to spring from radically different sources and one does not really help or gain from the other. The state’s codes are anemic; social movements do not aim at taking over the state. As a result, perhaps, power dissipates in networks. One tenuous connection between the two forms of power is that they are both based on violence. Classic power is based on physical violence, cultural power on “symbolic violence,” that is, “the capacity of a given symbolic code to delete a different code from the individual brain upon whom power is exercised.”

Thus we have a duality of power both versions of which are based on their own sources of violence. In what can only be described as a secular trend (with strong postmodern overtones), the balance between the two is shifting, because within the new sphere of power – the space of flows – cultural codes play such an important role. They influence minds. Physical power on the other hand, is where the bodies are, in the space of places. And, over time, control over bodies is less effective than influence over minds. What is here a duality of violence as the basis of two distinct forms of power is often thought of as a triad. One element is missing in Castells’s account. This is the element of structural violence. The term was coined by Johan Galtung in the late 1960s to refer to situations where violence is inflicted on someone without the direct, violent agency of someone else. Classic examples of structural violence are discriminatory laws which repress people in the normal course of events without anyone doing anything that is not perfectly within the order of things. Other examples are policy-induced famines where people starve without someone violently taking away their food.

The concept of structural violence has been criticized as overly broad, but in the context of the present discussion – focusing on the nature of power in the network society – it might be useful as a way to introduce a term such as structural power. This would denote the ability to threaten with, or inflict, structural violence. In terms of the global economy and global governance, it would indicate the ability to create conditions which induce people to behave in ways such that their actions, taken as independent actors, produce highly differentiated results. In other words, it would point back to the question of the programming of network protocols, just identified as the new locus of power in the network society.

Castells is very concerned not to reduce the programming of networks to control over the networks. For good reason. The relationship between protocols and the applications built on top of them is
an indirect one. As Phil Agre points out in a discussion of the social
character of peer-to-peer technologies, “decentralized institutions
do not imply decentralized architectures, or vice versa. [Yet] archi-
tectures and institutions inevitably coevolve.”91 While network
architecture does not determine the types of applications running
on the network, it does introduce important constraints on their
creation/development. Without considering how these constraints
are produced, often very deliberately, we cannot understand the
particular character of the networks created on the basis of partic-
ular protocols.

Castells’s account of power in the network society is very
uneven. Convincing is the analysis of how the old levers of (state)
power are becoming creaky. He is also on strong ground in point-
ing out that inside the networks of the global economy and politics,
the pressure on actors is relentless and even powerful actors can be
more driven than they are drivers. Yet Castells’s account makes
power disappear far more than necessary. Instead of actors, we have
only powerful processes. We have programs and protocols, but
still no programmers and no designers. This leads to a strange
imbalance. Castells is no apologist of neoliberalism; he is very clear
that an intolerable number of people are excluded and reduced to
abject poverty. Yet, as Peter Marcuse remarked, Castells presents
“the excluded without the excluders.”92 People face processes
whose political origins remain nebulous. The element of their
chaotic self-organization, driven by the need to survive dog-eat-dog
competition, is systematically worked out, whereas the elements of
their deliberate programming are almost systematically neglected.
Without taking into consideration the network architecture, any
analysis of the dynamics of the network remains incomplete. This
applies also to Castells’s political analysis of sociotechnical net-
works of production and power. Here, in the incomplete analysis of
the relationships of power characteristic of the network society, due
to a lack of attention, theoretically and empirically, to the program-
ing of the various intersecting networks of commerce and polit-
ics, lies the single greatest weakness in Castells’s theory of the great
transformation of social morphology. It is, as we will see in the final
chapter, directly related to his specific notion of the network.
However, in the meantime, let’s turn to what I believe to be
Castells’s most profound theoretical contribution, the analysis of the
transformation of time and space.