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Commodifying the 'Information Age': Intellectual Property Rights, the State and the Internet

Christopher May*

Abstract

This article examines the role of the state and the rule of law in relation to the problem of intellectual property on the Internet. It concludes that the claim that states are no longer effective actors (and hence subjecting to them to political pressure is a waste of time) has conveniently omitted the state's role as guarantor of the legislative infrastructure that underlies market activity. The state is critically required to legally support the markets of the 'new economy', and while its means of market intervention may have changed, this is not the same as withdrawal. The history of intellectual property has been a political battle to balance the rights of owners with the very important social benefits that flow from social availability of information and knowledge. Thus, states remain a key site for political mobilisation as regards the central legal structures of the (so-called) information society.

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^{*} Christopher May is Reader in International Political Economy at the University of the West of England, has published widely on intellectual property. A Critical International History of Intellectual Property Rights (co-authored with Professor Susan Sell) will be published by Lynne Rienner Publishers in 2005.

'It is often forgotten that law as a matter of fact is frozen politics'. 1

The compression of space and time which globalisation has heralded is often presumed to presage the transformation of the global political economy and the decline of the state as an effective political actor. Information and communication technologies (ICTs) are seen as one of the key catalysts of these changes. However, while many states may have reconfigured their legal institutions and modified their regulatory apparatus, these shifts do not represent a significant change in the role of the capitalist state. The frequent reification of the (global) market often underpins the argument that there has been a significant decline in the efficacy of the state, or the claim that we have entered some new phase of global economic organisation. However, markets need extensive political and legal foundations: where these foundations are absent 'normal' capitalism does not thrive; rather it is replaced by klepto-capitalism and economic collapse (as in Russia in the early 1990s).² Often in the accounts of the new 'information age', the market is depicted as a natural phenomena, separate from the political economic functions of the state. This reification can obscure the underlying supports on which information age capitalism continues to rest, most importantly the continuing centrality of commodification for capitalism's global reproduction.³

Although, not the central subject of this article, it is as well to briefly suggest the outline of markets in information and knowledge. Capitalism requires the commodification of goods into properties that can be bought and sold, to allow the exchange of goods within a developed division of labour. This needs both alienability (the ability to transfer legal ownership rights), and developed contract law to ensure such transfers are defensible. This underpins a 'credible commitment' to fulfil the obligations of transfer: the transfer of property rights in exchange for an agreed payment. This transfer requires the relinquishment of some (although not necessarily all) rights over the commodity by the seller in favour of the purchaser. For information and knowledge, this represents a clear difference from the 'free' circulation, and non-rivalry of non-commodified information and/or knowledge transfer. However, without the construction of scarcity no price could be guaranteed for transfer (as use could easily be obtained without purchase) and hence the market would struggle to function.⁴

Since 1995 intellectual property rights (IPRs) have been subject to the TRIPs agreement which is overseen by the World Trade Organisation (WTO). While this agreement does not determine national legislation, for members of the WTO to be TRIPs-compliant their domestic intellectual property law must support the protections and rights that are laid out in TRIPs' 73 articles. The agreement covers not only general provisions and basic principles, but also represents an undertaking to uphold

³ I would like to thank Script-ed's very thorough reviewer for helping me clarify and improve the argument in this article.

¹ L D Eriksson "The Indeterminacy of Law or Law as a Deliberative Practice" in A. Hirvonen (ed.) *Polycentricity. The Multiple Scenes of Law* (1998): 52

² see H de Soto *The Mystery of Capital* (2000)

⁴ see the discussion in C May, A Global Political Economy of Intellectual Property Rights. The New Enclosures? (2000), chapter two.

certain standards of protection for IPRs and to provide legal mechanisms for their enforcement. The robust dispute settlement mechanism which is a central aspect of the WTO now encompasses international disputes about IPRs. Prior to 1995, while there were long standing multilateral treaties in place regarding the international recognition and protection of IPRs (the Paris and Berne conventions), overseen by the World Intellectual Property Organisation (WIPO), these were widely regarded by governments in IPR-exporting countries as toothless in the face of 'piracy' and facilitated the frequent disregard for the protection of IPRs in less developed countries.

The inclusion of the TRIPs (and the General Agreement on Trade in Services) into the Uruguay Round final settlement was the culmination of a general strategy on behalf of the US and EU to force developing countries to adopt multilateral agreements in sectors which they had hitherto resisted.⁵ By withdrawing from their previous commitments under GATT 1947 and therefore terminating any obligations therein, the US and EU forced developing countries to accede to a much wider agreement under the WTO if they wished to retain the trade arrangements with which they had started the Uruguay Round.

In addition to the advantages to be gained by having a tougher multilateral enforcement mechanism, the US government (alongside allies in the EU) wanted to move the international regulation of IPRs into the new WTO (from the WIPO) because their negotiators felt that they were more likely to gain agreements to their advantage by linking these issues to the international trade regime.⁶ The fact the WIPO was an agency of the United Nations, and therefore (however imperfectly) subject to some pressure from development orientated interests, further encouraged the move to the WTO, a separate membership organisation where free trade is the overriding policy concern. It is therefore unsurprising that the TRIPs agreement represents a particular 'trade-related' view of the role of IPRs in economic relations. Indeed, a number of large multinational corporations with a particular interest in protecting their IPRs played a major role in the negotiations which led to the TRIPs agreement, drafting the majority of the document which became the broadly successful position advocated by the office of the US Trade Representative. These companies had a significant impact on the conceptualisation of IPRs and the (potentially) globalised norms of information commodification lying at the heart of the TRIPs agreement.

The TRIPs agreement is significant in its extension of the rights of the owners of intellectual property, representing a major triumph for the US pharmaceutical, entertainments and informatics industries. The TRIPs agreement ensures that while in the past there was significant variance across the global system as regards the protection (and recognition) of IPRs, there is now effectively a single legislative space where ownership rights (over knowledge and information) are paramount, and thus

TRIPs-plus world: The World Intellectual Property Organisation (TRIPs Issues papers No. 3) (2003).

⁵ R H Steinberg, "In the Shadow of Law or Power? Consensus-Based Bargaining in the GATT/WTO" (2002) 56 *International Organisation*: 339-374

⁶ J Braithwaite and P Drahos, Global Business Regulation (2000): 61-64

⁷ S F Musungu and G. Dutfield, Graham Multilateral agreements and a

these corporations can enjoy the same harmonised protection throughout the global economy. Indeed, Kurt Burch contends that this expansion of ownership rights

also extends an essentially liberal conception of social life as relations organised and understood by reference to exclusive property rights... [it] promotes the vocabulary of rights and property and the liberal conceptual framework they help define.⁸

Furthermore, Samuel Oddi argues that the use of a natural *rights* discourse tries to establish that

these rights are so important that individual [WTO] member welfare should not stand in the way of their being protected as an entitlement of the creators. This invokes a counter-instrumentalist policy that members, regardless of their state of industrialisation, should sacrifice their national interests in favour of the posited higher order of international trade.⁹

The rights of capitalists to commodify information and knowledge as they see fit are privileged throughout the agreement, and are regarded as the naturally 'just' rights of ownership. This attempts to raise commercial rights to exploit information and knowledge to the same level as human rights. Although this may be legitimate it is hardly uncontroversial, given that sometimes the exercise of these commercial rights is at the cost of the human rights of users, for instance in the realm of AIDS medicines.¹⁰

Therefore, while the agreement imposes a complex and wide ranging set of requirements on signatories, ¹¹ at the core is a particular set of norms regarding the treatment of knowledge as property. These norms underpin the entire agreement and are based on the notion that the private ownership of knowledge as property is a major spur to continued economic development and social welfare. They further emphasise the development of knowledge as an individualised and proprietorial endeavour, and the legitimate reward of such individualised effort. Most obviously TRIPs includes a robust norm of commodification of knowledge and information, which in itself should alert us to the fact that the 'information age' is capitalist business-as-usual, utilising previously established legal structures to ensure that capitalists' ability to commodify important and profitable assets and resources continues into the so-called 'information age'. It is not as some 'Internet Utopians' have claimed, a world beyond capitalism.¹² Before moving to look at the issue of the 'information age' it as well to understand the interaction of law and market.

⁸ K Burch, "Intellectual Property Rights and the Culture of Global Liberalism" 17 Science Communication (1995): 215

⁹ A S Oddi "TRIPs - Natural Rights and a 'Polite Form of Economic Imperialism" 29 *Vanderbilt Journal of Transnational Law* (1996): 440

¹⁰ C May 'Unacceptable Costs: The Consequences of Making Knowledge Property in a Global Society' 16 *Global Society* (2002): 123-144.

¹¹ Space precludes a detailed account of TRIPs numerous sections; K. Maskus *Intellectual Property Rights in the Global Economy* (2000) offers a good concise summary of the agreement, as does D. Matthews *Globalising Intellectual Property Rights* (2002), but also see my discussion in May *A Global Political Economy of Intellectual Property Rights*.

¹² The Utopian literature is surveyed at some length in C.May *The Information Society: A sceptical view* (2002)

1. The rule of law and markets

If modern law is 'a body of enacted laws; ...positive law, willed, made and given validity by the state itself in the exercise of its sovereignty', then we can assume that laws do not develop spontaneously. 13 Laws recognise non-state activities or traditional practices, but can only be law in the sense of a society wide legal code through the existence of legitimate political authority. Indeed, formalised law and the interests of the state are inseparable: 'the law is a moral topography, a mapping of the social world which normalises its preferred contours - and, equally importantly, suppresses or at best marginalises other ways of seeing and being. ¹⁴ By coding certain outcomes and practices as legal and others not, the state affects certain outcomes and legitimises coercion against those practices not consistent with such an agenda. The capitalist state constitutes much of society qua capitalist society through the legal forms it adopts to recognise and legitimise certain activities undertaken by contracting legal individuals. Even when the law seems absent, private space still exists within the jurisdictional space; the lack of rules in any specific instance is merely part of the overall current legal settlement and may change as the needs of capital change. Politics is never absent from law's development: the enacted law is intricately tied up with the interests and practices of the capitalist state.

As E.P. Thompson suggested: 'The greatest of all legal fictions is that the law itself evolves, from case to case, by its own impartial logic, true only to its own integrity, unswayed by expedient considerations'. 15 This is not to suggest that the law merely reflects the needs and interests of the ruling class; it is not merely 'superstructure', rather Thompson argues that the 'imbrication' (overlapping) of law and productive relations, means that legal institutions and the capitalist market economy are interconnected and impossible to completely separate. At the same time that laws structure productive relations (most obviously, but by no means exclusively, through property rights and legalised commodification), such law also changes in reaction to shifts in political economic relations mediated through the state's governing apparatus, although such shifts are never automatic nor instrumental. This imbrication of law and productive relations is 'endorsed by norms' although such norms are always subject to conflict and need to be constantly (re)produced. ¹⁶ The laws of the capitalist state and the social relations of capitalist economic activity are not related in a uni-directional manner but rather are intertwined in a simultaneous layering, each one affecting the other.

While itself part of the ruling apparatus and part of the way the state legitimises itself, law is also the way a society co-ordinates its various demands, interests and actors. Therefore, it is impossible to imagine a developed and complex *market* society

¹³ G Poggi The Development of the Modern State (1978): 103

¹⁴ P Corrigan and D Sayer "How The Law Rules: Variations on some themes in Karl Marx" in B. Fryer et al (eds) *Law, State and Society* (1981): 33

¹⁵ E P Thompson *Whigs and Hunters. The Origin of the Black Act* (1975) (hereafter referred to as Thompson *Whigs and Hunters*): 250

¹⁶ Thompson Whigs and Hunters: 261

without law.¹⁷ Markets are based on social rules and conventions, but these are backed by legal institutions in the last analysis. Laws which contradict social norms are difficult to enforce and thus while states may try to shift such norms through laws (through welfare and social policy for instance), such moves cannot (at least in a democracy) be made too quickly or against serious social resistance. Markets are a site of conflict over norms, contestation regarding acceptable practice, and the victory of particular interests. Frequently governments argue that they are required by 'the markets' to adopt certain practices (including regulatory systems). Such reification is mistaken: markets are the summation of the decisions (or perceived future decisions) of the actors whose economic interactions the market represents; markets do not act independently of such decisions, although the outcomes are aggregated.

The law is therefore a site of contestation and reproduction of the state's ability to rule, and as such mediates between those it governs and the state itself, where those it governs are not limited to its own nationals but also include non-nationals operating within its jurisdiction. The law not only limits the actions of the ruled but the rulers as well: the law 'may disguise the true realities of power, but at the same time... may curb that power and check its intrusions'. Thompson was keen to emphasise that the Rule of Law was an 'unqualified human good', even while stressing the injustice of particular laws. Thus, historically, one of the devices for countering resistance to the state has been to limit such rule through legal limits on state activity. Property laws both establish the state and protect property owners from the power of the state. Only by being seen as just can law rule without massive and continuing reinforcement through police action. The law and the state are intermingled; state governance develops using law to further particular interests within its jurisdiction, but also aware of the need to respond to resistance where the rule of law is too far removed from community understandings of fairness, justice or customary practice.

While law is not merely an epiphenomena of social relations, it does reflect (in a contested manner) the interests of certain groups more than others. Hence considerable political resources are deployed to establish certain 'common-sense' rights (most importantly for the argument here: the right to hold property in creative products, innovations and other forms of knowledge or information). In this sense the state in its enactment of law is a site of contestation between competing groups whose power resources may be fundamentally unequal. Although the state favours those who serve its (economic and political) ends, their more extreme demands may be compromised to protect the legitimacy of the overall legal structure. Now that I have laid out why law might be central to capitalist societies' economic organisation, we can focus on the key concern of this short essay; the commodification of information in the age of the Internet.

2. The centrality of intellectual property law in the 'information age'

Capitalism revolves around the relations between property holders, with many only having their labour (as property) to bring to the market. If capitalists are to make a profit and therefore accumulate more capital as they must do if they are to reproduce

¹⁷ Thompson Whigs and Hunters: 260

¹⁸ Thompson *Whigs and Hunters*: 265

¹⁹ Thompson Whigs and Hunters: 266

their capital, they must find things from which they can extract the surplus value, via the market. Most importantly these must be combined in various ways and then sold for more than their collective cost. This requires a regime of property rights to allow for the legally sanctioned transfer of resources (including labour) from one group to another. Historically capitalists have managed to render many things as property, and the expansion of IPRs represents merely another phase of their need to mobilise raw materials (their inputs) as legalised property.

Despite the claims of Internet Utopians (who remain surprisingly influential in policy circles), class differences based on ownership of the means of production have not disappeared. In the information economy the ownership of valuable knowledge resources remains largely with the various segments of capital, while workers are allowed access to these resources only to work them. They may work on, and use, the knowledge and information that companies control but they are mostly unable to finally own it. Employers use both legal and organisational techniques to ensure even senior workers cannot legally retain extensive knowledge resources (or 'knowledge capital') for their own use. 'Work-for-hire' provisions in intellectual property rights law (patent and copyright) allow the appropriation of the intellectual outputs of the workforce by the contracting employer.²⁰

While the methods of extraction may have changed, the logic remains unaltered. Like material property relations, intellectual property relations render output alienable and therefore exchangeable in markets, they commodify knowledge and information for capital's ends. The continuing deployment of technology has rendered intellectual activity *directly* productive and has allowed the demystification of many economic practices. This is hardly novel. Karl Marx pointed out last century that,

even down into the eighteenth century the different trades were called 'mysteries' [but] Modern Industry rent the veil that concealed from men their own social process of production, and that turned the various spontaneously divided branches of production into so many riddles, not only to outsiders, but even to the initiated. The principle which [modern industry] pursued, of resolving each process into its constituent movements, without any regard to their possible execution by the hand of man, created the new modern science of technology.²¹

Therefore, the move to reconstruct work into (commodified) tasks deliverable (at least partly) by machines is not part of the novelty of the information age, rather the rendering of 'skilled practices' as techniques is part of the characteristic logic of capitalism. The logic of capitalism has prompted the development of expert systems and software to commodify and carry out many information-related jobs, and the encourages the organisation of these new tasks into new industrial sectors.

Furthermore, companies frequently attempt to buy out those inventors who have managed to patent an idea, or rely on the increasingly expansive process of filing a patent to ensure that inventors find it hard to garner any protection for their innovations, allowing its capture by capital. For copyright, similar difficulties for

²⁰ This confusion is perhaps less pronounced in the work of Castells and other academic commentators, see F Webster *Theories of Information Society* (Second edition) (2003)

²¹ K Marx, Capital. A Critical Analysis of Capitalist Production (Volume 1) (1887 [1974]): 456/457, footnote deleted

exploitation arise. Few authors can successfully muster the funds to not only produce copies of their publication, but also mobilise the resources (from marketing to distribution) that will support the widespread availability of their work. It is hardly self-evident that the Internet will change this situation: in the music industry, although there have been attempts to record and distribute music outside the major global recording companies, these companies remain the only route to large scale distribution and potential rewards for the artist. Few if any 'unsigned' artists have been able to break into the global music market via Internet distribution and marketing (despite a number of services utilising peer-to-peer technologies). In other areas of the 'creative' industries, it is the same; to secure significant distribution (and therefore income) the originators or creators of knowledge- or information-related products need to assign the rights to their work to large companies, who then control these rights for exploitation.

Ownership and control of IPRs in capitalist enterprises is maintained through the conjunction of contract and property law. IPRs enable the enclosure of specific ideas into 'properties' while service and employment contracts ensure the control of these properties lies with capitalists, not the creators themselves. As the celebrants of the 'new economy' continually remind us, the new tools of work are located in the mind, but when these tools produce discrete ideas, products of innovations, labour contracts with IPR provisions aim to enclose such knowledge as the property of the employer. Intellectual property therefore allows the separation of the individual from the products of their own mind, it reproduces the alienation of the worker from the product of their labour that was central to Marx's characterisation of capitalist commodification of labour.

Marx placed the 'making' of property, or commodification, at the centre of his analysis of capitalism: this is the appearance of relations between individuals as a relationship between things. (Of course, one might argue that the making of property from information and knowledge is more akin to primitive accumulation than to commodification, but I shall leave this aside here.) Capitalism has progressively deepened its penetration into previously non-commodified social relations. However, we must clearly distinguish markets from capitalism. Markets are a device, embedded within society, for the co-ordination of demand and supply which produces prices that enable exchange mediated by money of goods that have been socially produced. This contrasts with capitalism, which intervenes in the economy by producing goods or services specifically for profit, speculatively. The capitalist earns a socially recognised (and legitimated) return on investment (enabling capital to be reproduced and accumulated) when items are brought to market and successfully sold. Market economies can exist without capitalism and have done so, but capitalism cannot exist outside a market economy.

This analytical separation enables changes in the form of market relations (most specifically the sorts of commodities and services brought to market) to be distinguished from the driving organisational logic of capitalists acting in the market itself. If we accept that markets are not the same as capitalism, then while they are

²² Space precludes a discussion of the associated problems of information enclosure. For an excellent recent collection of articles, see: J. Boyle *The Public Domain* (66 Law and Contemporary Problems: special issue) (2003).

²³ May The Information Society: 51-66

inter-related, changes in the market's character do not indicate necessary changes in the 'laws of motion' of capitalism. The character of the economy may change due to technological or social changes, and this may expand or contract the possibilities for capitalistic intervention, but it does not change the reproductive cycles of capital itself. The claimed shift from physical products to 'virtual' services is a shift *within* capitalism, not the emergence of some new political economic form.

Technologies can change without any necessary corresponding shift in the way the economy is organised: the Internet, in this sense, is merely a new form of (marketised) space for capitalist relations to operate within. The ability to interact over the Internet is subject to property relations. Time on-line is sold, not free; where it seems 'free' either through the University, or in public access booths in libraries, it has still been commodified. Free access merely means the commodity has been purchased elsewhere (in bulk by the university of library service) or supplied as part of a subscription package. In the information age, access *is* property (whatever the claims made regarding the free flow of information), much as it has been throughout the period when information was delivered through books, over the radio or TV.

While the technologies and practices of capitalism in the market have changed in form, the underlying property relations - those between labour owning and capital owning groups - remain in substance unaltered. This represents a remarkable and crucial continuity, not evidence for a revolutionary new information age as many Internet ideologues suggest. Indeed, it is this continuity of the capitalist logic that seems to be wilfully hidden by much of the discourse regarding the emergence of the information society, and the 'new economy'. The nascent information society has already seen the expansion of the private rights accorded to information and knowledge owners rather than their evaporation, not least through the globalisation of IPRs under the TRIPs/WTO legal settlement. Information or knowledge may have an existence outside the privately owned realm, but this is increasingly a residual category, only recognised when all conceivable private rights have been established.

3. The capitalist state and the (re)production of information inequality

The laws of intellectual property are required by information capitalists, but are also contested by many social groups. In this area the continuing power and importance of the capitalist state stands revealed. Property *qua* property does not pre-exist the apparatus of government (or the state), waiting to be recognised legally; rather the legal recognition of property constitutes its existence in a form that can be identified as property. Only the law can mandate the rights that 'owners' can claim: possession is not property in a legal sense, especially as regards information or knowledge.

The key legal right that extends to the owner of property is the right to 'control the actions of others in respect to the objects of property'. Most significantly this includes: the ability to charge rent for use; to receive compensation for loss; and payment for transfer. Thus, the control of other economic actors is maintained by the legal ability to exact a price for any specific action regarding such (intellectual) property. It is these rights that form the institution of property rather than the specific stuff (object or idea) to which a property right is attached. And although the institution of property is established enough in modern societies that the sanction of the state to

²⁴ R T Ely Property and Contract in their Relations to the Distribution of Wealth (1914): 132

support or enforce this control is seldom needed, behind the acceptance of property by those conducting social relations lies the strength of the state. These property rights must be robust as the central requirement of capitalism is the ability to contract for sale (i.e. transfer of property) and for work (the labour/employer relation). Without this possibility, the alienation of goods (for sale) and the alienation of labour (to provide capital with work) would be impossible to maintain without recourse to force.

Whereas physical property has something of a natural scarcity, this scarcity needs to be constructed by the state in the case of intellectual property. Without the legal construction of intellectual property, the scarcity of knowledge or information that produces a price in the market would be difficult if not impossible to establish. And without law the ability of the owner of intellectual property to contract for its use (either though licensing or sale for use-only) would be equally compromised. That the state as final guarantor of intellectual property faces no real competitors is further suggested by the private sector's demands, made concrete through TRIPs, to institutionalise sufficient protection for their property. At the centre of TRIPs is a radical widening and institutionalisation of state authority, from search and seizure based merely on the possibility of infringement, to the introduction of patent laws in sectors (such as pharmaceuticals) where for years developing countries have refused to implement protection. For information age entrepreneurs, like all profit-driven market actors, the protection of property is the *sine qua non* of successful activities.

Perhaps most invidiously this protection has gone from being an area of (potential) legal debate to a problem of technical specification. Having been frustrated by various courts (in both Europe and America) continuing to recognise some notion of fair use for information and knowledge, many 'owners' have sought recourse in Digital Rights Management (DRM) technologies.²⁵ Whereas, for much of the recent history of copyright there has been a legal space carved out for free public use of information and knowledge, encoded 'fair use' in law, new DRM technologies have tried to circumscribe such use quite severely. In the past certain uses, such as copying extracts for educational use, and the utilisation of copyright material for research purposes, was frequently legal in certain clearly defined circumstances. DRM halts this use without the explicit agreement (and usually payment to) the rights owner. Furthermore, both the Digital Millennium Copyright Act in the US and the EC Directive on Copyright in Europe explicitly criminalise any attempt to circumnavigate such technical controls even if this is to allow legally sanctioned 'fair use'. These technologies are intended to ensure that digital source material cannot be duplicated, transferred from machine to machine, or even used in many cases, without the express consent of owners. While this is already having some effect on the developed world's software and music markets, the potential impact on the transfer of knowledge to lesser developed countries is severe.

In the past many poor countries have essentially relied on what copyright owners' regard as mass piracy. Utilising cheap copying facilities, textbooks and research works have been duplicated and passed around from hand to hand. While on one side the digitalisation of source materials, we are told, will ease the flows of information around the global system (provided users have the appropriate computer technology, of course), DRM also ensures that there will be less uncontrolled usage. The ability to reproduce material outside international agreements on copyright will become more

²⁵ C May "Digital rights management and the breakdown of social norms" 8 *First Monday* 2003 @ http://firstmonday.org/issues/issues8 11/may/index.html

difficult, and certainly where information appears in expensive journals (this is especially true of scientific knowledge) almost impossible. This has prompted moves by George Soros' Open Society Institute among others to start to encourage and support the dissemination of scientific information and research results through 'open source' journals that are free to end users, which can then be duplicated at will. How successful this will be in the face of the concerted efforts of many content owning corporations to assert expanded controls over their 'assets' remains to be seen. Certainly the support for these open source initiatives from the academic community has been both forthright and quite extensive, leading one to hope (at least) that the commodification of information delivered over the Internet is not a unidirectional dynamic.

Nevertheless at present the use of DRMs and the protection from circumnavigation through law is working to ensure that those countries that need information the most, for developmental and welfare purposes and whose population in general does not have the wealth to access the Internet will find their access to vital information constrained. However, because so many states have signed up to the TRIPs agreement, as part of the general accession to the WTO, the possibilities of diplomatic resistance remain constrained as the slow and grudging movement on pharmaceutical patents after the Doha Ministerial Declaration on TRIPs and Public Health has demonstrated. Not only did this statement on the use of generic drugs in heath crises take many months to negotiate, producing merely a restatement of the position in TRIPs in any case, but the key issue of cross-border supply of generic AIDS-drugs to countries with no domestic capacity has only recently been partly resolved.

4. Resisting information commodification

The claim that states are no longer effective actors (and hence subjecting them to political pressure is a waste of time) has conveniently omitted the state's role as guarantor of the legislative infrastructure that underlies market activity. The declinist position represents an ideological acceptance (or reification) of the 'naturalness' of markets, a denial of states' extensive legal activities in supporting the free market. If this is forgotten then the state might seem to be less involved in social exchanges than in the past; the reification of the market has resulted in a denial of the state's historic role in the political economy. By removing the state from accounts of the market, the information society can be presented as a challenge to the state. However, the state is critically required to legally support the markets of the 'new economy', and while its means of market intervention may have changed, this is not the same as withdrawal. There have certainly been considerable shifts and changes, yet capitalist states remain crucial to the (re)production of the economic system. With no state it would be difficult for capitalist commodification to continue.

In the foreseeable future the capitalist state will remain the key actor in the global system, and as such must also remain the key target of political action. The political denial of efficacy in the face of the globalisation of the information society is an ideological mask for the continuation of rule on behalf of capital. However, an important distinction is widening between those states able to mobilise the rule of law and offer the legal regimes required for information based economic activity and those states who have difficulty even maintaining the territorial aspects of statehood. Where law has broken down, or alternatively never been established, the resource commitment needed to maintain a semblance of order reduces the possibility of the

development of any jurisdictional space by the state, let alone a informationalised one. While the powerful states continue to ensure their capitalists' (intellectual) property is safe-guarded, others will be increasingly threatened by the information age's commodification of their remaining national resources by international Capital (through bio-piracy and the 'theft' of traditional knowledge, for instance). Thus, the 'information age' both enhances the power of states that can effectively control their jurisdiction, *and* contributes to the weakness of those that do not.

The history of IPRs has been a political battle to balance the rights of owners with the very important social benefits that flow from social availability of information and knowledge. While in the period following TRIPs there has been a clear expansion in the rights of owners, this is not a necessary unidirectional dynamic. Commodification can be resisted through civil disobedience (of which down-loading MP3 files is merely a rather facile example). The circulation of information and knowledge through open-source communities is an important move in the direction of decommodification which tries to wrest the often proclaimed social(ist) possibilities of the Internet from the clutches of the capitalist companies that largely control it. Furthermore, given the state's central role in supporting commodification (and the control of informational resources through for instance the support for DRMs), it is still worth seeking to organise political pressure to reassert the historical precedents within IPR law for 'fair use'.

At its most basic such campaigns need to concentrate on limiting the use of DRMs (or at least constraining the legal codification and protection of their use-limiting capabilities) and re-establishing the information commons as a public domain for the nascent global society. Like the environmental movement, the value of the global (knowledge) commons must be (re)asserted against the 'logic' of continued commodification of (informational) resources. To widen access to information, there also is a real need to support plain text usage and to resist the constant upgrading of software for content generation. Even where those in developing countries have secured access to ICTs there is often considerable technological lag. By ensuring that information is distributed in easily backwards compatible forms, flows outside the high-tech enclaves of the west can be encouraged. However, at its most basic, to resist the commodification of information, pass it on freely wherever you can.

²⁶ see the recent discussion in F Fukuyama *State Building: Governance and World Order in the Twenty First Century* (2004)