EXPERIMENTALITY: THE FRIENDLY FACE OF POWER?

THE INTERACTIVE NEW MEDIA AS TOOLS OF

DISCRETIONARY GOVERNANCE AND RISK MANAGEMENT*

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Abstract

The interactive new media (INM) are a powerful information technology (IT) with contradictory consequences for the nature of work, creativity, and innovation. Digital interactivity shortens both time and distance within and across global networks. It reduces labor time and transaction costs, eases the shift from manual to mental labor, and raises efficiency, productivity, and profits. It facilitates quick responses to changing conditions and new opportunities, and it encourages experimentation, risk taking, discovery, and innovation. IT and INM constitute the technical infrastructure of advanced business and consulting services like advertising, management consulting, and accounting. They are popular components of the globalizing culture industry. But INM are also instruments of discretionary governance and neoliberal governmentality. They have an unaccountable influence on financial, actuarial, cybernetic and ideological forms of power, and they serve to extend the mechanisms of indirect and anonymous social control into everyday life. The INM are widely adopted for purposes of discretionary governance and risk management, but tend to escape autonomous social and democratic regulation. The paper examines the effects of INM on small project teams as well as on aspects of neoliberal experimentality such as informalism and flexibility at work, the hacker work ethic, social networking, and techno-libertarianism. The conclusion reconsiders the intrinsic tension between neoliberal experimentality and governmentality.

Key words:

interactive new media
financial, actuarial, cybernetic, ideological controls
intellectual labor and consulting services
globalizing culture industry
neoliberal experimentality vs. governmentality

INTRODUCTION

Experimentality – the spirit of discovery and experimental pragmatism – stretches across the spectrum of human activities, from trial and error in everyday life to scientific experiments in neuroscience and physics. In between, there are countless types of experimentality such as the the bricolage of children's play, the improvisation in jazz and the exploration of new forms in architecture, painting, music, and dance, as well as the excitement of betting, gambling, and taking risks in the stock market and the great expectations firing up entrepreneurs starting a new business. In many of these settings, experimentality has the quality of an unfinished process, of an ongoing project that is perpetually under construction or "permanently beta". This paper focuses on a specific episode of experimentality in the growth of information and communication technology (IT) in the last 20 years, namely the interactive new media (INM) and their network-like organizational structure. Based on the rapid development of computer hardware since the middle of the 20th century, the INM and their software technology (also called multimedia or digital media) grew out of the creative fusion between digitalized video, audio, and graphic capacities of film and television and the constantly expanding interactive capacities of the Internet.

But the spirit of experimentation can also be found in its conceptual twin, governmentality, that is, in the will to dominate and control. According to Foucault (2008, 193), neoliberal governmentality in the U.S. is a form of indirect control that seeks to facilitate and maximize the expansion of the neoliberal economy and assumes the role of a "major economic-political alternative" and a "widespread movement of political opposition within American society". Thus, the tools of governance and risk management in contemporary post-bureaucratic work organizations like the new media, banks, hedge funds, private equity, investment and venture capital firms are designed to deal with different types and degrees of uncertainty, unpredictability and risk (Power, 2007). They, too, engage in experimentation based on the capacities of information technology, the Internet, and the interactive new media. They are central to the processes of global-local interaction and networking, for example, "the ongoing revolution of information and communications technology" (Beck, 2000:102); the dynamics of "the *technological culture* of our global information societies", Lash, 1999:268; advertising and the promotional practices of the "capitalist consumer culture", Ewen 2001; the "culture-ideology of consumerism" and the "new world information order", Sklair, 2000: 164; 174; and the accelerating compression of time and space due to neoliberal globalization (Harvey, 1989; 1996; 2005; Giddens, 1990; Scheuerman, 2001).

The notion of "interactive media" referred initially to a variety of "two-way" or "all-channel" communication capabilities, in contrast to the traditional "one-way" or "two-step" model of mass media (Katz and Lazarsfeld, 1955/2006). To the extent that cable, satellite, and wireless technologies now allow for instantaneous feedback and communicative interaction, they have superseded these earlier models as well. In the present context, however, the main story is the accelerated pace of innovation and of collective participation in interactive feedback loops among producers, consumers, and users collectively comprising a great variety of networks and markets as well as forms of collaboration, co-production, distributed cognition, social intelligence and collective decision making. The term "social interaction" generally implies mutual causation, i.e. the mutual influence and transformation among interacting subjects in multiple direct and indirect social relationships. Due to the potential speed-up in "response time" and "turn-arounds" made

possible by IT, work and interaction can now be measured in smaller and smaller time units. Digital interactivity dramatically shortens distance and time within and between social networks. It facilitates the commodification and financialization of information, knowledge and other cultural products in the context of the neoliberal transnational political economy. The INM are part of a new service industry, the globalizing "culture industry". They are central to the fast-track production, distribution, and consumption of cultural goods in the form of marketable commodities. This paper is not primarily concerned with the unintended consequences and side effects of the Internet such as cyber crime and viruses. These vulnerabilities of the current Internet may in time be managed by risk governance and security systems. What is to be addressed is the deliberate, built-in capacity of the interactive new media to inform, empower and challenge, but also to deceive and control.

As a new technology and industry, then, the INM can be said to have two faces. On the one hand, the friendly face of the INM represents experimentality, technical innovation and progress with potentially enlightening and emancipatory consequences for human life, participatory democracy, creativity, work, education, and leisure. On the other hand, the INM serve to extend the mechanisms of indirect social control and governmentality into everyday life. The INM can therefore also be described as technologies of discretionary governance and risk management. While such combinations of technology and power used to be called "technocracy" in the last century, they now aspire to integrate technocratic and democratic possibilities in the form of "the new governance" (Bingham, Nabatchi, and O'Leary, 2005; Burca and Scott, 2006; Cohen, 2008). In Google's Wikipedia, itself a prime example of an interactive new medium, the 'new governance' construct is described as follows: "Technology enables individuals to participate in the debate and decision making directly - in a forum no further than their own study. With this new level of connectivity we can create a new type of democracy. Help us to define it here" (http://governmenthttp://government2.pbwiki.com). The most revealing goal of this "new democratic" governance system is to "leverage new social orchestration tools and methodologies to break down traditional social institutions in favor of organic collaboration"(ibid). Significantly, these self-promotional references are silent on the potential tensions between the concepts of 'democratic' and 'technocratic', or 'government' and 'governance'.

Computer technology and the INM should not, of course, be mystified as material commodities that come alive and radiate economic optimism and political aspirations. Rather, they can be interpreted as a technical force that is created by human imagination, labor and interaction for specific purposes. Like many technical innovations, it is potentially disruptive, "revolutionary", and transformative, i.e., a productive force. But once established and entrenched as a privately owned or governmental system of production and control, computer technology and the INM may become part of the "social relations of production", i.e., a source of social, economic, ideological and hegemonic power. Thus, when viewed in terms of a simplified historical trajectory, a transformative technological invention at time 1 may come into conflict with its own hegemonic effects and consequences at time 2. But it would be capricious to see the new computer technology or the INM themselves as agents or active subjects (such as Latour's, 1999, "actants" in an "actor-network"). On the contrary, their fate and "value" are intimately tied to the strategic political and economic interests of agencies and corporations within a complex, hierarchical market or "system-of-use" (Rosenbloom and Christensen,1998).

Since the INM are an integral part of the Internet-based IT, let us pre-emptively raise the time-honored question of "who guards the guardians", in this case, who controls the Internet that has

become a virtual control technology in its own right (Abbate, 1999; Mayo and Newcomb, 2008)? Initially, Lawrence Lessig (2000) had argued that the Internet "code" is a form of law in cyberspace that is implemented by formal protocols built into the technology itself (see also Galloway, 2005). "Creativity flourished there because the Internet protected an 'innovation commons'" (cited from an anonymous review of Lessig, 2001, The Future of Ideas, published on Lessig's blog). "The Internet's very design built a neutral platform" facilitating a wide range of experimentation. But "this structural design is changing both legally and technically...powerful conglomerates are...using both law and technology to 'tame' the Internet....innovation, once again, will be directed from the top down, increasingly controlled by owners of the networks, holders of the largest patent portfolios and, most insidiously, hoarders of copyrights"(ibid.). This fateful combination of technical, economic, and legal forces demonstrates how computer programs and their legal trademarks can restrict the freedom of ideas in cyberspace (Vaidhyanathan, 2001; Klein, 2000; Lessig, 2004).

Yet it is not only the dynamics of steadily rising *economic* concentration that "uses technology and the law to lock down culture and control creativity" (Lessig, 2004; also 2008). As Goldsmith and Wu (2006) argue from a *political* perspective, there is now "a new kind of Internet - a bordered network where territorial law, government power, and international relations matter as much as technological invention" (Gannon, 2007:456). Indeed, it seems that especially in the transnational context, "technology's influence over the law is more important than the law's influence on technology" (ibid).

In a spirited review of Lessig's "Code", Karen Coyle (2000:2) argues that "what we can and can't do [in cyberspace] is governed by the underlying code of all the programs that make up the Internet, which both permit and restrict. So while the libertarians among us rail against the idea of government, our freedoms in cyberspace are being determined by an invisible structure that is every bit as restricting as any laws that can come out of a legislature, legitimate or not. Even more important, this invisible code has been written by people we did not elect and who have no formal obligations to us, such as the members of the Internet Corporation for Assigned Names and Numbers (ICANN)". However, the so-called "root authority" of the central server that determines the ten-digit Internet Protocol (IP) address of the Uniform Resources Locator (URL) and connects every domain server and its personal computers to the Internet (or "world wide web") - this root authority, vested in ICANN, remains under U.S.government control. And while the idea of central control by a supposedly accountable democratic government may sound reassuring, any public authority can clearly be misused for purposes of wire-tapping, snooping, and suppression, as the case of China's censorship of domestic or "imported" Internet (YouTube) content demonstrates, not to mention the provisions of the U.S.Patriot Act after 9-11-2001. All that is needed is the capacity to block access of dissident voices and unwanted content by erecting an invisible, technical "firewall" based on the granting or withdrawal of an IP address or an access code.

Thus, the interactive new media are not only doing double duty as a material technology and a social technology. They have also vastly increased and accelerated the internal and external social networking capacity of contemporary societies and thus dovetail with, and reinforce, the ongoing expansion of global-local interaction. This process has clearly positive consequences insofar as it expands the cultural horizons of isolated groups or isolationist politics and may help to reduce and mediate the perceived traits of strangeness of "foreign" peoples and "otherness" of "exotic" cultures. But the new media also have the potential of creating new simulated, parallel, virtual (and sometimes closed) universes of hegemonic ideological control, especially for

disenfranchised groups and minorities. As such, the INM serve to consolidate and expand existing disparities of power. This potential enables the exercise of mediated, indirect, and anonymous control of whole populations in the form of paternalistic or technocratic governance, a topic first broached by Foucault (2007a; 2008; see also Garland, 2001; Connelly, 2006). To be sure, these strategies are not always successful due to more or less effective "critical theories" and perspectives, the counter-hegemonic projects of social and political movements (Kahn and Kellner, 2006), and new framing strategies such as "democratic experimentalism" (Dorf and Sabel, 1998) or "empowered participatory governance" (Fung and Wright, 2003). But given the lop-sided distribution of resources and asymmetry of power wrought and worsened by neo-liberal policies of governance, the cost of resistance or social transformation tends to be high. We will return to this issue in the last section of the paper in the context of considering the intrinsic tension between experimentality and governmentality.

The distinction between democratic/progressive and technocratic aspects of the INM does not imply inevitable metaphysical dualisms of freedom vs. necessity or good vs. evil. Rather, it points to the historical result of contestation and counter-hegemonic mobilization by powerful political actors and institutions. Technocratic governance processes, already morally challenged by the destructive implications of authoritarian politics for constitutional democracy and the rule of law, entered a new phase after the end of the Cold War in 1989/91, only half a decade after Orwell's fictionally anticipated totalitarianism of "1984". The emerging IT had facilitated the explosive expansion of capital markets and accelerating capital mobility (Strange, 1990). The contemporary round of neoliberal globalization generated a new set of unusually challenging economic, political, and social crisis conditions variously described as "losing control" (Sassen, 1996) or "the price of inequality" (Stiglitz, 2012) . The U.S.-centered "new economy" of the 1990s (Brenner, 2002; Henwood, 2003; Sennett, 2006) responded to the contemporary round of neo-liberal globalization with a number of novel versions of financial risk management (Martin, 2007; Power, 2007)). The de-regulated, post-1991 expansion of finance capital in the form of world- wide foreign direct investments surpassed the level of 1913 for the first time in history (Bairoch, 2000; Eichengreen, 2003; Brenner, 2009).

The end of the Cold War, the political and economic restructuring of East European and Latin American reform societies, and the emergence of a "new world order" under US auspices accelerated the competition among the changing post-national and post-industrial political economies, a movement that involved a certain de-institutionalization of established authority relations and the rise of the "network society" (Castells, 1996). New media districts and their start-ups seemed to thrive on the "chaos" of social networks, partnerships, joint ventures, semi-autonomous projects, and seemingly unlimited resources in the form of venture and investment capital (Heydebrand, 2009). Moreover, economic deregulation, soft law, and the continuing rise of the logic of negotiated process such as legal-procedural informalism and alternative dispute resolution (arbitration, mediation, negotiation) facilitated the transformation and restructuring of largely bilateral sets of "international relations" into multilateral, transnational interaction networks and, in Europe, the "open method of coordination" (Trubek and Trubek, 2005). Neo-liberal domestic and foreign economic policies spawned the "unification movement" in international trade, a new "mercatocracy" built on the consolidation of transnational agencies of neo-liberal governance like the IMF and the World Bank (Cutler, 2003: 180-240; Stiglitz, 2002:195-213). All of these developments helped to promote and finance new media production districts in the global triad of the US, EU, Southeast Asia (see also Evans, 1995:94-105 on the

dominant role of information technology in the industrial policies of new developmental states).
It was this kind of macro-context that set the stage for the rise of the INM in the 1990s. While initially an economically limited, even financially negligible phenomenon, the field of INM soon became a technically highly consequential and culturally influential "post-industrial" sector. Business services, the so-called 'advanced producer services' like finance, insurance, and real estate (FIRE services) arguably benefitted the most from the INM. Other prominent advisory services such as advertising, management consulting, and accounting grew in tandem with INM and have grown into large international firms.

To sum up, this paper approaches the INM from the perspective of critical sociology and political economy. It therefore focuses on the interaction among social, economic, political, ideological and technical facets of organizational governance. Formally, these power relations are illuminated by the conceptual framework for the analysis of power provided by Steven Lukes (2005:111). Lukes distinguishes between three levels of power: the capacity of prevailing in actual decisionmaking, controlling a given agenda, and deciding what is to be decided. The crucial element at this third level is what Gramsci called "hegemony" or hegemonic power, the capacity to avert conflict, grievances, and resistance by the "securing of consent" of the governed, a process involving ideological domination. A substantive theory of power and domination, in turn, must necessarily be framed by the historically changing relationship between various forms of economic and political power, for example, between neoliberal capitalism and the state, complicated by the military imbalance of power among post-1991 nation states.
Specifically, then, this paper seeks to sharpen our understanding of the interactive new media in the context of the contemporary round of globalization since 1991. This context includes the potential transformation of democratic government into discretionary governance, a type of informal, flexible and unaccountable regime that is neither elected, appointed, and contractually limited nor constitutionally legitimated.

In the following, I introduce the argument via some well-known examples of the two-faced character of the INM. I briefly consider the nature of control models, emphasizing financial, actuarial, technical and ideological methods of risk management. I then turn to a more detailed consideration of the dynamics of indirect, mediated, and anonymous domination by the INM. Here, I focus on the interpenetration of information technology and social structure, i.e., the material and symbolic internalization of formerly bureaucratic rules and regulations by IT, and the resulting transformation of established work and authority relations into informal social networks of work and control in high-tech settings. Second, based on an empirical study and "culture-industrial" critique by Christine Resch (2005), I examine the crucial role of consultants and "knowledge experts" in using and promoting computerized management control technologies and the INM. Finally, I analyze the notions of 'experimentality' in the context of the new media "hacker ethic" and a neo-libertarian life style of social networking. In this way, the paper seeks to contribute to the "faces-of-power debate"(Shapiro, 2003:53; Lukes, 2005:112) that has been hovering at the intersection of global-local interaction, the new media, and the informalist logic of negotiated process rationality as a form of legal governance (Heydebrand, 2003).

THE TWO-FACED ROLE OF THE INTERACTIVE NEW MEDIA

To document and specify the friendly face of "fun and games" vs. the ominous face of "power and governance" in each of the new media forms would be an enormous task transcending the limits of this paper, but some initial examples are obvious and may suffice. The most important one is the "world wide web" (www) itself. This invention provides an unprecedented degree of access to a potentially unlimited network of actors. It has vastly expanded the capacity for high-speed communication and interaction across a wide range of geographic scale and socio-economic scope, including social movements and NGO's. But it has also disproportionately expanded the capacity of powerful actors such as national governments and transnational corporations to pursue their interests and purposes. It is, therefore, of relatively greater value to them than to the average citizen or individual consumer. This follows from the well-known fact that in the creation of a new market, the construction and expansion of an infrastructure of roads, transportation, and communication is of greatest tangible value to those organized corporate interests that are ready to exploit the provision of public goods for private gain. While both producers and consumers are deemed to be formally equal, their de facto substantive difference and inequality benefits one side more than the other.

A suggestive case illustrating this disparity of power is a "test" or "Online Age Quiz" recently devised to determine one's "real age", but largely for the benefit of drug companies like Pfizer, Novartis, and GlaxoSmithKline (Clifford, 2009). Test results revealing information on health problems, life style and family history of millions of people are funnelled to drug companies who then send the participants marketing messages by e-mail. The investment in "RealAge" membership establishes and cements a direct link between drug makers and potential patients, encouraging them to" take their health into their own hands". In this way, "RealAge" and the drug companies are, in effect, by-passing the medical profession and influencing the so-called "doctor-patient" relationship (as in: "call your doctor and ask whether such-and-such a drug is good for you").

Another typical use of the INM is associated with the conduct of public relations by private corporations as well as government agencies that seek to manipulate public opinion by producing favorable images of their mission and putative accomplishments. This effort goes pro-actively beyond advertising in that it gives a decidedly positive interpretation or "spin" to certain policies, practices, and events in the interest of improving the public image of the "open society", the "free market" and "democratic government" (Ewen, 1996). Thus, under exceptional conditions of transnational exchange, global trade or the effort to justify military action and wars, the commodification and export of cultural goods like "enlightenment", the "rule of law", and "democracy" are being placed in the best possible light. Not surprisingly, these cultural commodities all meet the definition of a crucial aspect of "ideology", namely the one-sided, partial, and distorted representation of contested aspects of "social reality" (see also Herman and Chomsky, 1988, on the "propaganda model").

What, then, are the two faces of the interactive new media? Let us look more closely at the example of email. The speed, efficiency, and low cost of exchanging messages by email and email attachments shortens the interactive distance between people world-wide. The response time between messages is potentially very short and facilitates information-sharing and decision making. Except for the likely consequence of being inundated by hundreds of unsolicited and

unwanted messages from advertisers and promoters of various businesses, also known as "spam" and "junk", few users will deny the immense benefits of an invention like email. But these benefits are unevenly distributed. As a marketing option, e-mail disproportionately benefits corporate senders of junk mail. It facilitates the exploitation of easy access to consumer lists by sending repeated, often unwanted and hard to "unsubscribe" messages. Moreover, the electronic trail left either via printed messages or in the memory of the computer's hard disk are relatively more valuable to big business, "Big Brother" or "Big Sister" than to any one individual user.

Another example is search engines like Google which facilitate and accelerate e-commerce like shopping, banking, and getting consumer-relevant information. But they also lock in customers, forcing cafeteria-style marketing and consumption choices, and complicating and discouraging returns and exchanges of unwanted or defective goods. In addition, they facilitate observing, recording, tracking and quantifying consumer behavior and preferences as well as operator behavior, anticipated by Shoshana Zuboff's "smart machine" and "informating".

Internet forums like telephone, wireless or video conference calls facilitate group, associational and organizational communication and interaction in virtual space, but are also capable of tracking participation and membership behavior. Chat rooms allow one to explore unhindered communication and unconventional interaction, but offer opportunities for police entrapment and criminal prosecution. Social networking web sites like Facebook, Twitter, or Linked-In facilitate information sharing and exploration of relationships, but may also create a captive audience of pseudo-members and pseudo-participants of virtual communities involving "pseudo-social interaction" formerly nurtured in radio or television-based programs that had been addressing members of "lonely-hearts-clubs" and "the lonely crowd" (Riesman, 1953; Croteau and Hoynes, 2003).

Further enhancing social networking and buoying the culture of instant communication has been the invention of gadgets like wireless laptops, I-pads, I-pods, Smartphones and I-phones with cameras, maps, GPS, and email capacity. But, apart from electoral politics or tying young people and students ever more tightly into new media markets, has it honed their collective intellectual and critical capacities or their desire to humanize and transform, rather than merely reproduce, their world? To be sure, electronic literature a la "Kindle" or on-line music, video and film provide access to cultural goods and educational information. But I-Phone memories and connections also facilitate collective cheating on academic tests and lend themselves to tracking tastes and preferences, framing choices, and targeting consumers of the culture industry for purposes of advertising, market research, and outright marketing.

In the case of interactive video and computer games**,** the enjoyment of time-out and relaxation, or possible training in useful skills like driving or flying, must be weighed against the social costs of concealing or suppressing boredom, neutralizing dissent, and generating alienation. Similarly, in the evolving "open source software" (Linux) used to modify and expand existing operating systems, the exploration of alternative programming possibilities and contributions to open source programming is counter-balanced by fixing, constraining and channeling programmed links so as to trap consumers, forcing narrow choices and options, undermining competition, and creating relations of dominance and dependence. The animosity and litigation between Microsoft and its "open source" competitors speaks volumes about this process.

Finally, the advertising industry is steadily contributing to the progressive commodification of human relationships and experiences. A typical example are the TUMS commercials showing spaghetti or chicken wings attacking unsuspecting restaurant visitors, who within seconds after

taking TUMS, can suddenly enjoy their food. Sophisticated interactive new media technologies can represent the animation of material objects and the commodification of human relationhips. Thus, contemporary advertising has perfected the theory and practice of "commodity fetishism", i.e. having material objects assume human characteristics and speech, turning people into animated things, or changing the social relationships between people into the material relations between objects, and vice versa. Commodification is thus the ultimate form of objectification and reification that turns almost everything into marketable commodities.

Clearly, some of the negatives are more serious and consequential than others. But can they be dismissed as merely incoherent ruminations of a disgruntled curmudgeon, or are they valid critical questions? While some aspects of the new media help to open and expand the social and cultural environment, others are emblematic of the invasion of privacy and the unwanted intrusion into personal and intimate space. In almost all cases, however, the sophistication of contemporary IT has made it possible to expand and refine the surveillance of people and public spaces by governments and the police, banks, and corporations (see, e.g., Lyon 2003:163-64 on the "co-construction" of information technology and social processes and the "wholesale computerization of surveillance"). A blatant example is the controversial powers of the so-called U.S. Patriot Act passed after 9-11/2001 (Prabhat, 2008). The Act amounts to declaring a permanent state of exception by the then incumbent U.S.national administration and continues today. It justifies and provides legal cover for the President's "authority" to decide who is an "unlawful enemy combatant" and other forms of labeling (see also Agamben, 2005; Bellina and Bonifazio, 2006; Bernstein, 2005; Gross, 1970). At issue is, inter alia, not only the implicit suspension of constitutional protections for selected categories of people deemed potentially dangerous by the National Security Agency, but the active cooperation and collaboration of telephone companies and other communication services with the pro-active and pre-emptive surveillance practices of the U.S. government. Not incidentally, the Act grants legal protection of these companies against potential law suits. Related examples come from the financial industry where de-regulation and legal ambiguity may border on corruption and crime such as stock market manipulation, the arbitrary allocation of annual bonuses, insider trading, money laundering, off-shore transactions and tax evasion (see, e.g., Tillman and Indergaard, 2005; Godechot, 2008; Morgensohn and Rosner, 2011).

FOUR TYPES OF CONTROL AND RISK MANAGEMENT

A striking aspect of the globalizing risk society is the "naturalization" and "normalization" of emergencies and exceptions. At a time when states of exception appear to become permanent, even specially targeted forms of crisis management can seem to be routine. Managerial controls tend to present themselves as natural, impersonal, common sense and inevitable courses of social action. Moreover, "objective conditions", a theme from technocratic theory, are typically portrayed as constituting a "natural" limit to democratic decision making that must be "realistically" recognized and respected as such even if it transcends legal and constitutional constraints. Crisis episodes and states of economic emergency, especially when defined as such by powerful decision makers, tend to be used to justify exceptional and sometimes draconian measures in which the cure is worse than the disease, but that are difficult to question by non-experts (Scheuerman, 1999; 2000; also Agamben, 2005; Klein, 2007; Sarat and Clarke, 2008). In spite of their frequently political character, emergency decrees minimize or seek to eliminate

"political" (i.e., contestable) definitions of problems in favor of scientific, technical, economic, or administrative determinations. Such actions are considered objective and urgent, and therefore less contestable or uncontestable due to the "need" to by-pass long-winded democratic deliberation and decisionmaking (recall Karl Mannheim's insight that "the nature of bureaucratic conservatism is to turn all problems of politics into problems of administration"; or Habermas' (1970:81) notion of "planning" as strategic, "purposive-rational action of the second order" that "aims at the establishment, improvement, or expansion of systems of purposive-rational action themselves"). In short, the routinization of risk management involves a process of de-politicization or de-democratization based on the hegemonic power to define aspects of social reality, that is, the capacity to frame the questions of what must be considered true or false, right or wrong, natural or social, normal or deviant (see also Bourdieu on "naturalization" and Foucault, 1978;1991 on "normalization"). The production and application of techniques of risk management, crisis management, and conflict management thus become central tasks of discretionary governance in the globalizing "risk society". The following section offers a brief description of four major forms of control and risk management.

Financial controls

Models of financial control are central to the financial services industry, from accounting, banking, investment, and stock markets to credit ratings, savings and loans as well as insurance, re-insurance, and real estate mortgaging. The power of financial control methods rests on the value attributed to efficiency, productivity, profitability and creditworthiness. Their efficacy relies on the capacity of near-instantaneous transfer of information, decisions, and funds. The significance of computer-based financial control models reflects the rising international dominance of finance capital over commercial and productive capital (Eichengreen, 2003;2011). Electronically connected international capital and credit markets are therefore central to the operation and viability of transnational corporations, national governments, and the international agencies of global governance. Typically, they are thereby also raising the vulnerability of the global financial system via fast-moving contagion, chain reactions, and crises. Monetary and fiscal policies promulgated and implemented by the World Bank and the IMF seek to establish and control the viability and stability of the global political economy. They create incentive regimes for national economies that may, in turn, aggravate intra-national, inter-regional, and international competition and inequality. At the same time, they can impose punitive economic sanctions on "uncooperative" nation states such as Cuba, Iran, and North Korea (Stiglitz, 2002; 2012; Martin, 2007; Eichengreen and Park, 2012).

At a more local level, credit ratings and actual credits , loans and mortgages, fixed vs. variable interest rates, credit and debit cards are well-known aspects of the heretofore de-regulated financial management of domestic economies, even though they extend beyond national boundaries (Martin, 2002). Local banking rules regulate the limits on money transactions by consumers, demanding compliance with detailed verification procedures such as ID's, PIN's, and passwords. While the automatic teller machine (ATM) eliminates long waiting lines for the few remaining bank tellers, the actual financial transactions are managed by internal automatic procedures and external surveillance and may incur charges, fees, and fines for clients who use the ATM's of other banks.

The result of these developments is that monetary control models have effectively superseded

legal and bureaucratic controls. Financial controls are widely used by government agencies, financial service industries, and central banks such as the Bank for International Settlements (BIS) which oversees conformity to the controversial rule that banks must maintain a certain margin of their capital in reserve, thus being able to hedge against financial meltdowns. These models inform management control technologies and constitute near universal methods of regulating transaction costs, efficiency barometers, and other "mechanisms of governance" (Williamson, 1996).

The intrinsic instability of neoliberal financial markets has generated two complementary strategies which Michael Power (2007) has called the "logic of opportunity or enterprise" and the "logic of risk management or 'auditability' ". The risk-happy, experimental spirit inherent in emerging or newly created opportunities must be continuously managed, audited, and regulated. Risk and opportunity arise from from financial volatility, speculation, and hedging or betting against the market. A key element is profitable destruction, the neoliberal version of Joseph Schumpeter's "creative destruction". Hedge funds, investment banks, and financial entrepreneurs make their creative or destructive decisions based on the estimated profitability of outcomes. Thus, the 'logic of opportunity' relies on the random or periodic occurrence of crises and disasters, or else, on the creation of crises like flooding the market with high-yield "junk bonds" (e.g., Michael Milken, 1980s) or betting against foreign currencies (e.g., George Soros' bet against the British pound in 1992 which netted him over a billion dollars). The recent financial crisis of 2007-10 involved risky financial instruments like subprime mortgages, derivatives and collateralized debt obligations (Morgensohn and Rosner, 2011) . By manipulating stocks and betting against their own products and futures, savvy investors benefit from periodic recessions and their consequences like unemployment, bankruptcies, and foreclosures. In management consulting circles, the exploitation of profitable opportunities is known as "thriving on chaos" (Tom Peters), or turning "the inevitability of disaster into an investment strategy" (Gladwell, 2009, 51-75).

The obvious downside of these strategies is that experimentation and risk taking can be "excessive" and financial markets "irrationally exuberant", as Alan Greenspan, the former head of the US Federal Reserve, put it. To counteract, control, and correct for the risk-happy, enterprising logic of opportunity, the logic of risk management has to go into action. In his optimistic book on "Organized Uncertainty" which appeared just before the onset of the recent "Great Recession" of 2007-10, Michael Power (2007) describes the rise of internal corporate and financial control strategies. They include the standardization of risk management, the invention of operational risk, the need to protect corporate reputations, logos, and brand names, and the "auditability" of risks, i.e., the institutionalization of corporate self-regulation and risk governance by means of continuous internal audits. This strategy of self-control conforms to the new ethos of corporate or personal responsibility as a response to the challenge of turbulence and uncertainty (O'Malley, 2004; 2007; Rose and Miller, 2008; Shamir, 2008).

Actuarial methods of prediction and control: the actuary as an informed risk manager.

Actuarial strategies have a prominent place in the insurance industry by using the demographic method of "life tables". Life insurance, property, automobile, health and other risk insurance (and re-insurance) are based on quantitative data on consumer's age, life expectancy, education, occupation, income, and credit history (Simon, 1987; 1988; Baker and Simon, 2002). This applies to both individuals and the socio-economic population categories they belong to. Just like the

"profiling" of targeted citizens by the police, "red-lining" is used by banks, real estate mortgage lenders, and investment, savings and loan institutions to allocate risk, premiums, "sub-prime" loans, or to deny loans. Such information is also used to estimate statistical risks and establish criteria in terms of which, for example, unmarried or younger persons (under 26) are judged to be less reliable, in the aggregate, than older and married ones and therefore having to pay higher premiums. Automobile accidents and actual driver behavior are used as basic indicators, e.g., # of tickets received from traffic police, types of violations, even grades in college for young drivers. This intrusion into privacy is reminiscent of the "Fordist" spying on off-the-job worker behavior and life-style through private home inspections in the early years of mass production.

Similar procedures have been applied to crime control as well as risk assessment of a wide range of behaviors and conditions that might be considered deviant, abnormal, or illegal (Simon, 1993; 2007; Garland, 2001). Based on Frank Knight's fruitful analytical distinction between uncertainty and risk, efforts to predict and control the future have shifted from the binary opposition of "certainty vs. uncertainty" to the idea of estimating degrees of risk, i.e., the probability of certain events occurring or not occurring. The relative magnitude of the risk factor or "expectancy value" can then be used to decide on a possible avoidance of, or intervention in, the course of events (Steele, 2007:1323; but see Harcourt, 2007).

An important element in the conceptualization of the nature of "risk and responsibility" (Giddens, 1999) is the question to what extent taking risks is an individual or a collective liability. As O'Malley (2007:1326) points out with respect to "risk-based government" and "governing through risk", "...neo-liberal governments are displacing those that deploy state-centered ways of managing risks, as with social insurance and social security. Neo-liberal regimes seek to make individuals and the private sector more responsible for risk management". Moreover, "insurance converts risks into monetary forms (premiums and benefits). It spreads risks rather than reduces them, and it is interested in individuals mainly as members of risk categories", for example, "different gender and racial groups" (also Ericson et al., 2003). Once placed in a certain risk category, however, it is hard for those tagged to extract themselves from the claws of classification.

Cybernetic technical controls

In today's economy, mechanical "governors" on machines, trains, and trucks to control maximum speed have been replaced by digital control mechanisms and the programmed capacities of IT to enable and regulate cybernetic decision making. Within IT, software programs were originally designed and "written" by programmers (see, e.g., Kraft, 1974 and Greenbaum, 1976 for descriptions of the early work culture of programming and "de-bugging"; and Howard and Jones, 2004 for observations on contemporary "on-line" systems) . While work related to the production and use of computer hardware can still be seen as "industrial" and "material", software production now involves "immaterial" or "post-material" services that produce information and shape the production of knowledge (see also Neff, 2012, on the new category of "venture labor"). Since the mid 1990's, software technology has been available, transferable and adaptable in a global context. It is highly flexible in its application even though its own internal symbolic structure is fixed, standardized, and hierarchical.

Access is typically controlled through quasi-contractual usage agreements, codes, ID's, user names and passwords. Content can be encrypted and governed by specified codes that provide

access to data and claim to ensure security. Controls governing secret and "confidential knowledge" tend to be based on "intelligence" software such as censored material, secrecy classifications of personnel and documents, and the requisite data collection hardware**.** Each of these areas has, of course, its own "security" experts and consultants who are in the lucrative business of using, and recommending the use of, IT and INM for these kinds of control purposes. It goes without saying that in the "age of security" (or insecurity, as the case may be) since 9/11, the relevant supply industries have been booming. The technical literature on cybernetic control systems, complexity theory, and self-observing or second-order cybernetics is too voluminous to even begin to document here.

Ideological controls.

The main function of ideological forms of control is the strategic production of consent and cooperation among workers and management. In small work groups, cooperation seems "natural" and "normal" and is usually taken for granted. Conflict and dissent are typically suppressed by appeals to solidarity. But as small start-ups and project teams become larger organizational units, their grown "organizational culture" - the shared understandings, norms, and practices of employees in a given workplace - is superseded by the strategic promotion of a "corporate culture". The latter aims at the communication of the "mission" of the enterprise and may still portray it as a "family" or a unique community of interest. But spontaneous initiatives, participation, and incentives can no longer be taken for granted and tend to be replaced by individualized forms of compensation and regulation. At higher managerial levels, this is the origin of annual bonuses, often focused on the individual contribution to corporate profit margins. Ideological appeals as a "cultural" or "collcctive" mechanism of control are vulnerable to the high frequency of organizational restructuring in larger new media organizations. Short-term contracts, rapid turnover, frequent reorganization, and the pressure for quick profits render such firms unstable and short-lived. In the case of Manhattan's Silicon Alley, for example, hundreds of new media start-ups would go through one or two rounds of venture capital funding and then disappear. In the 7 years between 1995 and 2002, the whole district had about 5000 start-ups, only about 500 or 10% of which survived the bursting of the bubble (Heydebrand, 2009) .

THE DYNAMICS OF INDIRECT, MEDIATED, AND ANONYMOUS CONTROL

To concretize the discussion of the nature of mental labor in the context of contemporary work organizations, let us explore in more detail the dynamics of control that are integral to IT and the INM. I first address the mutual interpenetration and framing relationship between IT and its surrounding social structure. I then discuss the role of contemporary management consulting or "consultant capitalism" as a crucial link between social structure and new media technology. Finally, I engage the logic of negotiated process in the context of discretionary governance and "experimentality", a mind-set that has an affinity with the IT and INM-based "hacker work ethic", a neo-libertarian and highly networked life style, and the tenets of the 'new governance' debated in certain legal circles and labor law (Stone, 2004; Cohen, 2008).

The Mutual Interpenetration of Information Technology and Social Structure.

In the context of this paper, two aspects of the relationship between information technology and social structure are of special interest: the solidification of ideas and cognitive labor in the form of labor-saving technology, and the transformation of organized human labor itself by the corporate use of IT and the new media. Both illustrate the familiar idea of creative activity as the externalization of a "productive force" in the form of an objective outcome, and the subsequent domination of the externalized object over the human actor. As is well known from the tale of the sorcerer's apprentice, this "unhappy" outcome is not a universal process, as Hegel assumed, but the result of the producer's loss of control over the product under certain specific historical conditions of commodification and expropriation. In other words, machines are the product of imagination, creative design, and labor. But once produced, they perform the mechanical or cybernetic part of human work, thus saving labor time, wages, and transaction costs. However, they are also ratcheting up the relative dependence of the worker on the machine and tend to "replace" manual and material forms of human labor by intellectual and immaterial ones.
It has long been a goal of the historical project of social democracy to prevent this loss of control by labor, or else to regain it so as to re-establish the original autonomy of the craftsman-worker-producer. But just as political democracy had to be energized by the tenets of social democracy to become socially effective beyond its promise of individual civil rights, social democracy must now be augmented by economic democracy to adequately regulate the power of capital and to allocate equitably the technical and financial benefits of IT and INM. **Endnote 1**

IT and INM as Solidified Results of Human Labor.

The notion of machines as the solidified outcome of prior work, labor, production, and control in the context of INM and the Internet goes back to the idea of the labor process and technical innovations as "productive forces" that revolutionize capitalist social relations of production based on the control of labor and an established technology. Apart from the actual production of commodities like manufacturing, an intrinsic "function" of labor beyond producing commodities is to produce labor-saving technologies which, in turn, help to produce better and more efficient labor-saving technologies. In this way, technical innovations are continuously introduced in order to raise the productivity of labor and to generate "relative surplus value" and, ultimately, profits, whereas wages are normally held constant at, or barely above, the level necessary for reproduction. Historically, this process is thought to change the "organic composition of capital" in the direction of the increased dominance of technology over the labor process and the gradual displacement of human labor itself, resulting in periods of long-term or "structural" unemployment or a bifurcation between cost-effective, low-wage labor and strategically placed pockets of high-wage labor. Solidification is thus an organic metaphor for the programmed structure of the Internet and IT as forms of "dead labor", in contrast to the surrounding informal, flexible, experimental and provisional structure of social networks which represent the remnants of living labor in this post-industrial sector. The metaphor is, of course, also applicable to the opposite processes of melting or evaporation as in the familiar imagery of "all that is solid melts into air" (Marx; Berman,1988). **Endnote 2**

INM *and Informal Social Networks*.

The second aspect of the interpenetration of IT and social structure concerns the transformation of work itself by the corporate use and control of intellectual labor in the form of IT and the new media (see also Sohn-Rethel, 1976; Negri, 2004). IT and INM are restructuring traditional work and authority relations in ways that are somewhat of a paradox. On the one hand, the acceleration of the labor process through high-speed information and communication technology is transforming direct, immediate, "material" personal interactions and relations into indirect, intellectual, "immaterial", and impersonal ones. External, bureaucratic rules involving, for example, hiring and firing, traditionally transmitted and enforced by a managerial hierarchy of supervisors and officials, can be translated and written into the computer software in the form of the technical language of protocols that follow their own impersonal logic. Thus, office work involving the use of PC's and INM can be performed without ever coming into direct, personal contact with customers, clients, or consumers, notwithstanding the "interactive" quality of INM. Even the interaction with an office supervisor can be highly impersonal, as epitomized by a famous *New Yorker* cartoon: a bedraggled employee facing a "manager" in the form of a computer screen is told in monotone speech: "I'm sorry, but we will have to let you go". A pink slips is then dispensed automatically to comply with the legal protocols of firing employees.

On the other hand, the location of rules and procedures *inside the technology,* e.g. in the computer software, permits a degree of de-formalization and de-bureaucratization *outside the technology* by activating and encouraging informal social and work relationships among those who operate it. Thus, the de-formalization of social relations in small work groups and project teams operating the technical apparatus may entail the relative attenuation and abolition of a formal division of labor and hierarchical authority relations (see Heydebrand, 2013, on "post-bureaucratic organizations"). It may also facilitate a degree of self-organization in the form of informal and semi-autonomous social networks and project teams which internalize supervision and control with the help of appropriate software. Technical rationalization, standardization, and structuration thus permit, within the limits set by the organizational power structure, the development of structural flexibility, de-structuration, experimentality, and innovative "intellectual" initiatives (see also Sandberg, 2013). This was the case, for example, in small start-ups in Silicon Alley (New York) where self-organized project teams often represented "the firm", thus combining hierarchical, heterarchical, and interactive dimensions of control (Girard and Stark, 2002; Heydebrand and Miron, 2002; Heydebrand, 2009; Neff, 2012).

The paradox of simultaneous technical formalization and social informalization in digitalized production and services may play itself out in different ways, depending on the organizational setting. In large-scale digitalized manufacturing and services, this de-formalizing effect may be smaller or absent. For example, in the "mass customization" of automated Nissan car manufacturing or in the computer-networked reservation centers of American Airlines, the social relations of work are still permeated by the Taylorist features of managerial control, albeit increasingly in the form of impersonal or symbolic communication (Head, 2003; see also Harrison, 1997, on the "dark side of flexibility"; and originally Marx, on the distinction between "formal" and "real subsumption of labor under capital").

Still another type of setting is exemplified by the structure of work in individualized and customized producer services like management consulting. Here, the formal rules and procedures

of the service bureaucracy and its communication and filing systems are *embodied* , as it were, in computerized systems and in the "language of systems development" (Orlikowski, 1988; 1996). Thus, the logic of IT transforms an earlier type of logic, namely the external rule system of bureaucracy, by internalizing and incorporating it. As the theoretical focus of the new IT model expands by incorporating the interactive and dynamic relationship between IT and its organizational framework, its activation and reproduction (together with change, experimentation and innovation) appear to occur simultaneously and continuously, a production process called "permanently Beta" (Neff and Stark, 2004; Neff, 2012) or "the perpetual Beta" (O'Reilly, 2005) This new constellation is now captured by the notion of "managerial control technologies" (see the empirical examples in Lave and Wenger, 1991; Pant, 2001; Contu and Willmott, 2003; and Mouritsen and Thrane, 2006).

In sum, contemporary information and communication technologies are internally highly standardized while at the same time giving the user a great deal of flexibility and options. IT has symbolically incorporated the external control structure of previous forms of work organizations into the technical systems themselves, especially hierarchical bureaucratic supervision and control, division of labor, work regulations, and formal legal and accounting rules that are now enacted automatically. In that sense, they function like instrumental mechanisms of governance and cybernetic decision making. At the same time, however, the informal, socially networked structure of IT-based labor processes is being condensed and may historically be shrinking to the point where actual human involvement in production, maintenance, control, and oversight is approaching minimum levels.

Thus, working with IT and INM both as producer and consumer or "user" illustrates the changing technical and value composition of capital which expresses itself in the growing inverse relationship between technology and labor to the point where technology becomes more and more encompassing and dominant. One crucial consequence is a trend toward longer-term structural unemployment, the relative decline of social welfare and public assistance programs, and gradually rising levels of public and private indebtedness (Mattick, 2011).

It should be obvious that this process must not be mistaken for a version of *technological* determinism. On the contrary, it is a key *economic* contradiction of the neoliberal mode of production. It represents the rise of the productivity of labor due to science, technology, increasing economic and corporate concentration, and accelerating managerial restructuring in tandem with a shrinking labor force. The intended result is an increase in the relative surplus value and profitability of production and services in certain tertiary sectors of the world economy, thus aggravating the uneven distribution of wealth within and among globalizing regions (Stiglitz, 2012).

The Rise of Consultant Capitalism.

The new indirect and anonymous control embedded in the INM is a specific form of techno-ideological domination that involves the growing influence of "experts" and consultants who use INM in the context of "consultant capitalism" (Resch, 2005). This is not a question of management consulting becoming a major source of control over INM. Rather, it represents the universal use of INM by the consulting industry as instruments of marketing, investment, risk management and corporate governance. While some operational and managerial functions are performed "in-house", others are "out-sourced" (sub-contracted), depending on cost and

availability.
One may start by asking: what do consulting firms really offer corporate management? Nominally, they are service providers and offer skills in project management, systems engineering, systems development, support services, as well as information and risk management. All of these services typically involve the products and technologies of INM. Consulting is part and parcel of the fast growing complex of "business services" or "advanced producer services" such as financial investment, advertising, accounting and management consulting. Some of these services are performed by the "Big Four" (PriceWaterhouseCoopers; DeloitteToucheTohmatsu; Ernst & Young, and KPMG, short for Klynveld, Peat, Marwick, and Goerdeler).
In practice**,** these huge international accounting firms act as creative consultant entrepreneurs who are in the lucrative business of producing, teaching, coaching and controlling management services as well as helping to sell the latest products associated with IT and INM (Lash and Wittel, 2002:1999). Typically, their corporate counterparts are certain members of the management team such as Chief Executive Officer, Chief Financial Officer, Chief Operations Officer, and Chief Risk Officer. The relative importance of these positions has changed in the past quarter-century due to the growing financialization of national and transnational economies. The internal recruitment of CEO's, for example, has shifted from the area of operations (COO) to that of finance (CFO) (Fligstein, 1990).
Management consulting firms also produce and legitimate the ever "new" management models appropriate for different industries. Moreover, individual "creative" consultants and accounting firms (like the now defunct "Andersen") may, under certain opportune conditions of informal corporate networking, be drawn into the vortex of collusion and fraud. As Altvater and Mahnkopf (1999:159) put it, "the boundaries between informal activities and extralegal or criminal conditions are fluid". Thus, accountants may, together with financial advisors, lawyers, and other service providers, become informal partners in financial corruption and corporate crime (see, e.g., ENRON.con, 2004; Tillman and Indergaard, 2005).
Among observers of the INM field, Scott Lash and Andreas Wittel (2002) were among the first to draw attention to the shift from content production to consultancy and interactive communications. In the context of an intensive case study of *AMX Studios,* London's iconic new media company, the authors show how the INM first engendered the rise of INM consultants, then the growth of "new media agencies" which offered professional consulting services. Often, this type of shift was augmented by other advanced business services like advertising and management consulting. These new consulting firms e.g., RAZORFISH (New York), AMX (London) or ICOMEDIALAB (Stockholm) began to grow into international mega firms. Ultimately, the large INM firms each had their own "new media agencies" developing and selling the esoteric knowledge of INM technology and organization to their clients. In short, the shift from content to consultancy amounted to the "deonstruction and reconstruction of authority" in the firms of the new economy (Simon, 2002).

Information and Knowledge Control as intrinsic to "Consultant Capitalism".

Based on a series of in-depth empirical studies of consultants, managers,"experts", and knowledgeable citizens of the modern "knowledge society", Christine Resch produced a rich theoretically informed and empirically grounded analysis of the role of management consultants in the "new economy". Her theoretical argument focuses on the structural transformation of

modern capitalism from ownership capitalism (OC), to managerial capitalism (MC), and now to consultant capitalism (CC). The model posits that in contemporary neoliberal transnational capitalism, consulting agencies are bracketing or superseding the previous roles of business owners and managers (Resch, 2005: 62-85; 254-81). In the current transition from MC to CC, the firm itself becomes both project and commodity (recently illustrated in the U.S. by the strategies of private equity firms like Mitt Romney's Bain Capital). Resch conceptualizes the power struggle among shareholders, managers, and consultants in terms of a "triangle of domination" (2005:268). "In this triangle, each constellation of dominant actors can claim that it is not responsible for the course of events, but that it can adapt to it" (2005: 268). Specifically, it can lay claim to the "inevitability" of structural changes like globalization or the collapse of "real socialism". In this this way, the demand for consultants can be explained plausibly as the result of structural changes emanating from the crisis of Fordism and the era of post-Fordism.

Resch shows that the growing prominence and influence of consultants has emerged from the fact that information and knowledge have become not only productive forces in modern service societies based on IT and the INM. Knowledge, information, technique, and skills are themselves becoming commodities and are, therefore incorporated into capitalist production relations (see also Burton-Jones, 1999, as itself an example of this genre of "knowledge capitalism"). Resch argues that the much heralded "knowledge society" must, therefore, be re-interpreted in terms of "consultant capitalism" (2005: 48-50; 273-81). Higher education and professional training has traditionally been based on the laborious acquisition and critical development of knowledge through studying, learning and practicing via student/teacher interaction and collective learning. But information (accumulated facts) and knowledge (coherent conceptual frameworks and explanatory theories) can increasingly be processed and standardized, then packaged and sold to a "user" or "customized" for a client in the private or public sector. The wholesale processing, storage, and marketing of knowledge and information is clearly facilitated by the parallel growth of interactive IT capacity. It is further enhanced and supported by various rational-choice-based methods, including financial incentives to induce "learning" among students, as well as entertainment to make it more palatable. The latter is based on the assumption that education should be "fun" rather than "hard labor", and that effective learning is the result of a (somewhat mysterious and fetishistic) spillover effect from INM entertainment to "infotainment" and "edutainment". In this way, education is commodified and integrated into the culture industry where its intrinsic power relations can safely be hidden and resistance neutralized (Steinert, 2007; see also Bernstein, 1971-75; 2000).

It has long been observed that CEO's of large firms are basically "challenged flexecutives" who tend to get ensnared in their own complex management apparatuses, especially in the INM and financial sectors (Altvater and Mahnkopf, 1999:298;301). Increasingly, executives turn out to be captives of their own management team and its support staff like advisors, consultants, head hunters, and a personal coach (Pine and Gilmore,1999). In part, the team's function is to manage a growing and complex empire, in part to protect the CEO from destructive infighting and institutional cannibalism (internal predatory hiring among departments). Contrary to Battelle (2005), the CEO may no longer be the main driving force of flexible innovation and change. Moreover, the cognitive and teaching functions, once defined by the "mission" of the corporation and determined by the CEO's "vision", are now being externalized and "outsourced" to management consultants and other business service providers. The consultants claim to be in charge of the "knowledge" necessary to run "complex systems". They provide

“guidance” for the CEOs who ask for advice not only how to run the organization and deal with crises, but how to run their own life , improve their performance, and preserve their dominance by continually “changing” and restructuring the organization. The enlarged and complexified role of management reproduces itself in the enlarged and complexified role of management consulting and the rising profitability of executive coaching. This new development partly accounts for the boom in executive coaching: the consultant controls the CEO by controlling the production of norms, templates, and models of management.

Yet the contemporary boom in consultancy also reflects the impact of larger structural forces and historical developments such as the accelerating transnational expansion of corporations, their increased size and complexity, the acceleration of product life cycles and of the circulation of finance capital, and the rise of the network entrepreneur. Resch suggests that “consultancy continues a process that began with the invention of the manager: a division of labor within organized capitalism where positions are created that mediate between ‘top’ and ‘bottom’, but also among different fractions at the top... consulting was a vehicle for reducing managerial power or to co-opt managers into changes which threatened their traditional interests. The demand for consultation has little to do with the loss of control by managers over ‘complex and highly specialized systems of knowledge’ within their firms .....on the contrary, it has to do with the desire of the shareholders (who yielded their control over the means of production to management) to regain control by strengthening their interests vis-a-vis management” (Resch,2005: 268, my translation). One may interpret these corporate strategies as a “minor counter-offensive” by management against the coalition of shareholders and consultants. “Managers react to the loss of power by calling on consultants to assume responsibility for the managers’ projects and decisions...even though consultants, seeking to escape from any causal nexus between advice and results can, in turn, blame the 'high-speed economy' and similar factoids if strategies fail ” (ibid.).

Resch argues that the “split within management between managers and consultants, on the one hand, and the transformation of the firm into a commodity, on the other, constitutes an ingenious strategic shift of responsibility designed to reject the obligations usually associated with property. Thus, the process begun under managerial capitalism, namely to render domination anonymous, was successfully reinforced under consultant capitalism” (Resch ,2005: 268). One might note here that indirect or anonymous domination is also intrinsic to Foucault's “neoliberal governmenality” which he defines as the “conduct of conduct” or the “control of control”.

According to Resch, consultants create the need for reducing complexity after first having themselves contributed to the problem by “finding” and “diagnosing” *increasing complexification*. Conventional consultancy theory defines organizations as “natural” systems that become more and more complex due to quasi-evolutionary processes of differentiation and specialization, and having to adapt to - or “mastering”- the ever-increasing complexity of their environment. The putative cure for failed adaptation is to shock a firm into the *reduction of complexity* or prescribing a therapeutic regime. Thus, the power to define “exceptional” crises afflicting corporate reality and managerial goals may indeed be slipping from the “sovereignty” of the CEO, and into the hands of the management consultants and financial experts. A critical consultancy theory such as Resch’s, by contrast, does of course not invoke a “natural” systems theory, but rather interactive, deliberative, and participatory approaches to corrective policies and remedies.

However, there appear to be conflicting tendencies at work within the consulting process itself.

As Clegg, Kornberger and Rhodes (2004:38) put it: "Consulting as discursive practice is the art of negotiating tensions and exploring spaces in between order and potential chaos. The consultant's role in this game can be circumscribed with a concept of Michel Serres (1982): consulting creates parasites. To make an important clarification up front - we do not use the term parasite negatively. Following Serres, a parasite is that which brings noise into the heart of a system, it disturbs and disrupts it - and as we have seen, this is a decisive task for every organization .... Parasites emerge in this space in-between where order becomes blurred into disorder and noise produces a new order".

As if responding to this generalized description of "consulting as discursive practice", Resch maintains that consultants are experts who give normative and technical advice to managers and executives not only in the interest of corporate management or that of shareholders, but also in their own interest as consultant entrepreneurs. They do this, inter alia, not by "*reducing complexity*" in the systems-theoretical mode (e.g.,Luhman), but on the contrary, by using natural or man-made disasters, or else, creating a process of "*complexification*", if need be, by a strategy of fear, shock, and awe (e.g., by telling managers their firm is in danger of going under, i.e., using the logic of opportunity by creating a danger) . For example, Clegg et al (2004:36) write, "consulting can be effective by increasing variety and complexity through a disruption of dominant orders". Indeed, the authors argue that "complexifixation is increasingly understood as important for management and organization theory" (ibid., p. 42). Following in certain respects the tenets of the "shock doctrine" (Klein, 2007), the consultant here acts like a therapist who administers a series of shocks to an ailing mind, body, firm, or society in order to "shake it out of its established order" and to revivify it.

In this way, the "rise of disaster capitalism" and the "rise of consultant capitalism" an be seen as going hand-in-hand like "bad cop" and "good cop". The shocks are exploited or administered first, then the shock therapist steps in and offers consolation and remedies. For example, modern macro-economic consultants recommended administering "shock therapy" to erstwhile socialist economies (e.g. Poland or Allende's Chile) in order to restore their neoliberal economic potential and productive capabilities (for a detailed discussion of cases, see Klein, 2007, *passim)*. Like most consultants, however, they do not take responsibility for the often devastating consequences of the "therapeutic" course they counsel (Resch, 2005: 268). Nor are they likely to be concerned with potential alternatives such as a "gradualist" approach to building a democratic work place, community, or society (Stiglitz, 2002:181).

Resch demonstrates the intimate link between the globalizing strategies of neo-liberalism and the concurrent rise of consultant capitalism. She also calls attention to the parallels between the slogans of lean production, lean management, and the lean state, on the one hand (Harrison, 1997) and, on the other, the "surplus production of academics" (Resch, 2005:269-70) and of intellectual labor, in general. Both processes have been of central importance in the production and management of IT and INM. Other observers have referred to "the role of the university-consultation-industrial complex in developing and implementing certain production concepts and practices" (Sandberg, 2003: 170) or to the "triple helix" of industry-government-university relations (Etzkowitz and Leydesdorff, 2005).

These triadic images suggest that a certain degree of constraint can be imposed on the power of corporate management. However, they also raise the question of the structural balance and relative instability of triangular constellations themselves. Since interactive triads are typically unstable and prone to various shifts within internal coalitions, it is conceivable that intermittent

alliances among any two of the contestants may arise against the third. Conversely, the conflict among any two may temporarily strengthen the position of the third (Simmel's *tertius gaudens)*. Thus, it remains an open empirical question whether managers are really facing a unilateral and persistent loss of power vis-a-vis the alliance of shareholders and consultants and their silent partners, IT and INM , or whether they are learning to apply the lessons of "divide and conquer". Resch's trenchant analysis of consultant capitalism helps us understand the nature and significance of IT and INM for the new discretionary governance based, as it is, on indirect, mediated, and largely anonymous forms of domination. Her argument is implicitly supported by Michael Power's (2007) analysis of the central role of consultant and advisory services in contemporary risk governance.

EXPANDING RISK GOVERNANCE THROUGH EXPERIMENTALITY

This final substantive section of the paper seeks to draw attention to a related set of issues that has emerged together with the widening consequences of neoliberal globalization**.** These issues arise from the transformation of social science categories and disciplines whose traditional boundaries were still taken for granted in the late 20th century**,** as noted by Wallerstein (1996). Categories such as legal formalism, substantive rationality, sovereignty and government have been bracketed, modified or superseded by new approaches and new ways of seeing (see, e.g., Berman, 1988; Wallerstein,1990; Foucault, 1991; Bauman, 2007). Mediated as they are by the ideological features of the "risk society", the "disciplinary society", or the "knowledge society", the INM may often appear as the "friendly faces of power". However, as Naomi Klein and Christine Resch suggest, they relate crucially to the twin towers of control represented by disaster capitalism and consultant capitalism.

In the following, I shall briefly single out four aspects of the complex of ideological elements that – from the perspective of both observers and participants - appear to hang loosely together and to have a certain "elective affinity" with each other: (1) the discretionary "new governance" such as the logic of negotiated process, bargaining, and informal procedure; (2) the work ethic of computer experts or "hacker ethic", (3) social networking as a life style, and (4) a neo-libertarian political ideology, including the alternative life styles of techno-libertarians and other 'nerverts' (Borsook, 2000:100-05). While these issues might formerly have been neatly separated in terms of the institutional domains of law, economy, civil society, and politics , they now share the common effects of de-formalization, de-legalization, and deregulation in the shape of informalism and flexibility, negotiated process rationality, and experimentality as the putative opposite of governmentality, i.e. as the attitude of not wanting to be governed "quite so much" (Foucault, 2007b:45).

Discretionary Governance*:* **Procedural Informalism and the Logic of Negotiated Process.**

In contrast to democratically legitimate forms of government, discretionary governance is a supposedly efficient and effective, but unregulated and essentially non-democratic form of social ordering, problem solving, and risk management (Vaidhyanathan, 2005:123). Under neo-liberal policies of economic, technical, and legal governance, an *ad hoc* set of instruments of societal guidance, technocratic steering, and social engineering tends to displace established institutional rules and decision making. Discretionary governance and risk management govern without

government, presumably in response to the perceived risks and threats of international disorder and disorganization. The dislocations generated by neo-liberal transnational expansion include the weakening of nation state sovereignty, its disconnection from civil society, and widespread deregulation, de-formalization, and de-governmentalization of the economy and financial markets, including the contemporary (2007-10) economic and financial crisis. The privatization of government is central to the "disembedding" of national welfare state programs which have, of course, long been prime targets of neo-liberal policies. In view of such structurally generated crisis conditions, the products of the culture industry such as film, television, theater, music and other forms of "cultural entertainment" are sometimes seen as presenting a "friendly face". But the INM are not an unadulterated blessing and invite critical examination of their capacity to impose indirect and anonymous social control.

To the extent that the INM are designed to by-pass or counteract the negative connotations of the older concept of technocratic governance, they can be seen as central to the concept of "new governance"that has stirred interest among lawyers and legal scholars. In a review of Schneider and Honeyman (2006), Amy Cohen claims that new governance theorists "typically take large-scale and ongoing instances of deliberative policy making as the basis of their theorizing" (Cohen, 2008:533). Cohen refers to new governance theorists as calling for "procedures that ensure that parties' interests and externalities are taken into account, negotiation processes are adequately structured, and the bargaining power of stakeholders is addressed" (Lobel, 2004:379). Similarly, Dorf (2003:958) is quoted to the effect that "one answer to the problem of power imbalances is, frankly, to attempt to remedy them through procedural rules" (Cohen, at 533; but see, critically, Karkkainen, 2004). In a critical and enlightening discussion of Archon Fung's (2005) emphasis on equality and reciprocity in "deliberative democracy", Jennifer Dodge focuses on the potential breakdown of deliberation in contexts of power. "Whether non-deliberative action is justified depends on the degree to which parties to deliberation are equal and willing to deliberate", i.e. recognize the norm of reciprocity (Dodge, n.d.).

The shift from "government" to "governance" that has accompanied the post-1991 transnational expansion of contemporary capitalism is vividly expressed in the secular trend of rising procedural informalism and "soft law" that is central to the argument about the expanding scope of discretion and informal power within certain legal, political, and economic contexts in the 20th century (Heydebrand, 2007; see also Scheuerman, 2001:105, who refers to the "mismatch between the *time horizons* of traditional modes of liberal law and of economic activity in the global economy"). Moreover, while flexibility and informalism were treated above as a by-product of the internalization of formal rules into IT, here they become an end in itself, for example, through self-regulation and self-organization, the open source movement (Raymond, 2001), soft law (Cutler,2003), and the open method of coordination (Trubek and Trubek, 2005). The high-speed economy of time has played an important part not only in fast-track legislation, but also in fast-track arbitration and "high-speed dispute resolution" (Scheuerman, 2001:111-16; and Katsh and Rifkin, 2001 on "on-line dispute resolution").

Procedural informalism in law refers to non-adjudicatory dispute processing, i.e., conflict management through informal mediation, arbitration, bargaining, and negotiation. The term "informal" here indicates the operation of varying degrees of accelerated, legally non-binding techniques of conflict management, ranging from triadic forms of mediation, arbitration and judicially orchestrated settlement conferences to dyadic bargaining and bi-lateral negotiation. The secular rise of procedural informalism has meant the dramatic expansion of ADR and

business mediation, and the decline of formal adjudication and trials in American courts of law.

More importantly, ADR and, particularly, business mediation, have openly shed their legal character. As Stipanovich (2004:848) puts it, "in most cases the best measure of ADR is not as a surrogate for public adjudication, but as an intervention strategy to promote what a trial was not designed to accomplish: getting quicker and less costly resolution, tailoring creative solutions, serving business goals...". Thus, for hundreds of major corporations and law firms supposed to sign a 'commitment' or 'pledge' to 'attempt to resolve disputes without litigation', "the motivating concerns were not only the cost of judgments or settlements, but also transaction costs, including the expense of legal counsel, supporting experts, preparation time, and discovery - costs that are often a multiple of the amount of settlement" (for supporting evidence, Stipanovich, 2004:876, and n.134, cites Lipsky and Seever, 1998; McEwen, 1998; and Lande, 1998; a lone critic of "the displacement of the public justice system by private fora" (David Schwartz, 1997) is left to wonder about "enforcing small print to protect big business" (cited by Stipanovich, 2004:898, n.217). Similarly, in global legal transactions and attempted regulation, there is an almost proverbial "hostility of business to traditional forms of legal regulation" (Scheuerman, 2001:115). From the perspective of business mediation, then, there is no reason to deplore the decline of trials since they are being replaced by "more modern and rational procedures" such as "negotiating agreement without giving in" (Fisher and Ury, 1981). A legal system "glorifying" (or merely re-affirming) adjudication, trials, binding arbitration and related formal procedures as part of the rule of law is branded as raising legal and economic transaction costs in time and money, and imposing "intolerable" financial burdens on business and corporate management.

These considerations imply another problematic development. Uncritical and apologetic pro-business reasoning suggests that the goal of law and government should not primarily be the protection of constitutional rights and procedures, but *effective conflict prevention and efficient conflict management* through complex (multi-faceted) systems of mediation and negotiation in the workplace, among businesses, and between businesses and consumers. It may well be true that, from the perspective of certain participants in formal court proceedings, "the process is the punishment" (Malcolm Feeley). However, it is widely recognized that socially weaker and more vulnerable participants in local as well as in international negotiations prefer more formal and regulated procedures that are designed precisely to protect the stakes of weaker parties. Nevertheless, advocates of business mediation believe that an excessive emphasis on the rule of law, legal rights (e.g., substantive and procedural civil rights), strict product liability and broad access to justice and formal litigation impairs the efficient operation of business and the economy. This well-known ideological stance is typical of the pervasive incompatibility between the rule of law and the political economy of globalization in the 20th and 21st century (Heydebrand, 2007:109-11).
For business interests on a global scale, then, it stands to reason that the ultimate "legal" strategy would not primarily be *conflict management* as such, but effective *conflict prevention*. This shift in emphasis, if implemented, underscores Steven Lukes' insight that domination flowing from hegemonic power implies "the imposition of some significant constraint upon an agent or agent's desires, purposes or interests, which it frustrates, prevents from fulfillment or even *from being formulated"* (Lukes, 2005:113; 134-44; italics added). Thus, it seems clear that conflict and

dispute *prevention* - the ultimate capacity to "secure voluntary compliance" - may border on the suppression of civil and human rights, regardless of where and by whom these rights are claimed, activated, and mobilized. Studies of "consensus" and "harmony" oriented communitarian or collectivist settings (e.g., Nader, 1990; 2002;, 196; Berman, 1962; Goldhagen, 1996) show that the assertion of individual "rights" or dissent may easily be criticized, marginalized, or ostracised as an unwarranted expression of unbridled individualism, self-indulgence and egotism, or may be rejected as a matter of social and legal policy.
Moreover, short of conflict prevention, the methods most likely to fit the notion of conflict *management* involve soft law, soft procedure, and the logic of negiotiated process. In light of the affirmation of 'negotiation' as being intrinsic to the 'new governance', one may raise the inconvenient question whether and to what extent procedural informalism and alternative dispute processing, including business mediation, amount to real dispute *resolution*. The question is a fair one because "lumping it", withdrawing claims, or "settlements" typically do not remove the underlying causes of conflicts and disputes, but merely shift them to a different level or sweep them under the rug (see, e.g., Felstiner, Abel, and Sarat, 1986). Similarly, Coleman (1957) has shown that methods of dealing with community conflict may simply diffuse and distribute responsibility by diverting it from the institutional level and shifting it down to lower levels of the social structure like communities and families. At that "micro" level, conflict and disputes can be more easily ascribed to such "normalized" conditions as changing neighborhoods, a "diverse" population, "bad apples" like "shoddy" businesses or manufacturers refusing to acknowledge product liability, exploitative and discriminatory places of work, police "profiling" and "brutality", the "dysfunctional" family, and even to the individual level where a dispute can simply be labeled as an expression of mental illness or deviant behavior (also known as "blaming the victim"). At these personalized levels, structural problems of inequality and gender or racial discrimination are no longer visible as causes of conflicts and disputes that might otherwise reach courts or alternative fora of dispute processing. This is particularly true of traditional family settings as the literature on feminist jurisprudence shows (a key insight here is that a patriarchal family is not a democracy). As is well known, violent acts against women are frequently re-enacted at the higher institutional level of courts of law, e.g., inquisition-style interrogation, accusing a woman of "provocative" dressing or behavior, or harsh prison sentences for unprovable self-defense (see also Mirchandani, 2005).

However, we are implicitly dealing with a wider set of issues. In an important sense, informalism and flexibility are social techniques in modern short-term social relations and network-like structures, in contrast to the long-term, socially reproductive primary relations of a traditional family, clan, friendship, or neighborhood group. Flexible informalization and globalization are like the "two faces of a coin" (Altvater and Mahnkopf, 1999:336-50; see also Tabak and Crichlow 2000). One of the main areas in which this trend has become increasingly visible is in the informalization and casualization of labor, i.e., the rise of unprotected and un-regulated labor relations, the expansion of involuntary "contingent" labor, and the proliferation of domestic and off-shore "sweat-shops" (Klein, 2000; Stone, 2004; 2006; Rodriguez-Garavito, 2005). Other aspects of this process are the fragmentation and lack of synchronicity in economic development (Altvater and Mahnkopf, 1999:145), the informalization of trade relations (e.g., dumping) in the shadow of "free trade" (ibid, 267), and the emergence of a "new economy of time", including the acceleration of production and innovation, benchmarking, simultaneous or

competitive engineering designs, and related forms of work flexibilization (also Dorf and Sable, 1998; Scheuerman, 2004).

As social techniques, then, informalism and flexibility are aspects of negotiated process rationality. In this context, three structural elements of a negotiated approach to quasi-legal dispute processing need to be highlighted. First, the logic of negotiated process constitutes a series of joint deliberations and transformative (rather than merely reproductive) interactions that are loosely oriented toward some practical outcome like solving problems, reaching understandings and agreements, and constructing alternative arrangements (Heydebrand, 2003:333-34). Process rationality is based on a concrete, though provisional commitment to sitting down and talking with other members of a given local community. As such, it occurs within a "conflicted" universe of discourse or "interpretive community" that may include designated foes and opponents in a "peace process". It thus involves a tentative readiness to communicate, interact, and bargain - without formal pre-conditions except a mutually agreed upon minimal, piecemeal agenda - on the assumption that, for purposes of the "process", the participants recognize each other as relatively autonomous and "equal".

Second, process rationality involves the explicit bracketing or avoidance of both formal legal rationality (procedural formalism and proceduralization) and the kind of substantive rationality that asserts general political, ideological, or ethical commitments such as a Manichean ethics of absolute "good and evil"or labeling opponents as constituting an "axis of evil" (see also Agamben 2005; Bernstein, 2005). These types of substantive myth making border on the disenfranchisement and social exclusion of the potential partners in bargaining and negotiation; they signal the rejection of "good faith" efforts at peace making.

Third, process rationality cannot be "institutionalized" in the sense of programming it to become an "institution" in its own right or placing it in the context of institutional routines. It is most relevant and effective when it is associated with a social network-like structure-in-process, i.e., when it evinces a certain post-modernist "liquidity" (Bauman 2007), fluidity, flexibility, malleability, relational elasticity, and -last but not least- experimentality. If there are any "goals" associated with process rationality, they tend to emerge from within the process itself, rather than determining it from the outside. If it were otherwise, the process would simply revert to an institutional form of substantive rationality or a moral directive. To be sure, there has to be at bottom an intrinsic, mutually shared interest and a sincerely felt "desire" among participants to settle disputes and solve problems jointly (the element of reciprocity stressed by Fung, 2005). An external "norm" to do so would be equivalent to moral pressure or coercion, hence counter-productive. One may, of course, strive to distinguish an individualistic, dualistic, or balkanized ethics from an interactive/communicative process of "recognition of the Other" as a consensual, self-legitimating project (Habermas, 1984).

Insofar as pragmatic process rationality, experimentality, and the problem-solving impulse are treated as merely "voluntary" or "expedient" ways of acting and thinking, they may remain utopian ideals in the face not only of the inequality of bargaining power, but of de facto abrogation of rights via "realist" strategies of economic and political exclusion (see also Simon, 2004; Heydebrand, 1994; for an instructive critical discussion of these issues, see the debates among Habermas/Bogdandy and Delavalle/Giegerich/Tinnevelt and Mertens, German Law Journal, vol.10,1,January 2009:1-92).

However, insofar as process rationality becomes a model of democratic, deliberative decision making, it approximates the notion of the self-legitimation of a negotiated process. As such, it

may include some kind of self-realization through "domination-free interaction" or "communicative rationality" (Habermas, 1984); enlightened popular sovereignty (Maus,1992; 1996), "directly-deliberative polyarchy" (Cohen and Sabel, 1997), "studied trust" and "democratic experimentalism" involving benchmarking, simultaneous engineering, and learning by independent monitoring (Dorf and Sabel, 1998), and "empowered participatory governance" (Fung and Wright, 2003). At a very practical level, linking established venues like specialized courts of law and related approaches to pragmatic problem-solving, the logic of negotiated process may also combine two otherwise incompatible and contradictory techniques: technocratic and democratic procedures of decision making and 'new governance', as suggested by studies of "problem-solving" venues like drug treatment courts (Dorf and Sabel, 2000) or domestic violence courts (Mirchandani, 2005) and, generally, problem-solving courts (see Mirchandani, 2008 who proposes a theoretical synthesis of Foucault's "therapeutic state" and Habermas' "deliberative democratic state"; and Heydebrand, McCoy, and Mirchandani on the problem of "problem-solving justice", forthcoming). As noted above, the older categories of 'technocracy' and 'governance' have been transmuted into 'empowered participation' and 'new governance' in the interest of dealing with, or reversing, the challenges of capitalist globalization, including the acceleration of product life cycles and of the circulation of capital (for a critical analysis of "democratic experimentalism"and the notion of "directly deliberative polyarchy", see Scheuerman, 2004; and Shapiro, 2005 for a critique of technocracy.).

Experimentality in the form of the Hacker Ethic, Networking as a *L*ife Style, and Technolibertarianism.

Experimentality can be understood as a mind-set animated by endemic curiosity. It is oriented toward perpetual exploration, pragmatic experimentation, discovery, innovative problem-solving, and risk taking. It is a mentality that fits the "logic of opportunity". The idea of experimentation in the spirit of scientific discovery and social reform is , of course, not new (e.g., Campbell, 1969 on the idea of "reforms as experiments"). But experimentality, as the permanent desire and readiness to live with impermanence and change as a way of life is a larger, post-structural and post-modern phenomenon. Experimentality implies an activist rejection of routinization, inertia, stagnation, ossification, and the institutionalization of one's environment. It is also consistent with many characteristics of cognitive and intellectual labor, with a profound mistrust of government and other dominant institutions, and with a resurgent celebration of the virtues of individualism and self-reliance. Experimentality in this sense has a fundamental affinity with the neo-liberal and neo-libertarian ethos that swept across Western capitalist societies since the 1970s and 1980s and which promoted short-term, flexible, and risk-taking policies in the political economy (see Chomsky, 1999; Dumenil and Levy, 2005; Harvey, 2005). It was directed at Soviet-style governmentality (see, e.g., Ayn Rand's novels) as much as against the Western-style welfare state, against the rigidities of Fordist corporate management as much as formalist legal and institutionalized political approaches to decision making. The spirit of experimentality implies the avoidance of institutional routines, rituals, and traditional certainties. It engenders flexibility and informalism, and it empowers risk taking, the shortening of time horizons, continuous restructuring, and speedy decision making in favor of innovation and change. The images of "flexible specialization" and "flexible accumulation" seemed to be apt descriptions of the mutual adaptation among new forms of production, work, organizations, markets and

financial institutions (Piore and Sabel, 1984; but see Harrison, 1997 on the "dark side of flexibility", and Sennett, 1998, on the "corrosion of character").

These structural changes raise a practical question: who wants to live that way, besides corporate entrepreneurs who run equity firms and who are locked into the profit-driven and devil-may-care risk taking practices of Wall Street? Who wants to always struggle and compete in the permanent fast lane ?
Ethnographic data and interviews with new media workers, technicians and owners of small start-ups in new media clusters around the world in the mid and late 1990s suggest that repeated re-tooling, a short-term, flexible managerial perspective, permanent restructuring, and endemic experimentality had, indeed, become a way of life and work for many in the new media field (Heydebrand and Miron, 2002; Heydebrand, 2009 ; see also Egan and Saxenian, 1999: 21-26 on the "Multimedia Gulch" and the San Francisco freelance artist community; Girard and Stark, 2002:1927 on projects that are perpetually 'under construction'; Grabher, 2002; Indergaard, 2004; Neff and Stark, 2004 on "permanently Beta", an open-ended phase of project development that is, by definition, incomplete and implies continuous re-configuration and restructuring; Neff. 2012 on"venture labor"; Augustsson, 2005: 104-113 on the "confusion of roles" and "struggles for participation and recognition"; O'Reilly, 2005 on the "perpetual Beta"; and Schull, 2005 on "digital gambling" and "the coincidence of desire and design" which implicitly characterizes a variety of behaviors like white collar crime, financial investing as a game of endemic risk taking, risk-happy entrepreneurship and gambling, and other forms of radical individualism involved in the ethics of ends-justifying-the-means.

For the technical aspects of the spirit of experimentality, the "hacker ethic" is paradigmatic. As the Finnish philosopher Pekka Himanen explains, the "hacker" label emerged in the early 1960s - it was a term that enthusiastic and passionate computer programmers applied to themselves and to their attitude toward their work (Himanen, 2001:viii). Hackers believe that "information-sharing is a powerful positive good, and that it is an ethical duty of hackers to share their expertise by writing free software and facilitating access to information and to computing resources wherever possible"(ibid.vii). In this sense, hackers share the scientific ethos of openness, continuous "testing" and exchange of one's ideas with others, and a passion for further experimentation and development (ibid. 180). But the hacker work ethic - which is dedicated to hard work without treating it as a religious obligation - has another dimension which may seem to be somewhat in tension with hard work, namely continuous exploration, a playful attitude toward work, and appreciating the value of "entertainment". Linus's Law - that which "makes hackers tick" - boils down to three fundamental motivations: "survival" (which links it to a kind of bionomics and Social Darwinism); "social life" (networking , having "social ties", e-mail, and the Net), and "entertainment" (doing something that is "intrinsically interesting and challenging") (in Himanen, 2001:xiv - xvii). Unlike the Protestant work ethic, then, which is strictly separate from anything having to do with pleasure and "leisure", the hacker ethic integrates work and play, just as it combines realistic problem-solving with playful puzzle-solving. For hackers, working with the computer is "hard-but-soft", challenging and enjoyable, and thus intrinsically entertaining. The joy of tinkering and bricolage was an ever-present theme of my conversations and interviews with the "entrepreneurs" of Silicon Alley in the late 1990s.
Himanen argues that the term "hacker" gradually assumed a negative connotation, i.e., as a label

for computer criminals. “In order to avoid the confusion with virus writers and intruders into information systems, hackers began calling these destructive computer users *crackers*” (ibid., see also Himanen’s (2001:179-88) “Brief history of computer hackerism”; Eric Raymond’s (2001:195-213) “How to become a hacker?”; and Salvatore Poier, 2008). **Endnote 3**

It would lead us too far afield to trace other parallels and differences between the hacker work ethic and the Protestant work ethic, on the one hand, and Thorstein Veblen’s analysis of the “instinct of workmanship” (Veblen, 1990[1914]) and his critical juxtaposition of the quality-oriented craftsmanship of “engineers” and the money-driven “price system”, on the other (Veblen,1947 [1921]). Suffice it to say that Himanen also touches on the two other elements of experimentality: the informationalism of the “network society”, and the neo-libertarian ideology that came to dominate the field in the 1990's and that has increasingly sought to adjust the technological development of the INM to the economic and political realities of the contemporary phase of capitalist globalization since 1989/91.

In an epilogue to Himanen’s book, Manuel Castells makes the by now familiar point that IT and the rise of the network society are closely related (Himanen, 2001:155-78) Hence, the idea that “informationalism is a technological paradigm” and “provides the basis for a certain type of social structure that I name the network society” (Castells, in Himanen, 2001:158) One does not have to share the touch of technological determinism in this quote in order to acknowledge the fundamental link between INM, networking, and experimentality. What is perhaps less well understood is the sense in which social networking is becoming a way of life in the form of social libertarianism. One aspect of this trend is the widely recognized experience that a larger and larger share of work and leisure-related activities are conducted not in formal institutional settings, but in the context, and through the medium of informal social relations and networks. As has been suggested above, work-relations involving both the production and use of INM have assumed an informal, network-like character. Similarly, procedures in legal settings like community courts and judicial settlement conferences revolve around meetings and communications which are no longer written down and recorded, a situation that has been true of plea-bargaining procedures in American criminal courts for more than 40 years. Most domestic and many transnational business and trade relations are mediated by informal social network relations in which it is as important who knows whom as what is being said or transacted (Heydebrand, 2009a). International law firms are increasingly interested in attorneys who master the art of negotiation rather than merely being technically well-trained legal experts. Moreover, it is commonplace that informal social networks have become the preferred medium, indeed, the vehicle of choice in transnational extra-legal and illegal transactions.

Social network relations have also become the context of mixed business/pleasure events (Neff, 2005;2012). While this phenomenon is probably typical of most industry-specific clusters in urban settings, it is of special importance to participants in fast-changing, post-industrial service industries like INM, advertising and consulting where personal contacts and connections are highly valued to the point of being commodified. Again, we can learn from Georg Simmel’s observations on socializing and sociability (e.g., parties and networking) where free-floating interaction and interpersonal exploration can have an experimental character and contribute to the formation of new identities and innovative personal “content”.

Finally, experimentality looms large in the neo-libertarian life-styles of hackers. Following Paulina Borsook (2000), a former contributor to the “in” cyber-magazine *Wired,* I am using the

term “technolibertarianism” to refer to this melange of technical, social, and political genres. Technolibertarians seem to have a fundamentally experimental attitude toward life, others, and themselves. They share “high tech’s animosity toward government and regulation” (Borsook, 2000:6). It goes without saying that the anti-authoritarian, anti-government attitude of hackers also includes anti-regulation - hence the visceral, “anarchist” opposition to intellectual property and copyright laws (Vaidhyanathan, 2004; Lessig, 2004). Himanen points out that “freedom of expression and privacy have been important hacker ideals, and the Net developed in accordance with them”....”in its defense of freedom of expression and privacy, the hacker world is typically decentralized”(Himanen, 2001: 89). And Raymond(2001:199) asserts: “Hackers are naturally anti-authoritarian. Anyone who can give you orders can stop you from solving whatever problem you’re being fascinated by - and, given the way authoritarian minds work, will generally find some appallingly stupid reason to do so. So the authoritarian attitude has to be fought wherever you find it, lest it smother you and other hackers”. And in the same vein: “Authoritarians thrive on censorship and secrecy. And they distrust voluntary cooperation and information-sharing - they only like ‘cooperation’ that they control. So to behave like a hacker, you have to develop an instinctive hostility to censorship, secrecy, and the use of force or deception to compel responsible adults. And you have to be willing to act on that belief” (ibid). As Michiko Kakutani’s (2000) review of Borsook points out, the technolibertarians and digerati of the end of the millennium have their “libertarian roots in the counterculture of the 60s and the Reaganism of the 80s”, suggesting once again that the difference between neo-libertarians and neo-liberals is mainly one of degree. By the same token, this anarcho-capitalist stance has, of course, something in common with the *Fountainhead* hero-worship popularized by writers like Ayn Rand and George Gilders (Borsook, 2000: 143-44).

Experimentality vs Governmentality.

Since experimentality has been coopted by a neo-libertarian political ideology, it appears to be in opposition to the notion of governmentality. As Steven Lukes (2005:96) points out, however, Foucault’s governmentality has multiple references. It refers to “ ‘rationalities of rule’ - styles of reasoning embodied in governing practice...; to conceptions of the person that they seek to inculcate ; to ‘technologies of the self’ that individuals deploy to pursue their respective interests, acting upon themselves to induce virtuous habits and fashion their characters...; to the ways in which these elements are aligned with one another”. Foucault’s own definition of governmentality as the “conduct of conduct” or the “control of control” aims at “ the totality of practices by which one can constitute, define, organize, and instrumentalize the strategies which individuals in their liberty can have in regard to each other”(ibid). Interestingly, Foucault theorizes “resistance”, but not “emancipation”, a choice that seems to lock governmentality into a permanent trap with “no exit”.

Nevertheless, Foucault may have been on to something that was endemic to the “New Left” of the 1960s: an anti-authoritarianism and a spirit of experimentality that seemed to bracket Althusser’s and the “Old Left’s” “over-deterministic” concern with economic power and capitalist oppression. In an early text in which he counterposes notions of domination to a “domain of possibility” and “reversibility”, Foucault asks: “[H]ow can the indivisibility of knowledge and power in the context of interactions and multiple strategies induce *both singularities*, fixed according to their conditions of acceptability, *and a field of possibles, of openings, indecisions*, reversals and

possible dislocations which make them fragile, *temporary*, and which turn these effects into *events*, nothing more, nothing less than *events*"? (Foucault, 2007 b:66; italics added). The whole paragraph ends with an invocation of "....this decision not to be governed" , echoing, in turn, "as a very first definition of critique, this general characterization: the art of not being governed quite so much" (Foucault, 2007 b: 45).

The neo-libertarian spirit resonates with a remarkably modernist and contemporary conception of the Enlightenment, namely "the courage, the audacity, to know" (Foucault, 2007 b:100). " Thus Enlightenment", Foucault argues, "must be considered both as a process in which men participate collectively and as an act of courage to be accomplished personally. Men are at once elements and agents of a single process. They may be actors in the process to the extent that they participate in it; and the process occurs to the extent that men decide to be its voluntary actors" (Foucault, 2007 b:100-101). This simultaneity of action and structure has become familiar to sociologists from Anthony Giddens' "duality of structure" and the theory of structuration which refers to the mutual dependence of structure and agency in one and the same process (Giddens, 1984).

It is true that Foucault's concept of governmentality can be seen as an "elementary sociological commonplace"(Lukes, 2005: 97) in that most people get socialized into the normative framework of their society, and subjected to the mechanisms of social control if they deviate (see also Neil Brenner's, 1994, critique of Foucault's functionalism). But to leave it at that would create a truncated, one-sided understanding of Foucault's version of the "duality of structure". While governmentality may be a sociological commonplace, the same could be said about experimentality, if one takes the time to explore the varieties of social psychology from Huizinga's "homo ludens" to W.I.Thomas's "four wishes" which include "recognition" and the search for "new experiences", to Maslow's "needs" for autonomy and self-expression. Indeed , defining experimentality as the social basis of innovativeness, discovery, even creative deviance appeals in many ways to the spirit of spontaneity and exploration in social life.

Experimentality could thus be seen not just as a sociological counter-principle to governmentality where rule making and rule breaking creatively alternate between one another. Experimentality may also be located in a specific historical moment in Foucault's life time, namely within the social liberation movements of the turbulent '60s where issues of gender, race, the bio-environment, and civil rights were contested and negotiated. Interestingly, Foucault seems to reflect on this possibility when he says: "...I wonder whether we may not envisage modernity rather as an attitude than as a period of history. And by 'attitude', I mean a mode of relating to contemporary reality; a voluntary choice made by certain people; in the end, a way of thinking and feeling; a way, too, of acting and behaving that at one and the same time marks a relation of belonging and presents itself as a task" (Foucault, 2007 b:105).

DISCUSSION AND CONCLUSION

The kinds of methods of governance and risk management described in this paper - whether technocratic or democratic, formal or informal, discretionary or rule-bound - are truly child's play compared to the methods of governance flowing from the "shock doctrine", as detailed in Naomi Klein's recent work. The unfriendly or ugly face of power of the interactive new media does not in itself imply shock and torture. However, the "ongoing revolution of information and communications technology" diagnosed as such by Beck and others may have given the rich countries and regions of the world a great gift to enhance the lives of their own citizens, thus

aggravating the structured inequality that separates the "West" from the "rest". The point is that the "friendly face of power" displayed by the INM helps to hide another face, namely the anonymity of the private power of those who own the INM as well as those who use their capabilities to impose the spectrum of controls inherent in the INM - technical, financial, actuarial and ideological - on the "rest", perhaps even on themselves in the form of alienated power. This is therefore not so much a simplistic question of a giant conspiracy being put over on an unsuspecting populace. Rather, it is the consequence of historical events like technical inventions and unforeseen "opportunities" that - once commodified and privately appropriated - tend to escape public regulation and democratic allocation, and thus assume an autonomous existence involving unaccountable influence and consequences.

The task of finding a way to regulate and control unaccountable powers is not easy. Given the possibility of unexpected political or economic crises, of the abrupt reversal of figure and ground, both governmentality and experimentality are available for purposes of discretionary governance and risk management. While seemingly opposed at one level, they may share what one might call a "latent function" at another level, viz. to expand the scope of discretion of governance techniques. Experimentality, in all its varieties and incarnations that seem to empower those who produce and use the INM, imparts the happy illusion of the user being in control and being able to use INM technology for wholesome purposes. It is an infectious attitude of optimism and confidence which is nurtured and reinforced by the permanent incompleteness of projects that are always under construction, but never finished. Similarly, the technology itself always promises to be better and more powerful, a promise intermittently reinforced by the rapid turnover of "models" and the ever shorter life cycles of new products. As Leslie Sklair suggests, it is this mentality that drives one of the engines of transnational capitalist expansion: consumerism, its "culture-ideology" and cultural imperialism, its connection to media markets and especially to "advertising, the main channel through which the culture-ideology of consumerism is transmitted" (Sklair, 2002: 166; see also Ewen, 2001).

Given the possibility of a near- permanent state of exception, both experimentality and govenmentality represent twin ideological forms of domination which, while seemingly competing against each other, actually tend to combine and join forces like "good cop" and "bad cop" in a game of self-estrangement. If this were literally true and factual, it would lead to a one-dimensional, deterministic, and rather chilling conclusion. It would mean that even experimental, innovative and democratic forms of governance (such as "democratic experimentalism") would ultimately have to be seen as expressions of governmentality, indeed, as "emergent experimentalist government" (Dorf and Sabel, 2000). The sobering fact is, of course, that both governmentality and experimentality are just that, mentalities. As such, they are typical "social constructions" with a philosophically "idealist" twist. Historically, then, it seems that the contemporary world is much too complex and transient to be forced into such monistic or dualistic cognitive straitjackets.

Thus, it behooves us to end on a more realistic and hopeful note by reminding ourselves that , at least locally, communities and social networks can learn from each other and often do have the chance to restore the democratic, participatory, empowering and emancipatory promise of the interactive new media. Taming global power through global control systems is clearly an oxymoron. Therefore, the new media need to be held to certain rules of the game from below, such as expanding access and choice, as well as protecting minority viewpoints and claims

instead of merely defining "democracy" as the will of the (sometimes militant) majority. And that, in turn, means not only monitoring the wanton concentration and expansion of the old and new media industry, but also permitting and encouraging the resurgence of locally anchored and locally effective media initiatives. In this way, regulatory and empowering policies can be put into place locally for limited democratic and redistributive or at least "balancing" purposes. It is ironic, but encouraging , that the virtues of the local may thus be stirred by the surfeit of the global.

ENDNOTES

1. In this context, it should be noted that, while there are, superficially, linguistic points of contact between the above formulation and Latour and Callon's constructionist actor-network theory (ANT), the latter is not a theory in the critical tradition, but a post-structuralist, semiotic and, in my view, largely mystifying conception of how "technology is society made durable" (see Latour, 1991a, on the technology of hotel keys or Kodak cameras, and 1991b on trying to start a car without buckling the seat belt; also Latour, 1999; see also the critique.of "hybridity" vs "hard-but-soft" law in Heydebrand, 2007:106-08).There are two issues here: first, the confounding of a "state of being" (for example, androgyny as a bi-polar, bi-sexual form) with a dynamic, interactive process in which putative "opposites" transform each other. A hybrid is a composite of different elements, parts, or origins, not a process of reproduction or transformation. It is, of course, conceptually possible, for example, to reify a series of historical *events* or an historical *process* into a static, bounded time period with mixed origins like a structuralist epoch of "long duration" (say, the British empire), or an "ideal type" like the Protestant ethic and the spirit of capitalism, or an "institutional pattern" like business cycles of expansion and recession. But ideal types are relatively static constructs which emphasize homogeneity and coherence over heterogeneity and contradictions. Second, the social construction of *ideas*, models, templates or ideal types needs to be analytically distinguished from the definition of actual *object*s (see Hacking, 1999, on the confounding of process and product, pp.66-68, and of the social construction of an idea and the cognition of an object as "real", pp. 83;91).

2. One example here is the imaginary production of an intelligent thinking and reasoning machine that is approximated in the idea of "artificial intelligence", robotics, and the chess-playing computer. Embodying the foundational conceptual work of Turing and von Neumann, modern computers perform multiple and complex operations in fractions of a second, thus transcending the laborious work of performing basic mathematical operations. Modern nano-technology based on Silicon chips is designed to perform multiple operations rapidly, simultaneously, and at ever lower cost in terms of energy and time. The relatively short product life cycle of contemporary PC's, I-phones, or electronic books (e.g.,"Kindle") illustrates the ongoing competition between established technologies and the episodic effect of ever more miniaturized, labor-saving and energy-saving technical innovations which periodically replace older computer technologies. The process has generally been described in terms of the acceleration of product life cycles and innovation, and the related notion of the "built-in obsolescence" of products already familiar from earlier phases of capitalist development (see also Stone, 2002 on "knowledge at work").
3. The emergent distinction between hackers and crackers is in itself an exemplary description of "boundary-work" by which insiders of a given sub-culture seek to distinguish themselves from

outsiders and the quintessential "Other" (Gieryn, 1983). The hacker ethic is the "spiritual" progenitor of the "open source model" pioneered by Linus Torvalds in the form of the Linux operating system. Today, this system is still - like the Wikipedia - a work under perpetual construction and a bane in the eyes of its strongest opponents, viz. powerful new media corporations like Microsoft and the defenders of laws protecting intellectual property and copyright. It is these forces, together with the rise of a new "electronic cultural policy" (Vaidhyanathan) since the early 1990s, that now constitute a new form of cultural domination.

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