Public Domain and the New World Order in Knowledge

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The General Agreement on Tariffs and Trade, the World Intellectual Property Organization negotiations in 1997 and, currently, the Multilateral Agreement on Investment are the legal instruments for the globalization and deregulation of international trade. My paper focuses on some of their implications for the free circulation of knowledge. For, if the rhetoric of globalization is all about the freeing-up of access to and the removal of regulatory controls from formerly restrictive and protected industries, one of the effects of these new legal regimes has, nevertheless, been to institute increasingly severe restrictions on cultural flows. Common to all of them is the fact that they define knowledge as property, and then seek to map out an appropriate regime of property rights. The restriction of illegal copying of software and of audio- and video-recordings, and the enforcement of patents on biological, agro-chemical and pharmaceutical patents are the leading edge of this new wave of incursions into the public domain that is supposedly protected by intellectual property law; with the extension of patent law to previously exempt areas, with strong moves towards the protection of facts in databases, and with the erosion of fair use exemptions, the very notion of a public domain of knowledge from which writers, artists, scientists and scholars can draw is seriously threatened.

The following is the description of a throwaway camera which, towards the end of Richard Powers' recent novel *Gain*, stands in for the heroine's death from cancer:

The camera jacket says: 'Made In China With Film From Italy Or Germany.' The film itself accretes from more places on the map than emulsion can cover. Silver halide, metal salts, dye couplers, bleach fixatives, ingredients gathered from Russia, Arizona, Brazil, and underwater seabeds, before being decanted in the former DDR. Camera in a pouch, the true multinational: trees from the Pacific Northwest and the southeastern coastal plain. Straw and recovered wood scrap from Canada. Synthetic adhesive from Korea. Bauxite from Australia, Jamaica, Guinea. Oil from the Gulf of Mexico or North Sea Brent Blend, turned to plastic in the Republic of China before being shipped to its mortal enemies on the Mainland for moulding. Cinnabar from Spain. Nickel and titanium from South Africa. Flash elements stamped in Malaysia, electronics in Singapore. Design and colour transfers drawn up in New York. Assembled and shipped from that address in California by a merchant fleet beyond

description, completing the most heavily choreographed conference in existence. (Powers 1998: 347–348.)

This account of an interrelation involving, at once, structural dependence and the technological and logistical magic (in all senses of that word) of the capitalist project is one that we all too easily recognize. Too easily, because the concept of the global that spins out into familiarity from this blur of proper names transforms the heterogeneous assemblage of the throwaway camera into a figure of ontological unity, a not very long-lost friend from the history of Western metaphysics.

Let me begin, then, by denying that the concept of globalization, in the sense I shall shortly specify, is either coherent or useful. Much of the theorization of globalization within disciplines such as geography, sociology, and cultural studies over the past decade and longer has extrapolated from the level of flows of traded goods and currencies and future probabilities—the halides and metal salts of the camera—to the level of cultural flows, which it imagines by way of the topos of the impact of transnational on ‘local’ culture. This figure once took the form of a thesis about cultural imperialism; these days, its more usual form is some version of the transformative integration of global into local cultures. This now somewhat sterile topos continues to assume (and to be nostalgic for) the level of the *national* culture, which it equates with the ‘local’. It tends not to have good ways of being specific about the uses and negotiations it posits, and it has rarely been attentive to positional differences within the receiving audience. Most importantly, it works as a figure of totality.

My argument concerns, in the first place, the conceptual framework within which this figure of the global has been constructed. A noun of becoming, ‘globalization’ offers an encapsulated explanation of transformations of space and time, of speed and social complexity, which are seen as, in some sense, epochal. In the oddly vulgar-Marxist form it most commonly takes in sociology textbooks and the *Wall Street Journal*, the concept of globalization posits a single driving force—either a set of interlinked changes in the mode of production (the advent of an information economy), or changes in the composition or the conditions of existence of global capital, or the complex of communications and information-processing technologies—which is then designated as the motive force for the associated transformation of a whole culture. This is a totalizing model in two senses: it projects a ‘lateral’ knitting together of space/time across an entirely interconnected geopolitical network; and a ‘vertical’ isomorphism of economic, political and cultural levels, such that the internal configuration of forces in each can be read off from, and is consequential for, that of the others: market liberalization and political democracy, for example, are assumed to be necessary conditions, the one of the other.

Because, like all models of epochal totality, the figure of globalization is teleological, it tends to be accompanied by a metaphors of the overcoming of social constraints by an irresistible force. In this imaginary, obsolete and rigidified social structures (the rusty machinery of government regulation, archaic protectionist barriers) succumb, will succumb, or must succumb to the force of a historical inevitability (one thinks of Marx’s hydraulic metaphors of floods and bursting

dams). Playing fields become level again, actors are released from their fetters, borders become porous to the flow of trade. In a familiar paradox, teleology takes on an ethical dimension: it is not just bad timing, but morally culpable that Thailand failed sufficiently to deregulate its banking sector, or that Japan set barriers to market entry, or that Suharto's Indonesia permitted quasi-state monopolies to distort competition. The morality has a neo-Darwinian ring to it: you must reform because it is right to do so, but also: you must reform because otherwise you will be destroyed.

I see two sorts of problem with this enactment of a logic of totality by the figure of globalization. The first is a factual problem. Paul Hirst and Grahame Thompson define the concept of globalization as a more or less coherent thesis positing the emergence, since the crises of the early 1970s, of a truly integrated global economy, which is rendering national economies and national regulatory systems irrelevant. Global market forces, primarily highly mobile transnational corporations that no longer owe allegiance to any nation state, are, the argument goes, henceforward uncontrollable by national governments. This thesis, Hirst & Thompson (1996: 197) argue, is, in the first place, lacking in historical perspective, since there have been earlier periods of comparable internationalization of trade and capital flows, especially that which stretches from 1870 to 1914. There is nothing unique about the present extent of market integration, since 'financial and other markets were closely integrated once the system of international submarine telegraph cables was in place and in a way not fundamentally different from the satellite-linked and computer-controlled markets of today'. Second, there are in fact few genuinely transnational companies: most very large companies trade multinationally from a national base. Third, far from being properly global, most trade flows occur between the United States, Europe and Japan, and these three powers have the capacity to exert considerable control over finance markets and the structure of international trade. Together, these arguments mean that the world's economy is international rather than properly global, and that the myth of globalization should therefore not be used to impose defeatist conclusions about the possibilities of national control, or at least mitigation, of the power of transnational capital.

The second, and I think more fundamental, problem with the discourse of globalization is a philosophical difficulty that affects any historicist discourse: the assumption built into it that each of its parts—the throwaway camera, at the far end of the process—is a *pars totalis*, a microcosm, in which, as in a hologram, the general logic of the whole process is contained in miniature. To the extent that each dimension or level or fragment of the epochal world-system is thus expressive of that system, no sub-set of the whole can be thought of as working according to specific determinations that are, in some sense, separate and different from those of the system. At the same time, the logic of necessity that informs this discourse projects this expressive logic onto the plane of diachrony: the global is at once the spatial dispersion of a logic, and its regular and necessary unfolding through time.

If, however, we leave open the question of whether the sense of historical movement carried by the concept of globalization corresponds to a 'singular' change, or a set of 'loosely associated' changes, or a set of 'contingently associated'

changes, then it becomes possible to understand both the non-synchronous temporalities of different domains and their coincidence or non-coincidence under specific circumstances. In what Appadurai (1996: 47) calls a world of 'disjunctive global flows', fields of action and organization have different speeds and trajectories, but always in relation to certain centralizing and singularizing pressures that are productive of a world order rather than its expression.

What I mean to offer is a 'Gramscian' explanation that 'globalization', while real enough as a set of constraints and effects, is not a *sweeping* process, but a series of moves, strategically coordinated and implemented, which are complexly related to the dynamics of capital accumulation and which have uneven effects on different fields. This is not a matter either of neo-imperialist conspiracy or of an inevitable historical direction, but of planning in transnational bureaucracies to create the legal instruments for the unimpeded flow of goods and capital, in ways which happen to advantage the most powerful nations and which make no concession to the poorest nations. (But 'nation', as always, is a problematic unit of explanation, since this division is also always internal to nations.) Let me make an analogy with what seems, in retrospect and I think wrongly, to have been the almost magically self-generating process by which the Thatcher and Reagan cultural revolutions transformed the course of history: an apparently epochal change that embedded a radical liberalism in the economic and political realms, reworked notions of the social order, the public domain, citizenship and the role of the state, and the market, and changed fundamentally the balance of power between capital and those institutions that moderate it—organized labour, state regulation, and the public sphere. To explain this process, which so quickly engulfed at least the Western world, however, it is not necessary to resort to the uncanny logic of historical necessity—to imagine it as a kind of contagion or a historical prairie fire. It is much more rationally explicable as a process of work: planned and coordinated work by disciplined cadres of business-oriented intellectuals, and politicians and bureaucrats making the long march through the institutions in a way that the European and American Left had only dreamed of. Blumenthal (1986), among others, has documented this planned attack on the key institutions of civil society; far from being an uncontrollable energy, this change was implemented patiently and systematically.

An institutionally inflected account of globalization would similarly understand it as a partial and incomplete outcome of processes occurring, with various degrees of overlap and disjunction, in a range of institutions that most closely affect the movement between nations of goods and capital, but which then have more scattered and less easily controllable effects upon more distant fields. My focus in the later sections of this paper is on the legal regimes governing international trade, including the regimes governing intellectual property; this nexus is a useful way of gaining some degree of precision about the causal mechanisms by which the domain of culture is affected by globalizing strategies.

Writing about the unprecedented form of economy that has emerged on a worldwide scale in the past two decades, Manuel Castells argues that:

It is *informational* because the productivity and competitiveness of units or agents in this economy (be it firms, regions or nations) fundamentally

depend upon their capacity to generate, process, and apply efficiently knowledge-based information. It is *global* because the core activities of production, consumption, and circulation, as well as their components (capital, labour, raw materials, management, information, technology, markets) are organized on a global scale, either directly or through a network of linkages between economic agents. It is informational *and* global because, under the new historical conditions, productivity is generated through and competition is played out in a global network of interaction. And it has emerged in the last quarter of the twentieth century because the Information Technology Revolution provides the indispensable, material basis for such a new economy. (Castells 1996: 66.)

Accepting for the time being, and with the reservations already expressed, the linkage that Castells makes, let me offer some definitions. I understand information to be any organization of matter-energy, and I assume that it is not necessarily representational in form. Knowledge would then be a higher level of information 'that has been systematized and integrated, organized so that it is relevant to natural and social processes' (Davis & Stack 1992: 2). In the domain of production, it takes the form of embodied skills, of organization of the production process, of the design of tools or machinery, of scientific knowledge about materials, of software algorithms, of techniques of use of materials, and of reflexive control of processes and of agents. The attribution of value to knowledge, which underpins the changes that Castells, like many others, describes, is closely bound up with its functions of control. This function has existed in all historical systems of production, but as Beniger (1986) argues, it has acquired an exponentially increasing value in industrial and post-industrial production, where the reflexivity of logos has become the condition of possibility, in military as in industrial strategy, of complex logistical achievement.

A central form of reflexivity in relation to the lower-level system of production is the market, which I understand as a cybernetic system for the distribution of information. What is exchanged in markets is not, directly, goods and money, but rather, in the first instance, information (which may or may not be true) about the holdings of each player; then an assessment of the value of each other player's holdings; then a negotiated commensuration of these valuations; then an exchange of promises formalized in a contract that commits a future exchange of holdings; then, finally, a translation of these pieces of information into the material or immaterial objects in which the market deals (which may be more information). Markets are cybernetic in the sense that the distribution (the adjustment of forces within the field) is ideally self-regulating, sensitive only to the forces at play and not to external controls—although the strength of those forces is, of course, formed in other fields, including other markets. One of the major failures of neoclassical economics was its working fiction that knowledge is valueless and costless, not itself a stake in market transactions; the real costs of knowledge, however, contribute to the formation of market asymmetries. In an information economy, both traditional

markets in commodities and markets in capital (including markets in equity and in derivatives such as futures) have been transformed by the networking of expert systems, which allow the coordinated instantaneous exchange of massively greater quanta of information than was previously the case. These effects of concentration and speed have contributed substantially to the formation of the chronotope of the global.

Markets are social constructs, products of regulation, which have been set up in order to work in particular ways on particular kinds of raw material and with particular speeds, balances of forces, degrees of openness, and so on. They are put in place by legal regimes that specify their conditions of operation, and it is for this reason that markets are never the opposite of government but always the constructs of a particular regulatory regime. (Even highly deregulated markets depend upon a construction by the state of forms of property, of contract and of personhood that have no extra-governmental existence.) In recent years, the world market in information has been dramatically restructured.

Two opposed models of the governance and social role of knowledge have struggled for dominance in the post-war period: on the one hand, the model embodied in the New World Information and Communication Order (NWICO), proposed in 1976 and espoused by a large bloc of third-world nations (cf. MacBride 1980; Smith 1980; Mattelart 1994); on the other, the model embodied in the protocols governing trade-related aspects of intellectual property formulated in the Uruguay round of the General Agreement on Tariffs and Trade (GATT). These alternative frameworks were propounded in international forums by United Nations bureaucracies, divided between those with a 'trade' orientation (the World Trade Organization, the International Monetary Fund, the World Bank) and those with a 'development' orientation (the United Nations Conference on Trade and Development, the World Intellectual Property Organization, and the United Nations Economic, Scientific and Culture Organization), whose attitudes reflect, as Braga puts it, 'the predominance of a *scientific ethos* which has at its basis the norm of complete disclosure', and which 'is hostile to the view of knowledge as a *private capital good* that is the foundation of the so-called mature intellectual property systems of the industrialized economies' (Braga 1990: 263; cf. Lindsay 1994: 36). NWICO was defeated in 1985 with the withdrawal by the United States, and subsequently many of its allies, of funding support from UNESCO; the GATT protocols on intellectual property were ratified in 1994.

The GATT treaty marks a clear historical demarcation in the global control of information.¹ What it does, on my reading, is impose a definition of intellectual property rights directly disadvantageous to Third World countries that, holding few patents themselves, have now been brought within the scope of a regime where they will be held strictly accountable for their state of exponentially increasing indebtedness. The GATT protocols specify uniform and universally binding standards on patents (which now have a lifespan of 20 years), trade marks, industrial design, integrated circuits, trade secrets, and copyright in software, and audio and video products. One of their main objectives is the extension of patent enforcement to certain key industries, such as pharmaceuticals and agrochemicals, which had in

many countries been exempt from patent protection (cf. Correa 1994: 327). These are industries whose products—medicine and food—force, in a particularly direct manner, the issue of a conflict between ‘social’ and ‘private’ interests. The new biotechnologies of genetic engineering, and the changing patent regimes which both correspond to and foster them, are at the centre of these industries; and what is at stake is an extension of intellectual property regimes to incorporate the patenting of nature itself.

Within Western intellectual property regimes, nature, like language, has traditionally been classified as a *res communis* that can have no human author (cf. Edelman 1994: 79). Just as I cannot lay claim to exclusive ownership of the basic materials of the English language, so I cannot patent a natural species or a particular use of a substance found in nature; I can patent what I invent, but not what I discover. The biotechnological revolution of the past 20 years has, however, brought great pressure to bear on the way in which that line between invention and discovery has been drawn. Greenfield (1993: 151) notes that the trend in contemporary law ‘is to allow patents for “products of nature” so long as the inventor has changed the product to conform to the utility, novelty, and nonobviousness requirements of the patent statute’. Correa elaborates:

In countries that are members of the European Patent Convention a patent can be granted when a substance found in nature can be characterized by its structure, by its process of obtention or by other criteria, if it is new in the sense that it was not previously available to the public. In the United States an isolated and purified form of a natural product can be patented if it is found in nature only in an unpurified form. As a result, a very thin line separates ‘invention’ from ‘discovery’ in those countries. (1992: 155.)

This is to say that patent law has been shifting towards a more expansive definition of its subject matter, and in particular towards a rather different understanding of that ‘common’ realm of ‘nature’.

In the domain of genetic engineering, a line of patent decisions in the United States and Europe has granted monopoly rights in ‘invented’ plant varieties and in their reproducibility—the genetic chain that is the essence of living matter; in genetically engineered organisms, from oysters to the Harvard mouse to the cloned sheep, Dolly; and to human DNA sequences. One effect of this shift in the legal status of organic matter is that the world’s germplasm resources, largely clustered in the Third World and which have traditionally been considered to belong to the ‘common heritage of mankind’, are being appropriated at little cost from the world’s poorest nations, developed by genetic hybridization, and resold to the source countries as commodities that are not only expensive in themselves, but are bred to be reliant upon chemical fertilizers and pesticides manufactured by the agrochemical corporations (cf. Kloppenburg 1988: 15).

The issue is one of subsidy. The genetic uniformity that has resulted from hybridization and crop-standardization has left First-World agriculture heavily dependent on importations from the Third World as a source of genetic variation. Yet this flow, which has enriched the corporate producers of hybrid varieties, has been

almost entirely free of charge, since the model of knowledge as private intellectual property works to the disadvantage of the 'almost invisible, informal and collective innovation' characteristic of peasant communities (Correa 1992: 154). Patent law, which has no hold on 'products of nature', favours innovations deriving from high-tech research rather than innovation by long-term breeding for genetic variety (cf. Mooney 1990: 9). Also, as James Boyle points out, the implicit metaphor of authorship which runs through Western intellectual property regimes plays a strongly determinant role in structuring the pattern of distribution: 'The chemical companies' scientists fit the paradigm of authorship. The [Third World] farmers are everything that authors should not be: their contribution comes from a community rather than an individual, tradition rather than an innovation, evolution rather than transformation' (Boyle 1992: 1529–1530).

A second set of protocols that are likely to have substantial effects upon the global ownership and control of knowledge is the Multilateral Agreement on Investment (MAI). Negotiations on the Agreement began in 1995 among the 29 members of the Organization for Economic Cooperation and Development; it was intended to be signed in April 1997, and then in April 1998, but the deadline has been further extended because of the difficulty the negotiators have experienced in reaching agreement.

Built on the provisions of the North American Free Trade Association, and intended to remove obstacles to international investment, including regulatory controls favouring local over foreign investors, the agreement represents exclusively the rights, not the obligations of investors: it is effectively a charter of rights for multinational corporations. Under the current draft, signatories will be required to:

1. open all economic sectors, including real estate, broadcasting and natural resources to foreign ownership;
2. treat foreign investors no less favourably than domestic firms;
3. remove performance requirements that require investors to behave in certain ways in order to gain market access (for example, laws requiring a certain degree of local content, or technology transfer, or training of local personnel);
4. remove restrictions on the movement of capital;
5. compensate investors in full when their assets are expropriated, either through seizure or 'unreasonable' regulation;
6. accept a dispute-resolution process, allowing investors to sue governments for damages before international panels when they believe a country's laws are in violation of MAI rules; and
7. ensure that states and localities comply with the MAI.²

The effect of these requirements will be to exert pressure on labour laws, on anti-discrimination provisions, on environmental safeguards and on measures designed to protect local industries. They will have potentially damaging effects on the culture industries because they will make local content provisions illegal, and on education because they will entitle foreign providers to subsidies available to local providers.

The agreement does allow for some sectors of the economy to be reserved from

its provisions—France, for example, has already announced that it will reserve its culture industries—but the long-term expectation is that the agreement will be comprehensive, and it is structured in such a way that no new reservations can be added by later governments, and later governments are locked into the agreement for 20 years. There is now no certainty that the agreement will come into effect because, despite the secrecy with which negotiations have taken place, it has aroused considerable opposition from non-government organizations and grassroots political organizations (and not just on the left: it is also vehemently opposed by right-wing movements fearful of world government). If it does have a successful outcome, however, it is expected that it will be extended to the members of the World Trade Organization, with some pressure for compliance being exerted by the international financial institutions.³

Finally, let me briefly mention a third set of international legal protocols affecting proprietary rights in knowledge. This is the negotiations that have been underway in the World Intellectual Property Organization to extend copyright protection to databases and thus, implicitly, to the facts which are compiled in them. Like ideas, facts have always been understood in copyright law to be exempt from private appropriation; in an information economy, however, databases are an immensely valuable commodity, and there is every chance that this area of the public domain will also fall to commercial interests.

It would be a mistake, however, simply to condemn the world information order set in place by legal regimes such as GATT. Like any complex political formation, it has the potential for both negative and positive consequences. Because they are embedded in a broader trade framework, the GATT protocols tend to favour universality and openness of access to information, and to work against both restricted cultures and cultures of secrecy. They enhance the often corrosive effects of the mass media on face-to-face cultures, and the universality they propound is, in one sense, no more than the universalized particularity of the wealthy nations. Yet, however contradictory this openness, it may serve to stimulate reactive cultural production, or cultural hybridization, or merely an uncontrollable dissatisfaction with repressive political orders. At the same time, despite the rhetoric of the 'free flow of information' (one of the slogans used by the Reagan administration against the supposed effects of the NWICO), it is also the case that the strengthening of private property rights in information has potentially serious consequences for the protection of local cultures and for the further enclosure of the public domain.

Much of the commentary on the GATT round is cast in a moralistic rhetoric of protection of the Western information industries against 'piracy' and 'theft' on the part, particularly, of South-East Asian nations and China (cf. Hoffman & Marcou 1990: 25). However, these denunciations rarely attempt to get to grips with the conflict of definitions of what should count as 'property' in the first place (should patents run for 5 years or for 20? should pharmaceutical products be subject to special conditions such as local licensing?), and their bland assurances that subscription to an international intellectual property regime will, in the long term, bring about technology transfer and thus a *decreased* dependency of the 'developing' on the 'developed' nations ring hollow in the light of the way the GATT regime has 'neatly

and disturbingly divided developed countries, who are major net exporters of intellectual property rights, from the L[ess] D[eveloped] C[ountrie]s which are net importers' (Kostecki 1991: 273). There is no 'accumulation of knowledge capital' when use of that capital is carefully controlled by monopoly rents; and the undermining of a 'library model' of knowledge, in which knowledge is deposited in open archives for free access by everyone, in favour of a system of private ownership, where access is regulated by the payment of rent, represents a major erosion of the principle of public domain.

The concept of public domain is the cornerstone of all Western intellectual property regimes. In the case of patent law, 'nature' has been the key area reserved for the public domain, and there has also been a strong emphasis on the publication of patentable knowledge; in the case of trademark, it is language itself that is reserved; and in the case of copyright, it is, above all, ideas. Yet the concept is a purely residual one: rather than being, itself, a set of specific rights, the public domain is that space, that possibility of access, which is left over after all other rights have been defined and distributed (cf. Lange 1981).

In recent years, the concept of public domain has been subject to the same broad philosophical critique that has been directed at the concepts of public good and the public sector by neoliberal advocates of market forces. This critique is based in a Malthusian assumption of scarcity and of the need to ration scarce resources between competing and self-interested individuals. One of its most influential versions has been Garrett Hardin's metaphor of the tragedy of the commons, a version of the prisoner's dilemma paradox, in which the aggregation of what is in each individual's best interest produces an outcome in which players overall come out worse off. In Hardin's argument, given a piece of common pasture, each herdsman who grazes cattle on it will, 'as a rational being', seek 'to maximize his gain', which will then lead to overgrazing and the destruction of the land. 'Each man', Hardin says, 'is locked into a system that compels him to increase his herd without limits—in a world that is limited. Ruin is the destination towards which all men rush, pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all' (Hardin 1968: 1244).

Insofar as this argument draws upon the model of the European feudal commons, in which villagers held coexistent rights, it is historically wrong: the commons were highly regulated by a customary recognition of rights that were coincident rather than exclusive, indicating 'that even with respect to scarce resources, a commons need not be a wasteland of uncertain or conflicting property claims. Customary use of the mediaeval commons, even for consumptive uses, had been hedged with restrictions limiting depletion of resources' (Rose 1986: 743). However, the argument to the tragedy of the commons is also conceptually wrong, since, rather than being exhausted by use, knowledge actually increases when it is shared. In Davis and Stack's words, it 'has peculiar qualities which distinguish it from labour, machinery, raw materials and other components of production. Two people can use some bit of knowledge simultaneously, it can be duplicated ad infinitum at almost no cost, it can circulate around the globe in seconds, it is not "consumed" or exhausted as it is

used, and the more it is shared, the more it grows. These qualities give knowledge a unique and subversive role in commodity production' (Davis & Stack 1992: 3).

If it is to be made to yield a profit, however, the problem becomes that of attaching exchange value to this entity which has an almost limitless use value, i.e. of making an abundant good scarce. The uncertainty that flows from the indeterminacy of uses (the unpredictability of the 'take' of any information product) entails considerable risk for capital investment (Miège 1989: 43). At the same time, the relatively high costs of initial production and the relatively low costs of subsequent copying of information goods make predictability imperative.⁴ The problem of the minimization of risk can be solved in part by generating 'a constant stream of unique (if often similar) products with severely limited life spans' (DiMaggio 1987: 446), and more broadly by a combination of control of access and regulation of demand.

One of the rationales given for the creation of private property and commercial markets in information and knowledge is the need to provide an incentive for the creation of new knowledge. This argument is rarely tested, and there are strong counter-examples: recipes, for example, cannot be copyrighted because they are 'methods'; yet there is little evidence that this lack of protection inhibits the creation and publication of new recipes. Similar arguments can be made about shareware, or indeed about computer architecture. But the important thing, it seems to me, is not only that the argument about incentive is too narrowly posed in economic terms, but that it misses the point: the problem is not that there is a shortage of new information, but that a private property regime imposes potential limitations on the extent to which cultural materials can be freely used and transformed.

One of the ways in which copyright law thinks about uses and transformations is through the fair use or fair dealing provision, which allows free use of copyrighted materials for certain specified purposes such as criticism, comment, news reporting, scholarship, and teaching; and one of the metaphors it uses is that of the relation between first authors and second authors. First authors are the originating authors, whose work is made use of by those who come after: scholars whose work is quoted by later scholars, for example. Something similar to the fair use clause is implied in patent law's insistence on publication of the knowledge that forms the basis of a patent: its explicit goal is to further scientific research while giving a limited monopoly right of control of the material in order to reward creativity. Now, the paradox of the relation between first and second authors resides in the fact that all first authors are themselves always second authors, indebted to their predecessors in an endless chain. Copyright law thinks of the relation as an exceptional one, restricted to 'productive' uses or special public-good purposes; it represents, as one judge puts it, 'a form of subsidy — albeit at the first author's expense — to permit the second author to make limited use of the author's work for the public good' (Blackburn 1984: 478). However, this special case is the basis of all textual production: authors (to use the legal term) do not create *ex nihilo*, but draw upon a language and a genre, and a textual matter and a tradition that they neither invent nor fully control. The legal fiction of originality is fully in tension with this intertextual underpinning of textual production, and this means, as Litman (1990: 967) puts it, that the paradigm of authorship 'can lead us to give short shrift to the

public domain by failing to appreciate that the public domain is the law's primary safeguard of the raw material that makes authorship possible'.

All this is perhaps a long way from GATT, yet the two are intimately connected because of the internationalization through its protocols of an intellectual property regime that is built on the principles of Western law and which is deeply committed to the full commodification of culture. My reservations about these principles are grounded in the traditional Enlightenment values of critique, of an open public sphere, and of the scientific ethos of the free sharing of knowledge—although I make no assumption that any of these values have ever been historically actualized, and although I recognize that Enlightenment values also ground many aspects of the Western intellectual property regime itself. I assume that a flourishing public domain is the precondition for those processes of intertextual transformation by which cultures stay alive.

In contesting the idea that globalization is a sweeping and irresistibly totalizing force, and in emphasizing instead its piecemeal character as political and legal work carried out in a series of discrete institutional sites, I have tried to argue that the defense of this dynamics of use and transformation can also be made at each of these sites, and without any foregone conclusion that our freedoms will be swept away by the tsunami of history. Let me conclude by calling attention to the crucial role that China will play in this new world order in knowledge. For all its cultural wealth, it enters that world poor in the kind of intellectual property that determines wealth and poverty in an information economy. It brings with it, however, the eminently capitalist power of being the world's largest market. Its interests are thus ambivalent, and it is the hope of many of us who oppose the enclosure of the public domain that it will exercise its market power to the benefit of all those who lose out in the new world order in knowledge.

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Notes

This paper was delivered at the Conference on Globalization and the Future of the Humanities, at the Beijing Language and Culture University, August 1998.

- [1] The following paragraphs draw on material elaborated in Frow (1997).
- [2] This summary is based on an account prepared by the Preamble Collaborative, which I found at <<http://mai.flora.org/>>.
- [3] Since this paper was completed the HAI has effectively been abandoned. It is likely, however, that the substance of its proposals will be incorporated into the next round of WTO negotiations.
- [4] Landes & Posner (1990: 448) discuss this in terms of the 'public good' character of information.

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