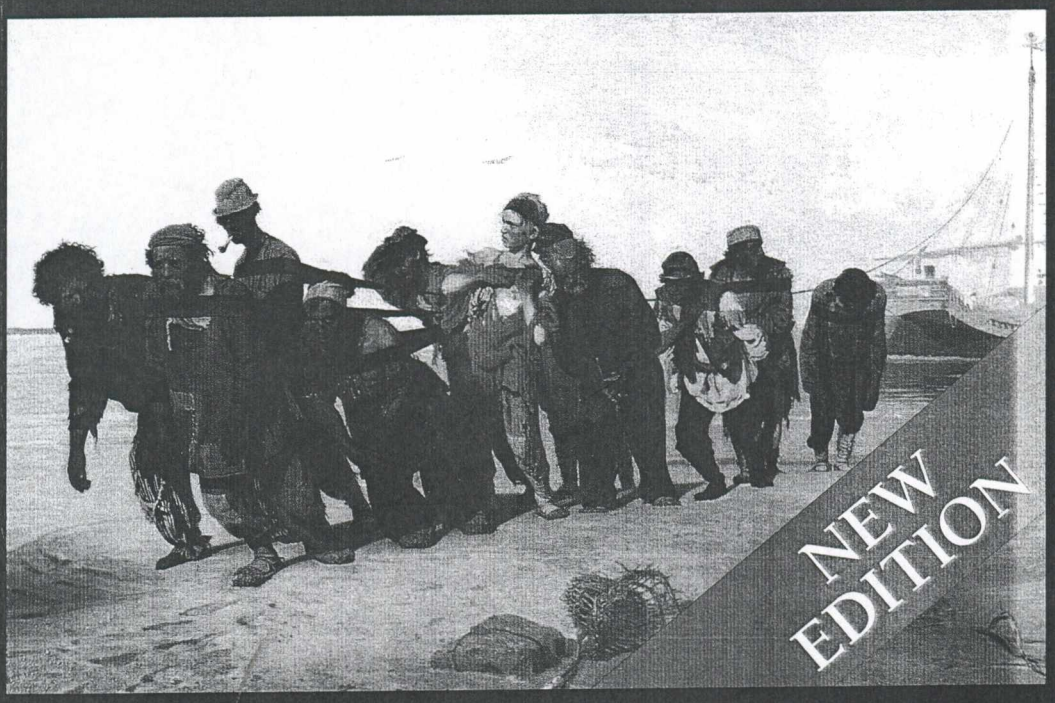
THE INFORMATION AGE:
ECONOMY, SOCIETY AND CULTURE
Volume III

END OF MILLENNIUM

Second Edition



Manuel Castells

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Economy, Society and Culture

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The Unification of Europe: Globalization, Identity, and the Network State

The unification of Europe around the turn of the second millennium, when and if completed, will be one of the most important trends defining our new world.[1] It is important, first of all, because it will probably (but not surely) bring to an end the millennial war-making between major European powers, a recurrent practice that brought destruction and suffering to Europe, and in the Modern Age to the world, throughout the entire span of recorded history, peaking with extraordinary violence in the first half of the twentieth century. It is also important because a unified Europe, with its economic and technological might,

1 This chapter is intellectually indebted to my interaction with a number of Europeanists, both faculty and graduate students, at the University of California, Berkeley, where I chaired the Center for Western European Studies from 1994 to 1998. I am also grateful to the many European scholars and speakers (including government officials from different countries) who have visited the Center during these years. My discussion of information technology in relation to European economies and societies has been partly informed by exchanges with my colleagues in the European Commission's High Level Expert Group on the Information Society, on which I served during 1995–7. I thank Luc Soete, chair of the group, for facilitating these exchanges. I have benefited, as well, from my participation in a research program organized at Berkeley by the Center for German and European Studies, and by the Center for Slavic and Eastern European Studies, in 1995–8, on "Europe East and West: Challenges to National Sovereignty from Above and from Below." I thank the directors of this research program, Victoria Bonnell, and Gerald Feldman, for their kind invitation to join the effort. Last, but not least, my conversations with Alain Touraine, Felipe Gonzalez, Javier Solana, Carlos Alonso Zaldivar, Jordi Borja, Roberto Dorado, Peter Schulze, Peter Hall, Stephen Cohen, Martin Carnoy, and John Zysman, on the topics covered in this chapter, have shaped my thought, and considerably enriched my information.

and its cultural and political influence, together with the rise of the Pacific, will anchor the world power system in a polycentric structure, precluding the existence of any hegemonic superpower, in spite of the continuing military (and technological) pre-eminence of the United States. And, I argue, it is also significant as a source of institutional innovation that may yield some answers to the crisis of the nation-state. This is because, around the process of formation of the European Union, new forms of governance, and new institutions of government, are being created, at the European, national, regional, and local levels, inducing a new form of state that I propose to call *the network state*.

However, the actual content of this unification, and the actors involved in it, are still unclear, and will be so for some time. It is precisely this ambiguity that makes unification possible, while characterizing its process as a debate rather than as a blueprint. Indeed, European unification grew in the past half-century from the convergence of alternative visions and conflicting interests between nation-states, and between economic and social actors. The very notion of Europe, as based on a common identity, is highly questionable. The noted historian Josep Fontana has documented how European identity, throughout history, was always constructed against "the other," the barbarians of different kinds and different origins.[2] The current process of unification is not different in this sense, as it was made from a succession of *defensive political projects* around some common interests among the participating nation-states. Yet, Europe at the turn of the millennium is something else, and more complex. It results from the internal dynamics of the unification process, building on these defensive projects, then recently twisted, supported, and challenged by the two macro-trends that characterize the Information Age: the globalization of economy, technology, and communication; and the parallel affirmation of identity as the source of meaning. Because of the failure of the classic nation-state in articulating the response to these symmetrical, opposing challenges, European institutions are trying, just trying, to cope with both trends by using new forms and new processes, thereby attempting the construction of a new institutional system, the network state. This is the story I shall recount in this chapter, without having the opportunity, or harboring the intention, of presenting the whole economic and political complexity that surrounds the construction of the European Union, thus referring the interested reader to an abundant, well-informed literature on these matters.[3] My focus here is in

2 Fontana (1994).

3 Much of the information on which my analysis relies can be found in general newspapers and magazines, such as *El País*, *Le Monde*, *The New York Times*, *The Economist*, and

showing how the trends I have identified as critical in configuring the Information Age – globalization, identity, and the crisis of the nation-state – are shaping European unification, and thus the world of the twenty-first century.

European Unification as a Sequence of Defensive Reactions: a Half-century Perspective

The European Union resulted from three outbursts of political initiatives and institution-building aimed at defending the participating countries against three perceived series of threats in three historical moments: the 1950s, the 1980s, and the 1990s. In all three cases, *the goal was primarily political, and the means to reach this goal were, mainly, economic measures.*

In 1948, several hundreds of European leaders met in The Hague to discuss the prospects of European integration. Beyond ideological proclamations, and technocratic ambitions, the essential goal of European integration was to avoid a new war. For this, a permanent form of accommodation had to be found with Germany, in sharp contrast to Germany's humiliating condition following World War I which led to World War II. The accommodation had to be primarily between Germany and the other European continental power, France, and it had to be blessed by the United States, Europe's protector in the aftermath of a most destructive war. Furthermore, the Cold War, with its front line passing through Germany, called for an economically strong, politically stable Western Europe. NATO provided the necessary military umbrella, and the Marshall Plan helped to rebuild European economies, while paving the way for investment by American multinationals. But political institutions were required to stabilize relationships

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Business Week. I find it unnecessary to provide specific references to widely known facts. Nor do I intend to provide the reader with a dense bibliography on a set of highly specialized matters concerning European integration. I shall simply mention a few sources that I have found useful in refreshing my memory, and stimulating my thinking on a subject that I have followed very closely for the past quarter of a century in France, and Spain. Probably one of the most intelligent, informed analyses of the subject can be found in Alonso Zaldivar (1996). For a perceptive overview, whose argument I largely share, see Orstrom Moller (1995). A major source of ideas is Keohane and Hoffman (1991b). A seminal article on the political dimensions of European integration is Waever (1995). On multiculturalism and the crisis of democracy in Europe, see Touraine (1997). Additional, useful readings are: Ruggie (1993); Sachwald (1994); Ansell and Parsons (1995); Bernardez (1995); Bidelux and Taylor (1996); Estefanía (1996, 1997); Hill (1996); Hirst and Thompson (1996); Parsons (1996); Pisani-Ferry (1996); Tragardh (1996); Zysman et al. (1996); Zysman and Weber (1997); Ekholm and Nurmio (1999). It is also refreshing to go back to the classic texts by Ernst Haas (1958a,b, 1964), where many of the current political debates are advanced in analytical terms.

among nation-states that had been historically constituted fighting each other, or seeking alliances for the next war. No wonder that the first move toward European integration was a common market in the coal and steel industries, which made autonomous national development impossible in the industries that, at that time, were strategically central to any future war effort. The European Coal and Steel Community (ECSC) was created in Paris, in April 1951, by West Germany, France, Italy, and the Benelux countries. The good results of this initiative led to the two Treaties of Rome of March 25, 1957, creating Euratom, to coordinate policy in nuclear energy, the new strategic industry, and the European Economic Community, oriented toward improving trade and investment among the six nations.

The rapid increase of economic integration on the continent brought to the forefront of the European debate competing visions of the integration process. The technocrats who originated the blueprint of a unified Europe, and particularly Jean Monnet, dreamed of a federal state. None of the nation-states truly believed in it or wanted it. However, the inertia of the European institutions led to the accumulation of considerable influence (if not power) in the hands of European bureaucracy, while Germany, constrained in its international role, saw the EEC as a convenient international platform. The accession of de Gaulle to the French presidency put the brakes on the process of the transfer of sovereignty, and emphasized the option that would come to be known as intergovernmental, that is, placing European-wide decisions in the hands of the council of heads of executive powers from each country. De Gaulle tried to add a new political objective to the EEC: to assert its independence *vis-à-vis* the United States. This is why France vetoed twice, in 1963 and in 1966, the British application to join the EEC, considering that Britain's close ties to the United States would jeopardize European autonomous initiatives. Indeed, Britain represented, and to some extent still represents, a third, different vision of European integration: the one focusing on the development of a free-trade area, without conceding any significant political sovereignty. When Britain finally joined the EEC (together with Ireland and Denmark), in 1973, after de Gaulle's departure, this economic vision of European integration became predominant for about a decade, downplaying the political dynamics, and in fact slowing down the pace of integration, since the negotiation of national economic interests consumed most of the energy, and budget, of the EEC. The 1973 and 1979 economic crises ushered in the era of euro-pessimism, when most European nations felt deprived of political power by the two superpowers, technologically outclassed by the development of the information technology revolution largely beyond European shores, and

economically lagging behind not only the United States but also new Pacific competitors.

The inclusion of Greece, in 1981, and particularly that of Spain and Portugal in 1986, did add breathing space to the European economy (after all, Spain was at the time the eighth largest market economy in the world), and brought in some dynamic new players. But it also added depressed regions, and complicated negotiations in key areas, such as agriculture, fishing, labor legislation, and voting procedures. Yet it was the feeling that Europe could become an economic and technological colony of American and Japanese companies that led to the second major defensive reaction, represented by the Single European Act (SEA) of 1987, setting up steps toward the constitution of a truly unified market by 1992. Economic measures were combined with an emphasis on technology policy, in coordination with the European-wide Eureka program, created at the initiative of the French government, this time under Mitterrand, aimed at counteracting the American technological onslaught that came to be symbolized by the Star Wars program. Furthermore, with Mitterrand softening the French position against supranationality, and Spain (under Felipe Gonzalez) supporting Germany's emphasis on European institutions, broader powers were given to the European Commission; the European Council (representing heads of executives) obtained majority voting procedures in several key domains, and the European Parliament received some limited powers, beyond its previously symbolic role.

The reason why Spain became, probably, together with Germany, the most federalist country is also political: to be anchored in a strong, unified Europe would prevent the country, in the view of Spanish democrats, from returning to the demons of political authoritarianism and cultural isolationism, which have dominated Spanish history for most of the past 500 years. Under the double impulse of southern Europe becoming fully democratic, and France and Germany defending the techno economic autonomy of Europe in the new global system, the EEC became the EC: the European Community. Once again, an economic measure, the establishment of a truly common market for capital, goods, services, and labor, was, essentially, a measure to further political integration, ceding parts of national sovereignty to ensure some degree of autonomy for the member states in the new global environment. When Thatcher tried to resist, retrenching Britain in outdated state-nationalism, it cost her her job. Most British political and economic elites had understood the opportunity represented by a unified Europe, and had decided to go along, while reserving the possibility of opting out of undesirable policies, such as (for the Conservatives) workers' social rights.

Just when Europe had decided on an accelerated pace of economic integration, and on a moderate pace of political supranationality, the overall geopolitical environment suddenly changed, on November 9, 1989, prompting another round of European construction, to respond to the new political issues arising on the continent. The unexpected unification of Germany had necessarily to affect deeply the unification of Europe, since the neutralization of geopolitical tensions between Germany and its European neighbors was the original goal of European integration. The new, unified Germany, with 80 million people, and 30 percent of the European Community's GNP, represented a decisive force in the European context. Furthermore, the end of the Cold War allowed Germany to be truly independent of the tutelage under which it had been kept for over four decades by the victors of World War II. Thus, it became imperative again, for the whole of Europe, to strengthen the economic and political ties between Germany and the rest of the continent, by reinforcing the European Community, and accommodating German interests within it. The essence of the negotiation amounted to fully integrating the German economy with the rest of Europe, by moving toward a single European currency, the euro, and an independent, European Central Bank. For Germany to sacrifice its hard-won solid deutschmark, and to overcome the resistance of the Bundesbank, three major compensations were necessary:

1 The European economies had to absorb the deflationary policies made necessary by the alignment of monetary policies on the needs and pace of the German economy, particularly after the political decision of setting up the exchange rate between Western and Eastern German currencies on the parity of one mark for one mark, a decision that triggered inflationary pressures in Germany.
2 The European institutions would be reinforced in their powers, moving toward a higher level of supranationality, thus overcoming traditional French resistance, and British rejection, to any project approaching federalism. Again, the push toward further European integration was the only way for Germany to start projecting its weight in the international scene without triggering fear and hostility from most European countries. What Japan has never been able to do – that is, to bury the specters of World War II – is being accomplished by Germany via its full participation in supranational, European institutions.
3 Germany requested an additional concession from the 12 EC members, supported by Britain for its own, different reasons: the enlargement of the EC toward the north and east. In the case of

Austria, Sweden, and Finland, the goal was to balance the European Community with richer countries, and more developed economies, to compensate for the inclusion of southern Europe, with its burden of poor regions. In the case of Eastern Europe, Germany was (and is) trying to share with the rest of Europe the need to stabilize, economically and politically, these unsettled countries, as a way of preventing future turmoil from spilling over into Germany, either through immigration, or through geopolitical conflicts. Thus, Germany could play its traditional role of a Central/Eastern European power, without being suspected of reconstructing Bismarck's imperial dream.

In this regard, it is interesting to observe the persistence of historical perceptions of what a geopolitical threat is. Eastern European countries put all kinds of pressures on Germany to join the European Union, and on the US to join NATO, fundamentally for security reasons: to escape, for ever, from Russian influence. Germany supported their case also with the goal of establishing a territorial glacis between its Eastern border and Russia. And, yet, the terms under which these strategic aims are being discussed seem to be obsolete. First of all, the large-scale wars of the Information Age can be fought, and will be fought, essentially from the air, and through electronic communications and jamming of signals, making meaningless a few more minutes of flight for missiles or aircraft. Secondly, Russia does not seem to represent a security threat to the West, even counting on the resurgence of Russian nationalism, as a reaction to the subordination of the Yeltsin regime to Western influence during the 1990s. Indeed, except for its status as a nuclear superpower, the state of the Russian military, and the economic weakness of the country, do not allow Russian nationalism to project ambitions of geopolitical power in Europe for many years to come. And, yet, centuries of confrontation between Russian, German, and French military power in Eastern Europe, with ferocious battles fought in these lands, have left a mark that goes beyond the transformation of the actual conditions of geopolitical confrontation in Europe today. Because of the fear of Russian power (real or potential), and because of the instability of Russian institutions, Russia, one of the oldest European cultures, will not become a member of the European Union. Eastern European countries have been taken under the "protection" of NATO, and will be associated with the European Union, under forms that will vary for each country. The enlargement of the European Union to the East, which will probably be delayed until the middle of the first decade of the twenty-first century, will in fact create greater difficulties for effective integration in

the EU. This is because of the vast disparity of economic and technological conditions between ex-statist countries and even the poorest of the EU members. Furthermore, by pure game theory, the larger the number of members, the more complex the decision-making process, threatening to paralyze European institutions, thus reducing the European Union to a free-trade area, with a weak degree of political integration. This is, in fact, the main reason why Britain supports the process of enlargement: the larger and more diverse the membership, the lower the threat to national sovereignty. Hence, the paradox of seeing Germany (the most federalist country) and Britain (the most anti-federalist country) supporting enlargement for entirely different reasons. The main issues confronting European unification in the first decade of the twenty-first century relate to the arduous process of incorporation of Eastern Europe, which will begin with the inclusion in the EU of Poland, the Czech Republic, Hungary, Slovenia, and possibly Estonia, all countries whose economies are deeply penetrated by European investment (mainly German), and are largely dependent on exports to the EU. However, the mobility of labor will be restricted for some time, and political hurdles will remain concerning voting procedures and decision-making in the European Union. Ultimately, the enlargement of the EU toward the East will force a reform of its political institutions.

The Maastricht Treaty, signed in December 1991, and revised in the Intergovernmental Conference held in 1996–7, after the 1993 Danish and French referenda, and British parliamentary opposition, threatened to reject it, reflected the compromise between these different interests, and the ambiguity of the institutional formulas aimed at continuing with the process of integration without openly confronting the fundamental issue of supranationality. In essence, by deciding on the creation of the euro currency, of the European Monetary Institute, and the harmonization of fiscal policies, Maastricht made an irreversible commitment to a fully unified European economy, coming into existence in the first years of the third millennium. By reinforcing the decision-making power of European institutions, particularly by making it more difficult to form a blocking minority vote in the European Council, European-wide policies began to take precedence over national policies, in areas as varied as infrastructure, technology, research, education, environment, regional development, immigration, justice and police, in a process of political integration symbolized by the change of name from European Community to European Union.

However, in the late 1990s, foreign policy, security, and defense were not truly integrated as they have been, for a long time, areas of indecision and confusion in the European Union in spite of rhetorical

proclamations of convergence. Yet, the war in Kosovo opened up an entirely new perspective. After the catastrophic management of the war in Bosnia by the European Union, NATO asserted itself as the fundamental security instrument of the European Union, in close alliance with the United States. The election of a Spanish Socialist leader, Javier Solana, to the post of General Secretary of NATO, symbolized this transformation of a Cold War alliance into the operative tool of political/military coordination of European (and United States) initiatives in the new geopolitical context – an evolution that seemed to sentence to oblivion the Gaullian dream of a Europe militarily and strategically independent *vis-à-vis* the United States. Britain and Germany never wanted this independence, and none of the European countries' electorates was/is ready to foot the bill, in taxes and military effort, to be a world power, thus making Europe dependent on the United States in strategic terms.

Thus, in 1999, while European countries finally succeeded in acting together against Yugoslavia, triggering NATO's first war, the US air force and navy assumed the largest share of the campaign. The use of satellite-based technology, and precision-guided munition, made European armies largely tributaries of US military technology. The war over Kosovo showed the dependence of the European Union on NATO as the indispensable military tool of its foreign policy. The paradox is that the full realization of such dependence prompted the European Union, in the aftermath of the war, to search for an autonomous, common defense and security policy. With Blair's Britain pushing for an European defense system, the Western European Union alliance was re-tooled toward new security arrangements; the European defense industry was boosted in 1999 by the merger of the defense divisions of Daimler–Chrysler and Lagardere–Matra to form a major defense company EADS (European Aeronautic, Defense, and Space); and a new post was created in the European Union system of governance to be in charge of articulating the European policy on security and defense. Significantly, the first appointee to this position was none other than Javier Solana, after quitting his post with NATO, thus symbolizing the continuity between the two security arrangements. Indeed, the emergence of an autonomous European defense policy does not mean a break with the United States.

However, the success of NATO in the Yugoslav War may have signaled its historic decline, as a new coordination between European armies could pave the way for European military autonomy. Such autonomy, however, would imply a growing defense budget for European countries, as well as a significant effort in defense R&D and technology. Overall, for technological and geopolitical reasons, this

European defense system will still operate in close coordination with the US but with a greater degree of political freedom. In fact, the decision-making process in NATO has already evolved toward negotiation, consultation, and networking among its members: during the 1999 war in Yugoslavia, the political leaders of the main participating countries were in a continuing process of consultation by daily videoconference, among themselves and with NATO's Secretary General and military commanders. The collective, negotiated character of this decision-making process was illustrated in one of the most dangerous episodes of the war: after the surprise occupation by Russian paratroopers of the Pristina airport, the US General Commander of NATO ordered the eviction of Russian soldiers by force. But the British officer commanding the troops in the field resisted the order, and had the order eventually overturned by the political leadership of NATO. The US general was rewarded with early retirement. What was inconceivable behavior in the old logic of the nation-state, namely refusing to take orders from the supreme allied commander in the midst of war, had become acceptable practice within the networks of shared decision-making that characterized NATO's action during the Yugoslav War. Technological superiority, and the willingness to use its taxpayers' money to pay for superpower status, made the US the indispensable partner of European defense policy – but no longer as a dictating power, as was the case during the Cold War, but as a key node in a complex network of strategic decision-making.

In terms of the European construction, for all its limits and contradictions, the Maastricht Treaty marked an irreversible process of economic and political integration in the European Union, a process by and large confirmed in December 1996 by the "stability (and growth) pact" reached in Dublin. On the other hand, British, Swedish, and Danish reluctance to go along with conceding sovereignty through the European single currency, together with the diversity of situation among the countries negotiating their future membership, led to "Europe *à la carte*"; that is, to different levels of integration depending upon countries and issues. This "variable geometry" of European construction,[4] for all its incoherence, is an essential instrument of the construction itself, as it prevents frontal conflicts among major partners, while allowing European institutions to muddle through the challenges presented by the two processes that, at the same time, further and oppose integration: economic globalization and cultural identity.

Globalization and European Integration

European integration is, at the same time, a reaction to the process of globalization and its most advanced expression. It is also the proof that the global economy is not an undifferentiated system made up of firms and capital flows, but a regionalized structure in which old national institutions and new supranational entities still play a major role in organizing economic competition, and in reaping, or spoiling, the benefits of it. However, it does not follow that globalization is just an ideology. As I argued in volume I, chapter 2, and in volume II, chapter 5, while most economic activity, and most jobs, in the world are national, regional, or even local, the core, strategic economic activities are globally integrated in the Information Age through electronically enacted networks of exchange of capital, commodities, and information. It is this global integration that induces and shapes the current process of European unification, on the basis of European institutions historically constituted around predominantly political goals.

The foremost dimension in the globalization process concerns financial markets and currency markets. They are truly global, with the potential of working as a unit in real time, through electronic flows, and the ability to bypass, or overwhelm, government controls. The central decision that anchors the unification of Europe was the creation of the euro in 1999–2002, and the phasing out of national currencies, with the possible exception of the British pound, which will be, in fact, either pegged to the euro or pegged to the US dollar. In the 1990s, it became imperative to keep a minimum degree of monetary and financial stability in the European economies, after two revealing experiences. One was the failed attempt, in the early 1980s, of the first Mitterrand administration in France to embark independently on an expansionary policy, only to be forced to three successive devaluations of the franc, and to impose for a decade, both by Socialist and Conservative administrations, the most stringent budgetary policy of the whole continent. The second experience took place in the two-stage crisis of the European monetary system in the fall of 1992, and in the summer of 1993, when the pound and the lira were forced out of the system, and the peseta and the escudo were forced to devalue, in spite of the large-scale commitment of several European central banks, including the Italian, the British, and the Spanish, whose interventions were swept away by the movement of about US$1 trillion in a week of October 1992 in the European currency markets. After such an experience it became clear that, within closely linked economies, the floating of exchange rates between their national currencies constituted a

permanent temptation to induce capital market turbulences, since capital flows in the global financial markets were/are in relentless movement to maximize instant opportunities to enhance their return. In this context, the notion of speculation is simply misleading. What we are witnessing is not "speculation," but the domination of financial markets over all other investment opportunities in maximizing profits as a structural feature of the new global, informational economy. This does not mean that banks, or financial institutions, dominate industrial capital, an obsolete formulation that does not do justice to the intertwining of capital movements between different sectors in the networked economy, a theme that I will develop in the conclusion to this book.

The integration of capital markets, and the establishment of a single currency, require the homogenization of macro-economic conditions in the different European economies, including fiscal policies. Budgets may still vary according to national policies, but only by giving priority to some budget items over others within the constraints of similar fiscal prudence. Furthermore, the alignment of European economies on a given set of macro-economic parameters is but one step toward their alignment on international standards, at least *vis-à-vis* OECD countries. Indeed, the basic requirements established by the Maastricht Treaty, and made more precise by the Dublin "stability and growth pact" of December 1996, closely mirror the standard criteria imposed by the International Monetary Fund around the world: low budget deficit (less than 3 percent of GDP); relatively low public debt (no more than 60 percent of GDP); low inflation; low long-term interest rates; and stable exchange rate. The harmonization of European economies is inseparable from the harmonization of global macro-economic parameters, to be watched over, and imposed if necessary, by the G-7 annual meetings of the rich countries, and by the International Monetary Fund for the rest of the world. It is in this sense that we can truly speak of globalization of capital, and of the conditions of circulation of capital, not a small matter in a capitalist economy. Down the line, an attempt at stabilizing the exchange rate between the euro, the US dollar, and the yen is to be expected. And since the speed and volume of electronic exchanges in the currency markets will make it impossible to control highly destabilizing movements (as was the case in eurocurrency markets), the three dominant currencies will be likely to be pegged to each other in the future, thus eliminating economic national sovereignty for all practical purposes, although national pride will preclude the creation of a global currency, and technical obstacles will make a return to the gold standard unlikely.

There is a second, major dimension of globalization: information

technology, at the heart of the productive capacity of economies and the military might of states. As I mentioned above, in the mid-1980s, the intensification of European integration came partly as a response to a perceived technological deficit *vis-à-vis* the United States and Japan. In fact, most European technology policy initiatives failed, with the extremely important exception of Airbus and the aeronautics industry in general, predicated more on a successful commercial strategy than on technological excellence. Yet, Europe in the 1980s and early 1990s lost step with US companies in the critical areas of micro-electronics and software, and with Japanese and Korean companies in micro-electronics and advanced consumer electronics (with the exception of Nokia). The policy of "national champions" deteriorated in a wasteful subsidy to oversized, inefficient companies, as the (failed) attempt by the French government to sell Thomson to a consortium led by Daewoo for 1 franc in 1996 dramatically underscored. The European Union's research programs (such as Esprit) were too removed from industrial R&D, and the universities that most benefited from them were not advanced enough to break through new technological paths. Eureka's efforts at stimulating innovative businesses were too limited, and too dependent on a series of bureaucratic rules in establishing multi-country partnership, actually to make a difference in the overall picture. Telecommunications was the fundamental area in which European companies (particularly Alcatel, Siemens, and Ericsson) had cutting-edge know-how, a powerful industrial base, and well-established market connections. However, their dependence on electronic components and computers also made European technological autonomy unthinkable. So that, by the late 1990s, no serious policy-maker or industrial strategist in Europe thought about European technological independence in the way that de Gaulle or Mitterrand would have suggested. But the terms of this debate have been made obsolete by the nature of information technology industries in the new, global economy. High technology firms are all dependent on global networks of technological and economic exchange. True, there are some oligopolies, such as Microsoft in PC software, or Intel in advanced micro-electronics. And consumer electronics, with its array of critical technologies, such as HDTV or liquid crystal display, are, by and large, a Japanese (and increasingly Korean) domain. Yet the acceleration of technological change, the need to link up to specific markets, and the strategy of hedging technological bets among different partners (see volume I, chapters 1 and 3) have induced a fully fledged networking of multinational corporations and medium-level firms, in a model of interpenetration of technology, production, and markets that I have defined as "the network enterprise." Thus, instead of opposing Ameri-

can and Japanese companies to European companies, the globalization of information technology results in the complete entangling of research, R&D, production, and distribution between the advanced areas, firms, and institutions of the United States, the Pacific, and the European Union.

Information technology is now asymmetrically globalized, and the relevance of European research centers, firms, and markets assures that Europe is deeply integrated into the dominant technological networks. For instance, the key breakthrough in the diffusion of the Internet, the invention of the technologies underlying the World Wide Web, took place in Geneva's CERN laboratory in 1990; on the basis of these technologies, researchers at the University of Illinois' Supercomputer Center developed a new Web browser (Mosaic) in 1993; and, finally, the technology was commercialized in 1994–5 in Silicon Valley by Netscape, a new firm created around the University of Illinois' team (see volume I, chapter 1). In another instance of technological interdependence, in the next technological wave, genetic engineering, Japan lags way behind; European laboratories are on the cutting edge of cloning; and while R&D is most dynamic in the United States, some of the advanced American research, and researchers, have been acquired by giant pharmaceutical companies in Switzerland, Germany, and France. Mobile telephony was far more advanced in Europe than in the US at the turn of the millennium because of the ability of European countries and firms to share standards and protocols. Nokia, a Finnish company, seems to be consolidating its position as the world leader in cellular telephony by combining home-grown research resources with a deep connection to US innovative technology firms. France's software giant, Cap Gemini, had also secured a significant market share in Europe in 1999, and was making substantial inroads into the US market, mainly through the acquisition of American start-up firms. Thus, while it is true that American-based information technology research and production continue to be more advanced than in Europe (with some notable exceptions, such as Nokia and Ericsson), access to new sources of knowledge and application is guaranteed to European firms and institutions by the intertwining of information technology networks, and European companies are rapidly catching up in high technology industries, both in Europe, and in the global market. In this sense, the fundamental productive base of Europe in the Information Age is truly globalized.

The globalization of capital and information technology force us to consider the classic subject of the integration of trade and investment in a new perspective. A major theme of debate about Europe and globalization concerns the potential decline of European competitiveness

in a truly global market, under the double squeeze of US and Japanese technology from above, and the lower production costs of newly industrialized countries from below. Yet, in the 1990s, the European Union's balance of trade *vis-à-vis* the United States and, in the late 1990s, *vis-à-vis* Japan was just equilibrated, year in, year out. There was a deficit in relation to newly industrialized countries, but European imports from these countries were not large enough to induce an overall imbalance. How was this possible? How does Europe, as a whole, keep its competitive position, in spite of higher labor costs, inferior entrepreneurialism, the financial conservatism of firms, and lower level of technological innovation? Part of the answer concerns timing. Markets for goods and services are not truly globalized *yet*. Some traditional sectors, such as textiles or garments, have been hurt by competition from Asia and Latin America. But most European trade is within the European Union, and the lowering of tariffs in strategic sectors, such as automobiles or farm products, still has a long way to go, and will have to operate on a reciprocity basis, in application of the Uruguay Round GATT agreements. Another factor is that the technological and managerial re-tooling of European companies in the 1990s allowed European economies to match (in Germany) or even surpass (in France) American labor productivity, thus ensuring the basis for competitiveness in an open economy. As for the competition with Japan, its labor costs are in fact higher than in Europe, and Japanese firms in key sectors of information technology, such as software and Internet design, are far behind European companies.

But there is something more important: networking of trade and investment across national boundaries. Japanese, American, and Asian Pacific companies are investing and producing in Europe besides exporting from their various platforms. And European firms are producing in Asia and in the United States. As much as one-third of world trade seems to be intra-firm, or intra-network, movements of goods and services, thus largely invisible to trade statistics (see volume I, chapter 2). And European companies, when faced with decreasing competitiveness for exports from their European bases, tend to invest in America, the Asian Pacific, and Latin America, both to serve these markets and to export back to Europe from their offshore production sites, such as Singapore. Thus, in 1994–6, while German industrial companies sharply reduced their investments in Germany, they went on an investment spree around the world, particularly in Asia. For instance, in 1995, investment abroad by German companies almost doubled, reaching a record US$32 billion, while investment fell in Germany. Thus, it is the global movement of investment, and the con-

[illegible] both in manufacturing

and services, that characterize the process of globalization, rather than the constitution of a single, global market.

While globalization characterized the movement of capital, technology, and productive investment in the Europe of the 1990s, the movement of labor is far more restricted. To be sure, citizens of the European Union have the feeling of being invaded by immigrants, but the actual trends are more complex, and require some empirical clarification, given the importance of the question for European identity.[5] Up to 1990, as I showed in volume I, chapter 4, the proportion of foreign population *legally recorded* in the European Union as a whole remained at a modest 4.5 percent, albeit with a substantial increase from its 3.1 percent level in 1982. Much of this increase was due to emigration into Germany, Italy, and Austria, while Britain and France saw their respective percentage of foreign residents fall slightly during the 1980s. The situation substantially changed in the 1990s, on four grounds. First, the opening up of borders in Russia, and Eastern Europe, prompted significant emigration from these areas. The catastrophic predictions by the European Commission of 25 million Russians flocking into Western Europe did not materialize. But over 400,000 ethnic Germans from Russia and Eastern Europe exercised their immigration and citizenship rights. Hundreds of thousands of other Eastern Europeans also emigrated, most of them heading for Germany and Austria. Secondly, the destabilization of the Balkans by the disintegration of Yugoslavia, and the subsequent nationalist reactions and ethnic wars, generated a large influx of refugees, particularly into Germany and Italy. Germany found itself in a paradoxical situation derived from its contradictory naturalization policy. On the one hand, the difficulties of obtaining German nationality keep millions of long-time residents, including many born in Germany, as foreigners in their own land; on the other hand, the compensatory policy of liberal asylum attracts hundreds of thousands of political and economic refugees. Together, these two trends contributed to a sharp increase in the proportion of foreigners in Germany, approaching 12 percent by the turn of the century, a foreign stock to which should be added illegal immigrants and naturalized ethnic Germans. Italy suffered the full shock of the disintegration of Albania, and shared the impact of the Balkan Wars. Thirdly, the opening of internal European borders, increased immigration into countries, such as Spain, Portugal, and Italy, that were in the frontline of impoverished African lands. Migrants had the option of staying in these countries or searching for better job opportunities farther north. This contributed to an unfore-

5 Massey et al. (1999).

seen sharp increase of immigration in southern Europe. Fourthly, when the European Union tightened up its border controls illegal immigration exploded. By 1999, it was estimated that the flow of illegal immigration in the European Union was about 500,000 per year. Eastern European mafias made traffic in human beings their most profitable trade, including the sale of hundreds of thousands of women as prostitutes for the enjoyment of the civilized men of the European Union. Together with the demographic pressure from the Mediterranean southern rim, Fortress Europe will face a dramatic challenge in the twenty-first century. But, unlike the United States, which faces a similar issue from south of Rio Grande but has always been a multicultural, multiethnic society, most Europeans of the European Union continue to long for a culturally and ethnically homogeneous society, which is now irreversibly gone with the global wind. This schizophrenia between self-image and the new demographic reality of Europe constitutes a key feature of cultural and political dynamics linked to the redefinition of European identity.[6]

There are two additional dimensions of globalization that directly affect the process of European unification, which I simply mention here for the sake of coherence of the argument, without repeating it, since their analysis can be found elsewhere in this book. On the one hand, the globalization and interdependence of communication media (see volume I, chapter 5, and volume II, chapter 5) create a European audiovisual space that fundamentally transforms European culture and information, in a process, by and large, independent of the nation-states. On the other hand, the rise of a global criminal economy (see chapter 3 of this volume) finds a wonderful opportunity to prosper in a half-integrated institutional system, such as the one currently characterizing the European Union. Indeed, national controls are easily bypassed by the new mobility of capital, people, and information, while European police controls are slow to develop, precisely because of the resistance of national bureaucracies to give up their monopoly of power, thus inducing an historical no man's land where crime, power, and money link with each other. However, in October 1999, the European Union Council of Ministers, at its meeting in Tampere, Finland, adopted a series of measures to step up the coordination of police functions, as well as preliminary steps toward a European judicial space. In so doing, European governments were giving themselves the means to fight global crime but, at the same time, were crossing a major boundary toward the sharing of their national sovereignty.

The shaping of European unification by this multidimensional glo-

6 Al-Sayyad and Castells (2000).

balization has profound and lasting consequences for European societies. Probably the most important one is the difficulty of preserving the European welfare state in its present form. This is because the mobility of capital, and the networking of production, create the conditions for investment to move around the world, and around Europe, to areas of lower labor costs, lower social benefits, and lesser environmental constraints. Thus, in the late 1990s, European firms, and particularly German firms, were investing heavily in Eastern European countries (but not in Russia or Ukraine), taking advantage of lower labor costs, and in anticipation of their integration into the European Union: in 1999, Western European investment in Poland, Hungary, the Czech Republic, Estonia, and Slovenia totaled US$11 billion, and the projections were for 20 percent annual growth.

The preservation of the European welfare state in its present form also faces growing difficulties because the search for flexibility in the labor market, and the process of relative disinvestment in the European Union, reduce the employment basis on which the fiscal stability of the welfare state relies. Without job creation, and without a relative equalization of social costs in the internationally networked system, it is difficult to see how a comprehensive welfare state can be maintained in Europe, under the conditions of relatively similar, or in some cases lower, productivity *vis-à-vis* other areas of production (for example, the United States). Indeed, the UK, under Thatcher and Major, embarked on a major retrenchment of the welfare state from the 1980s, and, in the late 1990s, Germany, France, Spain, and (to a lesser extent) Italy had at the top of their agenda the significant shrinkage of the welfare state. Sweden's revival seems to be largely derived from a combination of deep cuts in social spending, flexibilization of labor markets, and higher taxes to finance human capital investment. If the UK experience is of any value, not to speak of the United States, a significant increase in inequality, poverty, and social exclusion will follow. Ultimately, political legitimacy will be undermined, since the welfare state is one of its pillars.[7]

A similar process of relative equalization of working arrangements between European Union, Eastern European, and American/Asian economies is taking place in the labor markets, as the push for flexibility and networking, characteristic of informational capitalism, is clearly on in most European countries. The ability of The Netherlands to generate jobs, reducing the unemployment level below 5 percent in the 1990s, was largely based on part-time employment. According to a 1996 report from the German *Länder* of Bavaria and Saxony, it was

7 Castells (1996); Navarro (1996).

projected that by 2015 about 50 percent of German workers would not hold a stable, full-time job.[8] If such were to be the case, the entire European social fabric would be transformed. Martin Carnoy has identified similar trends toward labor-market flexibility in the whole of Europe.[9]

I do not imply, however, that these consequences of globalization on European integration, and on European societies, are inexorable. There is, as Alain Touraine argues, an ideology of globalization that considers it as a natural force, reducing societies to economies, economies to markets, and markets to financial flows.[10] This is simply a crude rationalization of strictly capitalist interests, often defended with more vehemence by neo-liberal ideologists than by capitalists themselves, since many firms have a worldview broad enough to understand their social responsibility, and the need to preserve social stability. But Alain Touraine also points out that, too often, the opposition to globalization in Europe, and particularly in France, is carried out by social actors who defend narrow, corporatist interests, linked to an obsolete public sector subsidized by the taxpayer, without gaining much benefit from it.[11] However, together with the corporatism of privileged sectors of workers, such as Air France pilots, there is a widespread popular reaction, in France, and elsewhere, against the shrinkage and potential dismantling of the welfare state, and against flexibility in the labor market at the expense of workers' stable lives, an opposition often expressed in terms of the people against the politicians, the nation against the European state.[12] While the sources of this opposition are, to a great extent, rooted in social and economic interests, they tend to express themselves in the language of nationalism, and in the defense of cultural identity against the impersonal forces of global markets and the diktats of Eurocrats. The French farmers who, led by Jose Bove, attacked MacDonalds' establishments in 1999 were explicitly, and simultaneously, defending French identity (symbolized by French cooking versus fast food), fighting US taxes against French gourmet imports, and defending European health against genetically modified food. The political debate and the social conflicts around the ways to control, and guide, the transformation of European societies throughout their gradual integration into an increasingly globalized economy cannot be reduced to the elementary opposition between a-historical neo-liberalism and archaic public bureaucratism. In its re-

8 Touraine (1996c).
9 Carnoy (2000).
10 Touraine (1996b).
11 Touraine (1996b,c).
12 Touraine et al. (1996).

ality, this debate is expressed in the language of the Information Age – that is, in the opposition between the power of flows and the power of identity.

Cultural Identity and European Unification

The whirlwind of globalization is triggering defensive reactions around the world, often organized around the principles of national and territorial identity (volume II, chapters 1 and 2). In Europe, this perceived threat materializes in the expanding powers of the European Union. Widespread citizen hostility to the process of unification is reinforced by the discourse of most political leaders presenting the European Union as the necessary adaptation to globalization, with the corollary of economic adjustment, flexibility of labor markets, and shrinkage of the welfare state, as the *sine qua non* conditions for the integration of each country in the European Union.[13] Thus, since the acceleration of the integration process coincided in the 1990s with rising unemployment, widespread job insecurity, and greater social inequality, significant sections of the European population tend to affirm their nations against their states, seen as captives of European supranationality. It is revealing that, with the partial exception of Britain, the political establishment of all countries, both on the center-right and on the center-left, are unquestionably pro-European, while most public opinions are sharply divided, at best.[14] Xenophobic reactions against increased immigration fuel nationalist politics, including, in some countries, such as Austria and Switzerland, the extremist brand of nationalist politics that European citizens seemed to have rejected for good.

> Debate over European integration is not a matter of *raison d'état* but rather a matter of *raison de nation*. Whether European integration is allowed to proceed will depend on the ability of nations to secure their own survival. A nation will only allow integration when it is secure that its national identity will not be threatened, that it may even be strengthened by its exposure to different identities. If a nation feels that it is only able to survive through a close correspondence with a state that is sovereign and independent, if it does not believe that the state can be integrated while its culture is reproduced, it will block further integration.[15]

13 Touraine (1996b).
14 Alonso Zaldivar (1996).
15 Waever (1995: 16).

This insecurity is enhanced by the growing multi-ethnicity and multiculturalism of European societies, which trigger racism and xenophobia as people affirm their identity both against a supranational state and against cultural diversification.[16] The utilization of this insecurity by political demagogues, such as Le Pen in France, or Haider in Austria, amplifies the expression of cultural nationalism throughout the political system and the mass media. The linkage, in the public mind, between crime, violence, terrorism, and ethnic minorities/foreigners/the other, leads to a dramatic surge in European xenophobia, just at the high point of European universalism. This is, in fact, in historical continuity with the previous unification of medieval Europe around Christianity – that is, an intolerant, religious boundary, exclusive of infidels, pagans, and heretics.[17]

There is an additional, fundamental source of people's distrust of European institutions: what has come to be labeled "the democratic deficit." Significant powers affecting the livelihood of citizens have been transferred to the European Union, mainly to the European Council and the Council of Ministers, representing European nation-states, and to the European Commission acting on their behalf. Essential economic policy decisions have even been placed under the control of the European Central Bank. Thus, the capacity of citizens to influence these decisions has been considerably reduced. Between the act of choosing, every four years, from two different options of government, and the daily management of a complex, pan-European system, there is so much distance that citizens feel definitively left out. There are practically no effective channels for citizen participation in the European institutions. The European Commission's crisis of legitimacy was made worse by the level of mismanagement and petty corruption revealed by a parliamentary investigation in 1999, leading to the resignation of the entire Commission. While the appointment of a respected Italian economist Romano Prodi as the new President of the Commission seemed to restore some level of credibility, the damage was already done. The fact that, in June 1999, Mr Bangeman, the European Commissioner in charge of telecommunications, could be hired as a future consultant by the Spanish Telefonica at a time when he was still officially in his post in the Commission, while formally not breaking the rules, was widely considered an indication of how rotten the Brussels bureaucracy had become. Moreover, as Borja pointedly writes, there are no "European conflicts."[18] Indeed, the democratic process is not

16 Wieviorka (1993).
17 Fontana (1994).
18 Borja (1996: 12).

only based on representation and consensus building, but on democratically enacted conflicts between different social actors vying for their specific interests. Besides farmers littering the streets of Brussels with their produce (still unhappy in spite of being entirely subsidized by all other Europeans and, indirectly, by most of the developing world), expressions of transnational collective mobilization aimed at European decision-making are negligible. The apprenticeship of European citizenship is absent, to a large extent because European institutions are usually happy to live in their secluded world of technocratic agencies and deal-making councils of ministers. For instance, the possibilities of using networks of computer-mediated communication for the dissemination of information and citizen participation had been all but ignored by the end of the century.[19] Thus, confronted with a decline in democracy and citizen participation, at a time of globalization of the economy and Europeanization of politics, citizens retrench in their countries, and increasingly affirm their nations. Nationalism, not federalism, is the concomitant development of European integration. And only if the European Union is able to handle, and accommodate, nationalism will it survive as a political construction. As Waever, based on Anthony Smith's insights, proposes, while European institutions may adopt the French version of national identity, built around political identity, European nations may be heading toward the adoption of the German version of national identity, based on a linguistically united *Volk*.[20] As paradoxical as it may sound, it is possible that only the institutional and social articulation of both identity principles can make possible the development of a European Union as something other than a common market.

But if nations, independently from the state, become the sources of identity-based legitimacy for the European construction, the issue arises of which nations. It seems relatively clear in the case of France: after the successful extermination of plural national identities by the French Revolution on behalf of the universal principle of democratic citizenship. When French people react against Europe they do so in the name of "La France," in terms that would be equally understood by General de Gaulle and the French Communists. For different reasons, it is also clear in Germany, where the ethnic purity of the nation, even among Kazakhstan's Germans, remains untainted by the millions of immigrants, and sons of immigrants, that may never be German, after the grassroots campaign successfully orchestrated by the Christian Democrats in 1999 against the naturalization law of the Social Democratic/

19 HLEGIS (1997).
20 Waever (1995: 23).

Green government. The greatest fear of Eurocrats is that in the event of a political crisis, the German constitutional court will rule against the European institutions, in application of the principle of *Superrevisionsinstanz*, that it affirmed in its landmark verdict of October 12, 1993.

The appeal to national identity is more complicated in other countries, based on pluri-national states, as is the case in Spain, in the United Kingdom, and Belgium. Would *Catalunya* or Scotland affirm its identity against the European institutions, or, on the contrary, in favor of the European Union, bypassing, rather than opposing, the Spanish or British governments?[21] Furthermore, the affirmation of a "Padania" identity in northern Italy has been superficially ridiculed because of the extravagant character of Bossi, the leader of the *Lega Nord*. And yet, while it is true that the foundation of this identity is essentially economic, and even more narrowly fiscal, it also has historical roots in the artificial integration of Italy in the late nineteenth century, and its dynamics may go well beyond the political anecdote. Not that Padania exists, but in linguistic, cultural, social, and political terms, it is highly doubtful whether Italy existed until well into the twentieth century, with the Mezzogiorno, even today, having very little in common with Lombardy, Piedmont, or Emilia-Romagna.[22] The retrenchment around the principle of national identity is strengthening the nation-states against the European Union in some countries, while reinforcing the European Union against the current nation-states in others.

The search for identity as an antidote to economic globalization and political disfranchisement also permeates below the level of the nation-state, adding new dynamism to regions and cities around Europe. As Orstrom Moller writes, the future European model may be made up of the articulation of economic internationalization and cultural decentralization.[23] Regional and local governments are currently playing a major role in revitalizing democracy, and opinion polls show a higher degree of citizen trust in these lower levels of government compared with national and supranational levels. Cities have become critical actors in establishing strategies of economic development, in negotiated interaction with internationalized firms. And both cities and regions have established European networks that coordinate initiatives, and learn from each other, putting into action a novel principle of cooperation and competition, whose practice we have described elsewhere.[24]

21 Keating (1995).
22 Ginsborg (1994).
23 Orstrom Moller (1995).
24 Borja and Castells (1997).

On the light side, an illustration of this double dynamic of local identity and European networking, which I consider to be extremely important, is the structuring of professional sports, such as football or basketball, in the past decade. As everybody knows, the local team is an essential rallying point for people's identity. While national competitions continue to be played, maximum attention is given to European competitions (of which there are three for football, for instance), so that the reward for teams in the national competition is to become "European," a goal that many teams can reach, in contrast with only a few three decades ago. At the same time, the opening of labor markets for European players, and the mass migration to Europe of players from other countries, means that a significant proportion of players in the local team are foreigners. The result is that people mobilize around the identity of their city, as represented by a group of largely foreign professional players competing in various European leagues. It is through this kind of basic life mechanisms that the real Europe is coming into existence – by sharing experience on the basis of meaningful, palpable identity. How, then, can unification proceed between the high winds of globalization and the warm hearth of locality?

The Institutionalization of Europe: the Network State

When we reflect on the contradictory visions and interests surrounding the unification of Europe, and we consider the lack of enthusiasm among citizens of most countries, it seems miraculous that the process of integration is as advanced as it is at the turn of the millennium. Part of the explanation for this unlikely success can be found in the fact that the European Union does not supplant the existing nation-states but, on the contrary, is a fundamental instrument for their survival on the condition of conceding shares of sovereignty in exchange for a greater say in world, and domestic, affairs in the age of globalization. But this convergence of interests still had to find an institutional expression to be operational. It found it in a complex, and changing, geometry of European institutions that combines the control of decision-making by national governments (the European Council, and its summit meetings every six months, the principle of a rotating presidency of the Council, the regular meetings of the Council of Ministers), the management of common European business by a eurotechnocracy, directed by the politically appointed European Commission, and the symbolic expressions of legitimacy in the European Parliament, the Court of Justice, and the Court of Auditors.

The relentless negotiations within this set of institutions, and between the national actors pursuing their strategies in the framework of these institutions, may look cumbersome and inefficient. Yet it is precisely this indeterminacy and this complexity that make it possible to accommodate in the European Union various interests and changing policies, not only from different countries, but from the different political orientations of parties elected to government. The process becomes even more complicated with the introduction of a single currency and with the process of enlargement. Some countries, like Britain and Denmark, may exercise their opt-out clause. Others will negotiate exceptions to the general rules. And, because of increasing disparity between the conditions of countries within the Union, voting procedures will change, depending on issues. On the one hand, a majority vote in the Council of Ministers will make it possible for large countries to go ahead with strategic decisions without being paralyzed by the specific interests of one country, or of a minority coalition. On the other hand, the price to be paid for this reinforcement of majority powers will be flexibility in the application of Union decisions to some countries in some areas and for some time. As Alonso Zaldivar writes, under this system the federal and confederal logics are not mutually exclusive:

> For instance, in matters of defense, police, and public spending, the confederal or intergovernmental [logic] could take precedence, while in monetary policy, trade, residence, and circulation of capital, goods, and people, the functioning of the Union would be closer to federalism or supranationality. Other matters, such as foreign policy, environment, taxes, and immigration would occupy an intermediate position. The future, enlarged European Union must be less uniform and more flexible .... It is possible that the organigram of such an institution will be closer to a network than to a tree, and political theory still does not have a simple term adequate to this kind of configuration, but this is not an obstacle to building it. However, it will not be enough that enlightened bureaucrats conceive this institution: it will also be necessary for the citizens to accept it.[25]

The key element in gradually establishing the European Union's legitimacy, without jeopardizing its policy-making capacity, is the ability of its institutions to link up with subnational levels of government – regional and local – by a deliberate extension of the subsidiarity principle, under which the Union institutions only take charge of decisions that lower levels of government, including nation-states, cannot assume effectively. The Committee of the Regions, an advisory

25 Alonso Zaldivar (1996: 352–3); my translation.

body composed of 222 members representing regional and local governments from all the countries of the Union, is the most direct institutional expression of this concern. The real process of relegitimization of Europe appears to be taking place in the burgeoning of local and regional initiatives, in economic development, as well as in cultural expressions, and social rights, which link up horizontally with each other, while also linking up with European programs directly or through their respective national governments.[26]

Reflecting on the growing complexity and flexibility of European political process, Keohane and Hoffman propose the notion that the European Union "is essentially organized as a network that involves the pooling and sharing of sovereignty rather than the transfer of sovereignty to a higher level."[27] This analysis, developed and theorized by Waever,[28] brings European unification closer to the characterization of institutional neo-medievalism; that is, a plurality of overlapping powers, along the lines suggested years ago by Hedley Bull, and echoed by a number of European analysts, such as Alain Minc.[29] Although historians may object to such a parallel, the image illustrates powerfully the new form of state epitomized by European institutions: *the network state. It is a state characterized by the sharing of authority (that is, in the last resort, the capacity to impose legitimized violence) along a network*. A network, by definition, has nodes, not a center. Nodes may be of different sizes, and may be linked by asymmetrical relationships in the network, so that the network state does not preclude the existence of political inequalities among its members. Indeed, all governmental institutions are not equal in the European network. Not only do national governments still concentrate much decision-making capacity, but there are important differences of power between nation-states, although the hierarchy of power varies in different dimensions: Germany is the hegemonic economic power, but Britain and France hold far greater military power, and at least equal technological capacity. And Spain controls the most precious service for many Europeans: their vacations. However, regardless of these asymmetries, the various nodes of the European network state are interdependent on each other, so that no node, even the most powerful, can ignore the others, even the smallest, in the decision-making process. If some political nodes do so, the whole system is called into question. This is the difference between a political network and a centered political structure.

Available evidence, and recent debates in political theory, seem to

26 Borja (1992).
27 Keohane and Hoffman (1991b: 13).
28 Waever (1995).
29 Bull (1977); Minc (1993).

suggest that the network state, with its geometrically variable sovereignty, is the response of political systems to the challenges of globalization. And the European Union may be the clearest manifestation to date of this emerging form of state, probably characteristic of the I formation Age.

European Identity or European Project?

In the end, however, the unification of Europe will probably not b fulfilled only by skillful political engineering. In the context of democratic societies, Europe will only unify, at various degrees and under forms yet to emerge, if its citizens want it. On the basis of the exploration of social trends presented in the three volumes of this book, it is unlikely that this acceptance will take place exclusively on the basis of instrumental interests of managing globalization, particularly when this management will certainly hurt considerable sections of the population. If meaning is linked to identity, and if identity remains exclusively national, regional or local, European integration may not last beyond the limits of a common market, parallel to free-trade zones constituted in other areas of the world. European unification, in a long-term perspective, requires European identity.

However, the notion of European identity is problematic at best.[30] Because of the separation of Church and state, and the tepid religiosity of most Europeans, it cannot be built around Christianity, as was the case historically, even if the widespread anti-Muslim reaction signals the historical persistence of the Crusader spirit. It cannot be built around democracy: first, because democratic ideals are shared around the world; secondly, precisely because democracy is in crisis in its current dependency on the nation-state (see volume II, chapter 6). It will be difficult, and dramatic, to build it around ethnicity at a time when Europe is becoming increasingly diverse in ethnic terms. It is by definition impossible to build it on national identity, albeit if the preservation of national identity will be necessary for European unification to proceed. And it will not be easy to defend a European economic identity ("Fortress Europe") as core economic activities become globalized, and cross-border production networks articulate the European Union with the rest of the world, starting with Eastern Europe and South-East Asia. Do most people feel European – besides feeling French, Spanish, or Catalan – according to opinion polls? Yes.[31] Do they know

30 Al-Sayyad and Castells (2000).
31 *The Economist*, October 23, 1999.

what it means? In their majority, not. Do *you* know? Even with the euro in circulation in 2002, its extra-economic meaning will be lost unless there is a broader cultural transformation of European societies.

So, by and large, there is no European identity. But it could be built, not in contradiction, but complementary to national, regional, and local identities. It would take a process of social construction that I have identified, in volume II, as *project identity*; that is, a blueprint of social values and institutional goals that appeal to a majority of citizens without excluding anybody, in principle. That was what democracy, or the nation-state, historically represented at the dawn of the industrial era. What could be the content of such a European identity project in the Information Age? I have my preferences, as everybody else, but they should not interfere with our exploration of history in the making. What are the elements that *actually appear in the discourse, and practice, of social actors opposing globalization and disfranchisement without regressing to communalism?*[32] Liberty, equality, fraternity; the defense of the welfare state, of social solidarity, of stable employment, and of workers' rights; concern for universal human rights and the plight of the Fourth World; the reaffirmation of democracy, and its extension to citizen participation at the local and regional level; the vitality of historically/territorially rooted cultures, often expressed in language, not surrendering to the culture of real virtuality. Most European citizens would probably support these values. Their affirmation, for instance in the defense of the welfare state and stable employment against the pressures of globalization, would take extraordinary changes in the economy and in institutions. But this is precisely what an identity project is: not a utopian proclamation of dreams, but a struggle to impose alternative ways of economic development, sociability, and governance. There are embryos of a European project identity. And, probably, only if these embryos find political expression will the process of European unification ultimately be accomplished.

32 Touraine (1997).

Conclusion: Making Sense of our World

This means to say that scarcely
have we landed into life
than we come as if new-born;
let us not fill our mouths
with so many faltering names,
with so many sad formalities,
with so many pompous letters,
with so much of yours and mine,
with so much signing of papers.

I have in mind to confuse things,
unite them, make them new-born,
mix them up, undress them,
until all light in the world
has the oneness of the ocean,
a generous, vast wholeness,
a crackling, living fragrance.

Pablo Neruda, fragment of "Too Many Names," *Estravagario*

This is the general conclusion of the three-volume book, *The Information Age: Economy, Society, and Culture*. I have tried to avoid repetition. For definition of theoretical concepts used in this conclusion (for example, informationalism, or relationships of production), please refer to the Prologue of the book in volume I. See also the conclusion of volume I for an elaboration of the concept of network society, and the conclusion of volume II for an analysis of the relationships between cultural identity, social movements, and politics.

Genesis of a New World[1]

A new world is taking shape at this turn of the millennium. It originated in the historical coincidence, around the late 1960s and mid-1970s, of three *independent* processes: the information technology revolution; the economic crisis of both capitalism and statism, and their subsequent restructuring; and the blooming of cultural social movements, such as libertarianism, human rights, feminism, and environmentalism. The interaction between these processes, and the reactions they triggered, brought into being a new dominant social structure, the network society; a new economy, the informational/global economy; and a new culture, the culture of real virtuality. The logic embedded in this economy, this society, and this culture underlies social action and institutions throughout an interdependent world.

A few, decisive features of this new world have been identified in the investigation presented in the three volumes of this book. The information technology revolution induced the emergence of informationalism, as the material foundation of a new society. Under informationalism, the generation of wealth, the exercise of power, and the creation of cultural codes came to depend on the technological capacity of societies and individuals, with information technology as the core of this capacity. Information technology became the indispensable tool for the effective implementation of processes of socioeconomic restructuring. Particularly important was its role in allowing the development of networking as a dynamic, self-expanding form of

1 In discussions in my seminars in recent years a recurrent question comes up so often that I think it would be useful to take it to the reader. It is the question of newness. What is new about all this? Why is this a new world? I do believe that there is a new world emerging at this turn of millennium. In the three volumes of this book I have tried to provide information and ideas in support of this statement. Chips and computers are new; ubiquitous, mobile telecommunications are new; genetic engineering is new; electronically integrated, global financial markets working in real time are new; an inter-linked capitalist economy embracing the whole planet, and not only some of its segments, is new; a majority of the urban labor force in knowledge and information processing in advanced economies is new; a majority of urban population in the planet is new; the demise of the Soviet Empire, the fading away of communism, and the end of the Cold War are new; the rise of the Asian Pacific as an equal partner in the global economy is new; the widespread challenge to patriarchalism is new; the universal consciousness on ecological preservation is new; and the emergence of a network society, based on a space of flows, and on timeless time, is historically new. *Yet this is not the point I want to make.* My main statement is that it does not really matter if you believe that this world, or any of its features, is new or not. My analysis stands by itself. This is our world, the world of the Information Age. And this is my analysis of this world, which must be understood, used, judged, by itself, by its capacity, or incapacity, to identify and explain the phenomena that we observe and experience, regardless of its newness. After all, if nothing is new under the sun, why bother to try to investigate, think, write, and read about it?

organization of human activity. This prevailing, networking logic transforms all domains of social and economic life.

The crisis of models of economic development for both capitalism and statism prompted their parallel restructuring from the mid-1970s onwards. In capitalist economies, firms and governments proceeded with a number of measures and policies that, together, led to a new form of capitalism. It is characterized by globalization of core economic activities, organizational flexibility, and greater power for management in its relation to labor. Competitive pressures, flexibility of work, and weakening of organized labor led to the retrenchment of the welfare state, the cornerstone of the social contract in the industrial era. New information technologies played a decisive role in facilitating the emergence of this rejuvenated, flexible capitalism, by providing the tools for networking, distant communication, storing/processing of information, coordinated individualization of work, and simultaneous concentration and decentralization of decision-making.

In this global, interdependent economy, new competitors, firms and countries came to claim an increasing share of production, trade, capital, and labor. The emergence of a powerful, competitive Pacific economy, and the new processes of industrialization and market expansion in various areas of the world, regardless of recurrent crises and systemic instability, broadened the scope and scale of the global economy, establishing a multicultural foundation of economic interdependence. Networks of capital, labor, information, and markets linked up, through technology, valuable functions, people, and localities around the world, while switching off from their networks those populations and territories deprived of value and interest for the dynamics of global capitalism. There followed the social exclusion and economic irrelevance of segments of societies, of areas of cities, of regions, and of entire countries, constituting what I call the "Fourth World." The desperate attempt by some of these social groups and territories to link up with the global economy, to escape marginality, led to what I call the "perverse connection," when organized crime around the world took advantage of their plight to foster the development of a global criminal economy. It aims at satisfying forbidden desire and supplying outlawed commodities to endless demand from affluent societies and individuals.

The restructuring of statism proved to be more difficult, particularly for the dominant statist society in the world, the Soviet Union, at the center of a broad network of statist countries and parties. Soviet statism proved incapable of assimilating informationalism, thus stalling economic growth and decisively weakening its military machine, the ultimate source of power in a statist regime. Their awareness of stagnation and decline led some Soviet leaders, from Andropov to

Gorbachev, to attempt a restructuring of the system. In order to overcome inertia and resistance from the party/state, reformist leadership opened up information and called upon civil society for support. The powerful expression of national/cultural identities, and the people's demands for democracy, could not be easily channeled into a prescripted reform program. The pressure of events, tactical errors, political incompetence, and the internal split of statist apparatuses led to the sudden collapse of Soviet Communism, in one of the most extraordinary events in political history. With it, the Soviet Empire crumbled also, while statist regimes in its global area of influence were decisively weakened. So ended, in what amounted to an instant by historical standards, the revolutionary experiment that dominated the twentieth century. This was also the end of the Cold War between capitalism and statism, which had divided the world, determined geopolitics, and haunted our lives for the past half-century.

In its communist incarnation, statism ended there, for all practical purposes, although China's brand of statism took a more complicated, subtle way toward its historical exit, as I tried to show in chapter 4 of this volume. For the sake of the coherence of the argument presented here, let me remind the reader that the Chinese state at the turn of the millennium, while fully controlled by the Communist party, is organized around China's incorporation into global capitalism, on the basis of a nationalist project represented by the state. This Chinese nationalism with socialist characteristics is quickly moving away from statism into global capitalism, while trying to find a way to adapt to informationalism, without an open society.

After the demise of statism as a system, capitalism thrives throughout the world, and it deepens its penetration of countries, cultures, and domains of life. In spite of a highly diversified social and cultural landscape, for the first time in history the whole planet is organized around a largely common set of economic rules. It is, however, a different kind of capitalism from the one formed during the Industrial Revolution, or the one that emerged from the 1930s Depression and World War II, under the form of economic Keynesianism and social welfarism. It is a hardened form of capitalism in its goals, but is incomparably more flexible than any of its predecessors in its means. It is informational capitalism, relying on innovation-induced productivity and globalization-oriented competitiveness to generate wealth, and to appropriate it selectively. It is, more than ever, embedded in culture and tooled by technology. But, this time, both culture and technology depend on the ability of knowledge and information to act upon knowledge and information, in a recurrent network of globally connected exchanges.

Societies, however, are not just the result of technological and economic transformation, nor can social change be limited to institutional crises and adaptations. At about the same time that these developments started to take place in the late 1960s, powerful social movements exploded almost simultaneously all over the industrialized world, first in the United States and France, then in Italy, Germany, Spain, Japan, Brazil, Mexico, Czechoslovakia, with echoes and reactions in numerous other countries. As a participant in these social movements (I was an assistant professor of sociology at the Nanterre campus of the University of Paris in 1968), I bear witness to their libertarianism. While they often adopted Marxist ideological expressions in their militant vanguards, they had little to do with Marxism or, for that matter, with the working class. They were essentially cultural movements, wanting to change life rather than seizing power. They intuitively knew that access to the institutions of state co-opts the movement, while the construction of a new, revolutionary state perverts the movement. Their ambitions encompassed a multidimensional reaction to arbitrary authority, a revolt against injustice, and a search for personal experimentation. While often enacted by students, they were not by any means student movements, since they permeated throughout society, particularly among young people, and their values reverberated in all spheres of life. Of course, they were politically defeated because, as most utopian movements in history, they never pretended to political victory. But they faded away with high historical productivity, with many of their ideas, and some of their dreams, germinating in societies and blossoming as cultural innovations, to which politicians and ideologues will have to relate for generations to come. From these movements sprang the ideas that would be the source of environmentalism, of feminism, of the endless defense of human rights, of sexual liberation, of ethnic equality, and of grassroots democracy. The cultural movements of the 1960s and early 1970s, in their affirmation of individual autonomy against both capital and the state, placed a renewed stress on the politics of identity. These ideas paved the way for the building of cultural communes in the 1990s, when the legitimacy crisis of institutions of the industrial era blurred the meaning of democratic politics.

The social movements were not reactions to the economic crisis. Indeed, they surged in the late 1960s, in the heyday of sustained growth and full employment, as a critique of the "consumption society." While they induced some workers' strikes, as in France, and helped the political left, as in Italy, they were not a part of the right/left politics of the industrial era that had been organized around the class cleavages of capitalism. And while they coexisted, broadly speaking, with the

information technology revolution, technology was largely absent from either the values or critiques of most movements, if we except some calls against de-humanizing machinism, and their opposition to nuclear power (an old technology in the Information Age). But if these social movements were primarily cultural, and independent of economic and technological transformations, they did have an impact on economy, technology, and ensuing restructuring processes. Their libertarian spirit considerably influenced the movement toward individualized, decentralized uses of technology. Their sharp separation from traditional labor politics contributed to the weakening of organized labor, thus facilitating capitalist restructuring. Their cultural openness stimulated technological experimentation with symbol manipulation, constituting a new world of imaginary representations that would evolve toward the culture of real virtuality. Their cosmopolitanism, and internationalism, set up the intellectual bases for an interdependent world. And their abhorrence of the state undermined the legitimacy of democratic rituals, in spite of the fact that some leaders of the movement went on to renew political institutions. Moreover, by refusing the orderly transmission of eternal codes and established values, such as patriarchalism, religious traditionalism, and nationalism, the 1960s' movements set the stage for a fundamental split in societies all over the world: on the one hand, active, culturally self-defined elites, constructing their own values on the basis of their experience; on the other hand, increasingly uncertain, insecure social groups, deprived of information, resources, and power, digging their trenches of resistance precisely around those eternal values that had been decried by the rebellious 1960s.

The revolution of technology, the restructuring of economy, and the critique of culture converged toward a historical redefinition of the relationships of production, power, and experience, on which societies are based.

A New Society

A new society emerges when and if a structural transformation can be observed in the relationships of production, in the relationships of power, and in the relationships of experience. These transformations lead to an equally substantial modification of social forms of space and time, and to the emergence of a new culture.

Information and analyses presented in the three volumes of this book provide a strong indication of such a multidimensional transformation in the last lapse of the second millennium. I shall synthesize the

main features of transformation for each dimension, referring the reader to the respective chapters covering each subject for empirical materials that lend some credibility to the conclusions presented here.

Relationships of production have been transformed, both socially and technically. To be sure, they are capitalist, but of a historically different brand of capitalism, which I call informational capitalism. For the sake of clarity, I shall consider, in sequence, the new characteristics of the production process, of labor, and of capital. Then, the transformation of class relationships can be made visible.

Productivity and competitiveness are the commanding processes of the informational/global economy. Productivity essentially stems from innovation, competitiveness from flexibility. Thus, firms, regions, countries, economic units of all kinds, gear their production relationships to maximize innovation and flexibility. Information technology, and the cultural capacity to use it, are essential in the performance of the new production function. In addition, a new kind of organization and management, aiming at simultaneous adaptability and coordination, becomes the basis for the most effective operating system, exemplified by what I label the network enterprise.

Under this new system of production, labor is redefined in its role as producer, and sharply differentiated according to workers' characteristics. A major difference refers to what I call generic labor versus self-programmable labor. The critical quality in differentiating these two kinds of labor is education, and the capacity of accessing higher levels of education; that is, embodied knowledge and information. The concept of education must be distinguished from skills. Skills can be quickly made obsolete by technological and organizational change. Education (as distinct from the warehousing of children and students) is the process by which people, that is labor, acquire the capability constantly to redefine the necessary skills for a given task, and to access the sources for learning these skills. Whoever is educated, in the proper organizational environment, can reprogram him/herself toward the endlessly changing tasks of the production process. On the other hand, generic labor is assigned a given task, with no reprogramming capability, and it does not presuppose the embodiment of information and knowledge beyond the ability to receive and execute signals. These "human terminals" can, of course, be replaced by machines, or by any other body around the city, the country, or the world, depending on business decisions. While they are collectively indispensable to the production process, they are individually expendable, as value added by each one of them is a small fraction of what is generated by and for the organization. Machines, and generic labor from various origins and locations, cohabit the same subservient circuits of the production system.

Flexibility, enacted organizationally by the network enterprise, requires networkers, and flextimers, as well as a wide array of working arrangements, including self-employment and reciprocal subcontracting. The variable geometry of these working arrangements leads to the coordinated decentralization of work and to the individualization of labor.

The informational/global economy is capitalist; in fact, more so than any other economy in history. But capital is as transformed as labor is in this new economy. The rule is still production for the sake of profit, and for the private appropriation of profit, on the basis of property rights – which is the essence of capitalism. But how does this appropriation of profit take place? Who are the capitalists? Three different levels must be considered in answering this fundamental question. Only the third level is specific to informational capitalism.

The first level concerns *the holders of property rights*. These are, basically, of three kinds: (a) shareholders of companies, a group in which institutional, anonymous shareholders are increasingly predominant and whose investment and disinvestment decisions are often governed solely by short-term financial considerations; (b) family owners, still a relevant form of capitalism, particularly in the Asian Pacific; and (c) individual entrepreneurs, owners of their own means of production (their minds being their main asset), risk-takers, and proprietors of their own profit-making. This last category, which was fundamental to the origins of industrial capitalism and then became largely phased out by corporate industrialism, has made a remarkable comeback under informational capitalism, using the pre-eminence of innovation and flexibility as the essential features of the new production system.

The second level of capitalist forms refers to *the managerial class*; that is, the controllers of capital assets on behalf of shareholders. These managers, whose pre-eminence Berle and Means had already shown in the 1930s, still constitute the heart of capitalism under informationalism, particularly in multinational corporations. I see no reason not to include among them managers of state-owned companies who, for all practical purposes, follow the same logic, and share the same culture, minus the risk for losses underwritten by the taxpayer.

The third level in the process of appropriation of profits by capital is both an old story and a fundamental feature of the new informational capitalism. The reason lies in the nature of *global financial markets*. It is in these markets that profits from all sources ultimately converge in search of higher profits. Indeed, the margins of gain in the stock market, in the bond market, in the currency market, in futures, options, and derivatives, in financial markets at large, are, on average,

considerably greater than in most direct investments, excepting a few instances of speculation. This is so not because of the nature of financial capital, the oldest form of capital in history. But because of the technological conditions under which it operates in informationalism. Namely its annihilation of space and time by electronic means. Its technological and informational ability relentlessly to scan the entire planet for investment opportunities, and to move from one option to another in a matter of seconds, brings capital into constant movement, merging in this movement capital from all origins, as in mutual funds investments. The programming and forecasting capabilities of financial management models make it possible to colonize the future, and the interstices of the future (that is, possible alternative scenarios), selling this "unreal estate" as property rights of the immaterial. Played by the rules, there is nothing evil about this global casino. After all, if cautious management and proper technology avoid dramatic crushes of the market, the losses of some fractions of capital are the wins of others, so that, over the long term, the market balances out and keeps a dynamic equilibrium. However, because of the differential between the amount of profits obtained from the production of goods and services, and the amount that can be obtained from financial investments, individual capitals of all kinds are, in fact, dependent on the fate of their investments in global financial markets, since capital can never remain idle. Thus, *global financial markets, and their networks of management, are the actual collective capitalist, the mother of all accumulations*. To say so is not to say that financial capital dominates industrial capital, an old dichotomy that simply does not fit the new economic reality. Indeed, in the past quarter of a century, firms around the world have, by and large, self-financed the majority of their investments with the proceeds of their trade. Banks do not control manufacturing firms, nor do they control themselves. Firms of all kinds, financial producers, manufacturing producers, agricultural producers, service producers, as well as governments and public institutions, use global financial networks as the depositories of their earnings and as their potential source of higher profits. It is in this specific form that *global financial networks are the nerve center of informational capitalism*. Their movements determine the value of stocks, bonds, and currencies, bringing doom or bonanza to savers, investors, firms, and countries. But these movements do not follow a market logic. The market is twisted, manipulated, and transformed, by a combination of computer-enacted strategic maneuvers, crowd psychology from multicultural sources, and unexpected turbulences, caused by greater and greater degrees of complexity in the interaction between capital flows on a global scale. While cutting-edge economists are trying to model

this market behavior on the basis of game theory, their heroic efforts to find rational expectation patterns are immediately downloaded in the computers of financial wizards to obtain new competitive advantage from this knowledge by innovating on already known patterns of investment.

The consequences of these developments on *social class relationships* are as profound as they are complex. But before identifying them I need to distinguish between different meanings of class relationships. One approach focuses on social inequality in income and social status, along the lines of social stratification theory. From this perspective, the new system is characterized by *a tendency to increased social inequality and polarization*, namely the simultaneous growth of both the top and the bottom of the social scale. This results from three features: (a) a fundamental differentiation between self-programmable, highly productive labor, and generic, expendable labor; (b) the individualization of labor, which undermines its collective organization, thus abandoning the weakest sections of the workforce to their fate; and (c) under the impact of individualization of labor, globalization of economy, and delegitimation of the state, the gradual demise of the welfare state, so removing the safety net for people who cannot be individually well off. This tendency toward inequality and polarization is certainly not inexorable: it can be countered and prevented by deliberate public policies. But inequality and polarization are prescripted in the dynamics of informational capitalism, and will prevail unless conscious action is taken to countervail these tendencies.

A second meaning of class relationships refers to *social exclusion*. By this I mean the de-linking between people-as-people and people-as-workers/consumers in the dynamics of informational capitalism on a global scale. In chapter 2 of this volume, I tried to show the causes and consequences of this trend in a variety of situations. Under the new system of production, a considerable number of humans, probably in a growing proportion, are irrelevant, both as producers and consumers, from the perspective of the system's logic. I must emphasize, again, that this is not the same as saying that there is, or will be, mass unemployment. Comparative data show that, by and large, in all urban societies, most people and/or their families work for pay, even in poor neighborhoods and in poor countries. The question is: what kind of work for what kind of pay under what conditions? What is happening is that the mass of generic labor circulates in a variety of jobs, increasingly occasional jobs, with a great deal of discontinuity. So, millions of people are constantly in and out of paid work, often included in informal activities, and, in sizeable numbers, on the shop floor of the criminal economy. Furthermore, the loss of a stable relationship to

employment, and the weak bargaining power of many workers, lead to a higher level of incidence of major crises in the life of their families: temporary job loss, personal crises, illness, drugs/alcohol addictions, loss of employability, loss of assets, loss of credit. Many of these crises connect with each other, inducing the downward spiral of social exclusion, toward what I have called the "black holes of informational capitalism," from which, statistically speaking, it is difficult to escape.

The borderline between social exclusion and daily survival is increasingly blurred for a growing number of people in all societies. Having lost much of the safety net, particularly for the new generations of the post-welfare state era, people who cannot follow the constant updating of skills, and fall behind in the competitive race, position themselves for the next round of "downsizing" of that shrinking middle that made the strength of advanced capitalist societies during the industrial era. Thus, processes of social exclusion do not only affect the "truly disadvantaged," but those individuals and social categories who build their lives on a constant struggle to escape falling down to a stigmatized underworld of downgraded labor and socially disabled people.

A third way of understanding new class relationships, this time in the Marxian tradition, is concerned with *who the producers are and who appropriates the products of their labor*. If innovation is the main source of productivity, knowledge and information are the essential materials of the new production process, and education is the key quality of labor, the new producers of informational capitalism are those knowledge generators and information processors whose contribution is most valuable to the firm, the region, and the national economy. But innovation does not happen in isolation. It is part of a system in which management of organizations, processing of knowledge and information, and production of goods and services are intertwined. So defined, this category of informational producers includes a very large group of managers, professionals, and technicians, who form a "collective worker"; that is, a producer unit made up of cooperation between a variety of inseparable individual workers. In OECD countries they may account for about one-third of the employed population. Most other workers may be in the category of generic labor, potentially replaceable by machines or by other members of the generic labor force. They need the producers to protect their bargaining power. But informational producers do not need them: this is a fundamental cleavage in informational capitalism, leading to the gradual dissolution of the remnants of class solidarity of the industrial society.

But who appropriates a share of informational producers' work? In one sense, nothing has changed *vis-à-vis* classic capitalism: their em-

ployers do; this is why they employ them in the first place. But, on the other hand, the mechanism of appropriation of surplus is far more complicated. First, employment relationships are tendentially individualized, meaning that each producer will receive a different deal. Secondly, an increasing proportion of producers control their own work process, and enter into specific, horizontal working relationships, so that, to a large extent, they become independent producers, submitted to market forces, but playing market strategies. Thirdly, their earnings often go into the whirlwind of global financial markets, fed precisely by the affluent section of the global population, so that they are also collective owners of collective capital, thus becoming dependent on the performance of capital markets. Under these conditions, we can hardly consider that there is a class contradiction between these networks of highly individualized producers and the collective capitalist of global financial networks. To be sure, there is frequent abuse and exploitation of individual producers, as well as of large masses of generic labor, by whoever is in charge of production processes. Yet, segmentation of labor, individualization of work, and diffusion of capital in the circuits of global finance have jointly induced the gradual fading away of the class structure of the industrial society. There are, and will be, powerful social conflicts, some of them enacted by workers and organized labor, from Korea to Spain. Yet, they are not the expression of class struggle but of interest groups' demands and/or of revolt against injustice.

The *truly fundamental social cleavages of the Information Age* are: first, the internal fragmentation of labor between informational producers and replaceable generic labor. Secondly, the social exclusion of a significant segment of society made up of discarded individuals whose value as workers/consumers is used up, and whose relevance as people is ignored. And, thirdly, the separation between the market logic of global networks of capital flows and the human experience of workers' lives.

Power relations are being transformed as well by the social processes that I have identified and analyzed in this book. The main transformation concerns the *crisis of the nation-state as a sovereign entity, and the related crisis of political democracy*, as constructed in the past two centuries. Since commands from the state cannot be fully enforced, and since some of its fundamental promises, embodied in the welfare state, cannot be kept, both its authority and its legitimacy are called into question. Because representative democracy is predicated on the notion of a sovereign body, the blurring of boundaries of sovereignty leads to uncertainty in the process of delegation of people's will. Globalization of capital, multilateralization of power institutions, and

decentralization of authority to regional and local governments induce a new geometry of power, perhaps inducing a new form of state, the network state. Social actors, and citizens at large, maximize the chances of representation of their interests and values by playing out strategies in the networks of relationships between various institutions, at various levels of competence. Citizens of a given European region will have a better chance of defending their interests if they support their regional authorities against their national government, in alliance with the European Union. Or the other way around. Or else, none of the above; that is, by affirming local/regional autonomy against both the nation-state and supranational institutions. American malcontents may revile the federal government on behalf of the American nation. Or new Chinese business elites may push their interests by linking up with their provincial government, or with the still powerful national government, or with overseas Chinese networks. In other words, the new structure of power is dominated by a network geometry, in which power relationships are always specific to a given configuration of actors and institutions.

Under such conditions, informational politics, enacted primarily by symbol manipulation in the space of the media, fits well with this constantly changing world of power relationships. Strategic games, customized representation, and personalized leadership substitute for class constituencies, ideological mobilization, and party control, which were characteristic of politics in the industrial era.

As politics becomes a theater, and political institutions are bargaining agencies rather than sites of power, citizens around the world react defensively, voting to prevent harm from the state in place of entrusting it with their will. In a certain sense, *the political system is voided of power*, albeit not of influence.

Power, however, does not disappear. In an informational society, *it becomes inscribed, at a fundamental level, in the cultural codes through which people and institutions represent life and make decisions, including political decisions.* In a sense, power, while real, becomes immaterial. It is real because wherever and whenever it consolidates, it provides, for a time, individuals and organizations with the capacity to enforce their decisions regardless of consensus. But it is immaterial because such a capacity derives from the ability to frame life experience under categories that predispose to a given behavior and can then be presented as to favor a given leadership. For instance, if a population feels threatened by unidentifiable, multidimensional fear, the framing of such fears under the codes of immigration = race = poverty = welfare = crime = job loss = taxes = threat, provides an identifiable target, defines an US versus THEM, and favors those leaders who are

most credible in supporting what is perceived to be a reasonable dose of racism and xenophobia. Or, in a very different example, if people equate quality of life with conservation of nature, and with their spiritual serenity, new political actors could emerge and new public policies could be implemented.

Cultural battles are the power battles of the Information Age. They are primarily fought in and by the media, but the media are not the power-holders. Power, as the capacity to impose behavior, lies in the networks of information exchange and symbol manipulation, which relate social actors, institutions, and cultural movements, through icons, spokespersons, and intellectual amplifiers. In the long run, it does not really matter who is in power because the distribution of political roles becomes widespread and rotating. There are no more stable power elites. There are however, *elites from power*; that is, elites formed during their usually brief power tenure, in which they take advantage of their privileged political position to gain a more permanent access to material resources and social connections. Culture as the source of power, and power as the source of capital, underlie the new social hierarchy of the Information Age.

The transformation of *relationships of experience* revolves primarily around *the crisis of patriarchalism*, at the root of a profound redefinition of family, gender relationships, sexuality, and, thus, personality. Both for structural reasons (linked to the informational economy), and because of the impact of social movements (feminism, women's struggles, and sexual liberation), patriarchal authority is challenged in most of the world, albeit under various forms and intensity depending upon cultural/institutional contexts. The future of the family is uncertain, but the future of patriarchalism is not: it can only survive under the protection of authoritarian states and religious fundamentalism. As the studies presented in volume II, chapter 4 show, in open societies the patriarchal family is in deep crisis, while new embryos of egalitarian families are still struggling against the old world of interests, prejudices, and fears. Networks of people (particularly for women) increasingly substitute for nuclear families as primary forms of emotional and material support. Individuals and their children follow a pattern of sequential family, and non-family, personal arrangements throughout their lives. And while there is a rapidly growing trend of fathers' involvement with their children, women – whether single or living with each other – and their children, are an increasingly prevalent form of reproduction of society, thus fundamentally modifying patterns of socialization. Admittedly, I am taking as my main point of reference the experience of the United States, and of most of Western Europe (with southern Europe being, to some extent,

an exception in the European context). Yet, as I argued in volume II, it can be shown that women's struggles, whether or not avowedly feminist, are spreading throughout the world, thus undermining patriarchalism in the family, in the economy, and in the institutions of society. I consider it very likely that, with the spread of women's struggles, and with women's increasing awareness of their oppression, their collective challenge to the patriarchal order will generalize, inducing processes of crisis in traditional family structures. I do see signs of a recomposition of the family, as millions of men appear to be ready to give up their privileges and work together with women to find new forms of loving, sharing, and having children. Indeed, I believe that rebuilding families under egalitarian forms is the necessary foundation for rebuilding society from the bottom up. Families are more than ever the providers of psychological security and material well-being to people, in a world characterized by individualization of work, destructuring of civil society, and delegitimation of the state. Yet the transition to new forms of family implies a fundamental redefinition of gender relationships in society at large, and thus of sexuality. Because personality systems are shaped by family and sexuality, they are also in a state of flux. I characterized such a state as flexible personalities, able to engage endlessly in the reconstruction of the self, rather than to define the self through adaptation to what were once conventional social roles, which are no longer viable and which have thus ceased to make sense. *The most fundamental transformation of relationships of experience in the Information Age is their transition to a pattern of social interaction constructed, primarily, by the actual experience of the relationship*. Nowadays, people produce forms of sociability, rather than follow models of behavior.

Changes in relationships of production, power, and experience converge toward *the transformation of material foundations of social life, space, and time*. The space of flows of the Information Age dominates the space of places of people's cultures. Timeless time as the social tendency toward the annihilation of time by technology supersedes the clock time logic of the industrial era. Capital circulates, power rules, and electronic communication swirls through flows of exchanges between selected, distant locales, while fragmented experience remains confined to places. Technology compresses time to a few, random instants, thus de-sequencing society, and de-historicizing history. By secluding power in the space of flows, allowing capital to escape from time, and dissolving history in the culture of the ephemeral, the network society disembodies social relationships, introducing the culture of real virtuality. Let me explain.

Throughout history, cultures have been generated by people shar-

ing space and time, under conditions determined by relationships of production, power, and experience, and modified by their projects, fighting each other to impose over society their values and goals. Thus, spatio-temporal configurations were critical for the meaning of each culture, and for their differential evolution. Under the informational paradigm, a new culture has emerged from the superseding of places and the annihilation of time by the space of flows and by timeless time: *the culture of real virtuality*. As presented in volume I, chapter 5, by real virtuality I mean a system in which reality itself (that is, people's material/symbolic existence) is fully immersed in a virtual image setting, in the world of make believe, in which symbols are not just metaphors, but comprise the actual experience. This is not the consequence of electronic media, although they are the indispensable instruments of expression in the new culture. The material basis that explains why real virtuality is able to take over people's imagination and systems of representation is their livelihood in the space of flows and in timeless time. On the one hand, dominant functions and values in society are organized in simultaneity without contiguity; that is, in flows of information that escape from the experience embodied in any locale. On the other hand, dominant values and interests are constructed without reference to either past or future, in the timeless landscape of computer networks and electronic media, where all expressions are either instantaneous, or without predictable sequencing. All expressions from all times and from all spaces are mixed in the same hypertext, constantly rearranged, and communicated at any time, anywhere, depending on the interests of senders and the moods of receivers. This virtuality is our reality because it is within the framework of these timeless, placeless, symbolic systems that we construct the categories, and evoke the images, that shape behavior, induce politics, nurture dreams, and trigger nightmares.

This is the new social structure of the Information Age, which I call *the network society* because it is made up of networks of production, power, and experience, which construct a culture of virtuality in the global flows that transcend time and space. Not all dimensions and institutions of society follow the logic of the network society, in the same way that industrial societies included for a long time many pre-industrial forms of human existence. But all societies in the Information Age are indeed penetrated, with different intensity, by the pervasive logic of the network society, whose dynamic expansion gradually absorbs and subdues pre-existing social forms.

The network society, as any other social structure, is not absent of contradictions, social conflicts, and challenges from alternative forms of social organization. But these challenges are induced by the charac-

teristics of the network society, and, thus, they are sharply distinct from those of the industrial era. Accordingly, they are incarnated by different subjects, even though these subjects often work with historical materials provided by the values and organizations inherited from industrial capitalism and statism.

The understanding of our world requires the simultaneous analysis of the network society, and of its conflictive challenges. The historical law that where there is domination there is resistance continues to apply. But it requires an analytical effort to identify who the challengers are of the processes of domination enacted by the immaterial, yet powerful, flows of the network society.

The New Avenues of Social Change

According to observation, and as recorded in volume II, social challenges against patterns of domination in the network society generally take the form of constructing autonomous identities. These identities are external to the organizing principles of the network society. Against the worshipping of technology, the power of flows, and the logic of markets, they oppose their being, their beliefs, and their bequest. What is characteristic of social movements and cultural projects built around identities in the Information Age is that they do not originate within the institutions of civil society. They introduce, from the outset, an alternative social logic, distinct from the principles of performance around which dominant institutions of society are built. In the industrial era, the labor movement fought fiercely against capital. Capital and labor had, however, shared the goals and values of industrialization – productivity and material progress – each seeking to control its development and for a larger share of its harvest. In the end they reached a social pact. In the Information Age, the prevailing logic of dominant, global networks is so pervasive and so penetrating that the only way out of their domination appears to be out of these networks, and to reconstruct meaning on the basis of an entirely distinct system of values and beliefs. This is the case for communes of resistance identity I have identified. Religious fundamentalism does not reject technology, but puts it at the service of God's Law, to which all institutions and purposes must submit, without possible bargaining. Nationalism, localism, ethnic separatism, and cultural communes break up with society at large, and rebuild its institutions not from the bottom up, but from the inside out, the "who we are" versus those who do not belong.

Even proactive movements, which aim at transforming the overall

pattern of social relationships among people, such as feminism, or among people and nature, such as environmentalism, start from the rejection of basic principles on which our societies are constructed: patriarchalism, productivism. Naturally, there are all kind of nuances in the practice of social movements, as I tried to make clear in volume II, but, quite fundamentally, their principles of self-definition, at the source of their existence, represent a break with institutionalized social logic. Should institutions of society, economy, and culture truly accept feminism and environmentalism, they would be essentially transformed. Using an old word, it would be a revolution.

The strength of identity-based social movements is their autonomy *vis-à-vis* the institutions of the state, the logic of capital, and the seduction of technology. It is hard to co-opt them, although certainly some of their participants may be co-opted. Even in defeat, their resistance and projects impact and change society, as I have been able to show in a number of selected cases, presented in volume II. Societies of the Information Age cannot be reduced to the structure and dynamics of the network society. Following my scanning of our world, it appears that our societies are constituted by the interaction between the "net" and the "self," between the network society and the power of identity.

Yet, the fundamental problem raised by processes of social change that are primarily external to the institutions and values of society, as it is, is that they may fragment rather than reconstitute society. Instead of transformed institutions, we would have communes of all sorts. Instead of social classes, we would witness the rise of tribes. And instead of conflictive interaction between the functions of the space of flows and the meaning of the space of places, we may observe the retrenchment of dominant global elites in immaterial palaces made out of communication networks and information flows. Meanwhile, people's experience would remain confined to multiple, segregated locales, subdued in their existence and fragmented in their consciousness. With no Winter Palace to be seized, outbursts of revolt may implode, transformed into everyday senseless violence.

The reconstruction of society's institutions by cultural social movements, bringing technology under the control of people's needs and desires, seems to require a long march from the communes built around resistance identity to the heights of new project identities, sprouting from the values nurtured in these communes.

Examples of such processes, as observed in contemporary social movements and politics, are the construction of new, egalitarian families; the widespread acceptance of the concept of sustainable development, building intergenerational solidarity into the new model of

economic growth; and the universal mobilization in defense of human rights wherever the defense has to be taken up. For this transition to be undertaken, from resistance identity to project identity, a new politics will have to emerge. This will be a cultural politics that starts from the premise that informational politics is predominantly enacted in the space of media, and fights with symbols, yet connects to values and issues that spring from people's life experience in the Information Age.

Beyond this Millennium

Throughout the pages of this book I have adamantly refused to indulge in futurology, staying as close as possible to observation of what we know the Information Age brings to us, as constituted in the last lapse of the twentieth century. In concluding this book, however, with the reader's benevolence, I would like to elaborate, for the span of just a few paragraphs, on some trends that may configure society in the early twenty-first century. This is simply an attempt to bring a dynamic, prospective dimension to this synthesis of findings and hypotheses.

The information technology revolution will accentuate its transformative potential. The twenty-first century will be marked by the completion of a global information superhighway, and by mobile telecommunication and computing power, thus decentralizing and diffusing the power of information, delivering the promise of multimedia, and enhancing the joy of interactive communication. Electronic communication networks will constitute the backbone of our lives. In addition, it will be the century of the full flowering of the genetic revolution. For the first time, our species will penetrate the secrets of life, and will be able to perform substantial manipulations of living matter. While this will trigger a dramatic debate on the social and environmental consequences of this capacity, the possibilities open to us are truly extraordinary. Prudently used, the genetic revolution may heal, fight pollution, improve life, and save time and effort from survival, so as to give us the chance to explore the largely unknown frontier of spirituality. Yet, if we make the same mistakes as we made in the twentieth century, using technology and industrialization to massacre each other in atrocious wars, with our new technological power we may well end life on the planet. It turned out to be relatively easy to stop short of nuclear holocaust because of the centralized control of nuclear energy and weaponry. But new genetic technologies are pervasive, their mutating impacts not fully controllable, and their institutional

control much more decentralized. To prevent the evil effects of biological revolution we need not only responsible governments, but a responsible, educated society. Which way we go will depend on society's institutions, on people's values, and on the consciousness and determination of new social actors to shape and control their own destiny. Let me briefly review these prospects by pinpointing some major developments in the economy, polity, and culture.

The maturing of the informational economy, and the diffusion and proper use of information technology as a system, will likely unleash the productivity potential of this technological revolution. This will be made visible by changes in statistical accounting, when twentieth-century categories and procedures, already manifestly inadequate, will be replaced by new concepts able to measure the new economy. There is no question that the twenty-first century will witness the rise of an extraordinarily productive system by historical standards. Human labor will produce more and better with considerably less effort. Mental work will replace physical effort in the most productive sectors of the economy. However, the sharing of this wealth will depend for individuals on their access to education and, for society as a whole, on social organization, politics, and policies.

The global economy will expand in the twenty-first century, using substantial increases in the power of telecommunications and information processing. It will penetrate all countries, all territories, all cultures, all communication flows, and all financial networks, relentlessly scanning the planet for new opportunities for profit-making. But it will do so selectively, linking valuable segments and discarding used up, or irrelevant, locales and people. The territorial unevenness of production will result in an extraordinary geography of differential value-making that will sharply contrast countries, regions, and metropolitan areas. Valuable locales and people will be found everywhere, even in Sub-Saharan Africa, as I have argued in this volume. But switched-off territories and people will also be found everywhere, albeit in different proportions. The planet is being segmented into clearly distinct spaces, defined by different time regimes.

From the excluded segments of humankind, two different reactions can be expected. On the one hand, there will be a sharp increase in the operation of what I call the "perverse connection," that is, playing the game of global capitalism with different rules. The global criminal economy, whose profile and dynamics I tried to identify in chapter 3 of this volume, will be a fundamental feature of the twenty-first century, and its economic, political, and cultural influence will penetrate all spheres of life. The question is not whether our societies will be able to eliminate the criminal networks, but, rather, whether criminal

networks will not end up controlling a substantial share of our economy, of our institutions, and of our everyday life.

There is another reaction against social exclusion and economic irrelevance that I am convinced will play an essential role in the twenty-first century: the exclusion of the excluders by the excluded. Because the whole world is, and will increasingly be, intertwined in the basic structures of life, under the logic of the network society, opting out by people and countries will not be a peaceful withdrawal. It takes, and it will take, the form of fundamentalist affirmation of an alternative set of values and principles of existence, under which no coexistence is possible with the evil system that so deeply damages people's lives. As I write, in the streets of Kabul women are beaten for improper dress by the courageous warriors of the Taliban. This is not in accordance with the humanistic teachings of Islam. There is however, as analyzed in volume II, an explosion of fundamentalist movements that take up the Qū'ran, the Bible, or any holy text, to interpret it and use it, as a banner of their despair and a weapon of their rage. Fundamentalisms of different kinds and from different sources will represent the most daring, uncompromising challenge to one-sided domination of informational, global capitalism. Their potential access to weapons of mass extermination casts a giant shadow on the optimistic prospects of the Information Age.

Nation-states will survive, but not so their sovereignty. They will band together in multilateral networks, with a variable geometry of commitments, responsibilities, alliances, and subordinations. The most notable multilateral construction will be the European Union, bringing together the technological and economic resources of most, but not all, European countries: Russia is likely to be left out, out of the West's historical fears, and Switzerland needs to be off limits to keep its job as the world's banker. But the European Union, for the time being, does not embody a historical project of building a European society. It is, essentially, a defensive construction on behalf of European civilization to avoid becoming an economic colony of Asians and Americans. European nation-states will remain and will bargain endlessly for their individual interests within the framework of European institutions, which they will need but, in spite of their federalist rhetoric, neither Europeans nor their governments will cherish. Europe's unofficial anthem (Beethoven's "Hymn of Joy") is universal, but its German accent may become more marked.

The global economy will be governed by a set of multilateral institutions, networked among themselves. At the core of this network is the G7 countries club, perhaps with a few additional members, and its executive arms, the International Monetary Fund, and the World Bank,

charged with regulation and intervention on behalf of the ground rules of global capitalism. Technocrats and bureaucrats of these, and similar, international economic institutions will add their own dose of neoliberal ideology and professional expertise in the implementation of their broad mandate. Informal gatherings, such as the Davos meetings, or their equivalents, will help to create the cultural/personal glue of the global elite.

Global geopolitics will also be managed by multilateralism, with the United Nations, and regional international institutions ASEAN, OEA, or OAU, playing an increasing role in the management of international or even national conflicts. They will increasingly use security alliances, such as NATO, in the enforcement of their decisions. When necessary, *ad hoc* international police forces will be created to intervene in trouble spots.

Global security matters will be likely to be dominated by three main issues, if the analyses contained in this book are proved correct. The first is the rising tension in the Pacific, as China asserts its global power, Japan goes into another round of national paranoia, and Korea, Indonesia, and India react to both. The second is the resurgence of Russian power, not only as a nuclear superpower, but as a stronger nation, no longer tolerating humiliation. The conditions under which post-Communist Russia will be or will not be brought into the multilateral system of global co-management will determine the future geometry of security alignments. The third security issue is probably the most decisive of all, and will be likely to condition safety for the world at large for a long period of time. It refers to the new forms of warfare that will be used by individuals, organizations, and states, strong in their convictions, weak in their military means, but able to access new technologies of destruction, as well as find the vulnerable spots of our societies. Criminal gangs may also resort to high-intensity confrontation when they see no other option, as Colombia experienced in the 1990s. Global or local terrorism is already considered a major threat worldwide at the turn of the millennium. But, I believe this is only a modest beginning. Increasing technological sophistication leads to two trends converging toward outright terror: on the one hand, a small determined group, well financed, and well informed, can devastate entire cities, or strike at nerve centers of our livelihood; on the other hand, the infrastructure of our everyday life, from energy to transportation to water supply, has become so complex, and so intertwined, that its vulnerability has increased exponentially. While new technologies help security systems, they also make our daily life more exposed. The price for increased protection will be to live within a system of electronic locks, alarms systems, and on-line police patrols. It will also

mean to grow up in fear. It is probably not different from the experience of most children in history. It is also a measure of the relativity of human progress.

Geopolitics will also be increasingly dominated by a fundamental contradiction between the multilateralism of decision-making and the unilateralism of military implementation of these decisions. This is because, after the demise of the Soviet Union, and the technological backwardness of the new Russia, the United States is, and will be for the foreseeable future, the only military superpower. Thus, most security decisions will have to be either implemented or supported by the United States to be truly effective or credible. The European Union, for all its arrogant talk, gave a clear demonstration of its operational inability to act alone in the Balkans. Japan has forbidden itself to build an army, and the pacifist feeling in the country runs deeper than the support for ultra-nationalist provocations. Outside the OECD, only China and India may have enough technological and military might to access global power in the foreseeable future, but certainly not to match the United States or even Russia. So, excepting the unlikely hypothesis of an extraordinary Chinese military build up, for which China simply does not yet have the technological capacity, the world is left with one superpower, the United States. Under such conditions, various security alliances will have to rely on American forces. But the US is confronted with such deep domestic social problems that it will certainly not have the means, nor the political support, to exercise such a power if the security of its citizens is not under direct threat, as American presidents discovered several times in the 1990s. With the Cold War forgotten, and no credible equivalent "new Cold War" looming on the horizon, the only way America may keep its military status is to lend its forces to the global security system. And have other countries pay for it. This is the ultimate twist of multilateralism, and the most striking illustration of the lost sovereignty of the nation-state.

The state does not disappear, though. It is simply downsized in the Information Age. It proliferates under the form of local and regional governments, which dot the world with their projects, build up constituencies, and negotiate with national governments, multinational corporations, and international agencies. The era of globalization of the economy is also the era of localization of polity. What local and regional governments lack in power and resources, they make up in flexibility and networking. They are the only match, if any, to the dynamism of global networks of wealth and information.

As for people, they are, and will be, increasingly distant from the halls of power, and disaffected from the crumbling institutions of civil society. They will be individualized in their work and lives, construct-

ing their own meaning on the basis of their own experience, and, if they are lucky, reconstructing their family, their rock in this swirling ocean of unknown flows and uncontrolled networks. When subjected to collective threats, they will build communal havens, whence prophets may proclaim the coming of new gods.

The twenty-first century will not be a dark age. Nor will it deliver to most people the bounties promised by the most extraordinary technological revolution in history. Rather, it may well be characterized by informed bewilderment.

What is to be Done?

Each time an intellectual has tried to answer this question, and seriously implement the answer, catastrophe has ensued. This was particularly the case with a certain Ulianov in 1902. Thus, while certainly not pretending to qualify for this comparison, I shall abstain from suggesting any cure for the ills of our world. But since I do feel concerned by what I have seen on my journey across this early landscape of the Information Age, I would like to explain my abstention, writing in the first person, but thinking of my generation and of my political culture.

I come from a time and a tradition, the political left of the industrial era, obsessed by the inscription on Marx's tomb at Highgate, his (and Engel's) eleventh thesis on Feuerbach. Transformative political action was the ultimate goal of a truly meaningful intellectual endeavor. I still believe that there is considerable generosity in this attitude, certainly less selfish than the orderly pursuit of bureaucratic academic careers, undisturbed by the labors of people around the world. And, on the whole, I do not think that a classification between right-wing and left-wing intellectuals and social scientists would yield significant differences in scholarly quality between the two groups. After all, conservative intellectuals also went into political action, as much as the left did, often with little tolerance for their foes. So, the issue is not that political commitment prevents, or distorts, intellectual creativity. Many of us have learned, over the years, to live with the tension, and the contradiction, between what we find and what we would like to happen. I consider social action and political projects to be essential in the betterment of a society that clearly needs change and hope. And I do hope that this book, by raising some questions and providing empirical and theoretical elements to treat them, may contribute to informed social action in the pursuit of social change. In this sense, I am not, and I do not want to be, a neutral, detached observer of the hu-

man drama.

However, I have seen so much misled sacrifice, so many dead ends induced by ideology, and such horrors provoked by artificial paradises of dogmatic politics that I want to convey a salutary reaction against trying to frame political practice in accordance with social theory, or, for that matter, with ideology. Theory and research, in general as well as in this book, should be considered as a means for understanding our world, and should be judged exclusively on their accuracy, rigor, and relevance. How these tools are used, and for what purpose, should be the exclusive prerogative of social actors themselves, in specific social contexts, and on behalf of their values and interests. No more meta-politics, no more "*maîtres à penser*," and no more intellectuals pretending to be so. The most fundamental political liberation is for people to free themselves from uncritical adherence to theoretical or ideological schemes, to construct their practice on the basis of their experience, while using whatever information or analysis is available to them, from a variety of sources. In the twentieth century, philosophers tried to change the world. In the twenty-first century, it is time for them to interpret it differently. Hence my circumspection, which is not indifference, about a world troubled by its own promise.

Finale

The promise of the Information Age is the unleashing of unprecedented productive capacity by the power of the mind. I think, therefore I produce. In so doing, we will have the leisure to experiment with spirituality, and the opportunity of reconciliation with nature, without sacrificing the material well-being of our children. The dream of the Enlightenment, that reason and science would solve the problems of humankind, is within reach. Yet there is an extraordinary gap between our technological overdevelopment and our social underdevelopment. Our economy, society, and culture are built on interests, values, institutions, and systems of representation that, by and large, limit collective creativity, confiscate the harvest of information technology, and deviate our energy into self-destructive confrontation. This state of affairs must not be. There is no eternal evil in human nature. There is nothing that cannot be changed by conscious, purposive social action, provided with information, and supported by legitimacy. If people are informed, active, and communicate throughout the world; if business assumes its social responsibility; if the media become the messengers, rather than the message; if political actors react against cynicism, and restore belief in democracy; if culture is reconstructed from experi-

ence; if humankind feels the solidarity of the species throughout the globe; if we assert intergenerational solidarity by living in harmony with nature; if we depart for the exploration of our inner self, having made peace among ourselves. If all this is made possible by our informed, conscious, shared decision, while there is still time, maybe then, we may, at last, be able to live and let live, love and be loved.

I have exhausted my words. Thus, I will borrow, for the last time, from Pablo Neruda:

Por mi parte y tu parte, cumplimos,
compartimos esperanzas e
inviernos;
y fuimos heridos no solo por los
enemigos mortales
sino por mortales amigos (y esto
pareció más amargo),
pero no me parece más dulce
mi pan o mi libro
entretanto;
agregamos viviendo la cifra que
falta al dolor,
y seguimos amando el amor y con
nuestra directa conducta
enterramos a los mentirosos y
vivimos con los verdaderos.

For my part and yours, we comply,
we shared our hopes and
winters;
and we have been wounded not only
by mortal enemies
but by mortal friends (that seemed
all the more bitter),
but bread does not seem to taste
sweeter, nor my book, in the
meantime;
living, we supply the statistics that
pain still lacks,
we go on loving love and in our
blunt way
we bury the liars and live among the
truth-tellers.