<u>Space and Cyberspace</u>

<u>On the enclosure of consciousness</u>

<u>Abstract</u>

In this chapter I argue that the global privatisation of elctromagnetic spectrum marks this period as historically unique. I also put forward conceptual categories for understanding the nature of an emergent cybereconomy. They correspond to classical conceptions of property, value and labour, but in no way treat these categories as singular, simple or unproblematic. From a perspective informed largely by Marx's critique of classical political economy, I frame the creation of a global cyberspace as the enclosure, or "privatisation", of conscious activity. I argue that a full and formally defined cyberspace, at least as it is currenty conceived of, <u>must</u> prefigure the eventual alienation of human social existence at its most fundamental and definitive level: consciousness.

On the enclosure of consciousness

<u>Consciousness</u> is the total awareness of life which people have. It includes their understanding of themselves as individuals and of their relations with other individuals in a variety of forms of organization, as well as with their natural environment. Consciousness is a dynamic process. It grows and decays with the interaction of doing (or practice) and cognition over the life cycle of the individual in the family and other social formations. It draws on emotions, ideas, instincts, memory and all the other sensory apparatus.[1]

The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourses of men, the language of real life … The same applies to mental production as expressed in the language of politics, laws, morality, religion, metaphysics etc. of a people. Men are the producers of their conceptions, ideas, etc. … Consciousness can never be anything else than conscious existence, and the existence of men is their actual life-process.[2]

Introduction: Space, electrospace and cyberspace

This chapter is organised around the meaning of space in political economy. Space is a new and difficult concept, and perhaps for that reason it has not been discussed very much by political economists. Even when the subject of space is broached, most of political economy has tended to emphasise the time aspect, such as labour, the circulation of money and commodities, rent, the depletion of land and machinery, the movement of information and so on.[3] But the <u>meaning</u> of space is, for the most part, left untouched as a problem. In other words, space – as exemplified by land – is generally assumed to be an unproblematic concept; it is the activities that go on within and between particular spaces that most of political economy focuses on. But the legal definition and ownership of land is the very basis of private property. Without it, capitalism could not exist. As an idea and a reality, private property has become quite taken for granted. But we can perhaps imagine the kind of technical, legal, and historical work required for the idea to have become a reality by means of a thought experiment.

Imagine that you live at sea on a vessel that comfortably contains a about 40 or so people. You cannot see land on any horizon. You have never seen it. The currents are such that the vessel drifts at regular intervals within indistinct but regular boundaries. The community harvests fish at one time of the year, whales at another, and nutritious seagrasses at another. Rain falls predictably enough so that people have enough water during most years. Here is the problem: in such a situation, how would you go about imagining and defining the space within which the community moves so that it could be broken up into separate subdivisions which could be owned by particular individuals?

At the very least, you would need technical and legal definitions of the space. Your community would also need the means to patrol and enforce the boundaries of each and every subdivision, as well as the the boundaries of the community as a whole. Otherwise anybody could redefine the space in their own terms, perhaps dispossessing incumbents of their spaces. This is basically how the idea of privately owned land became a reality over roughly three hundred years.[4] But the pre-existence of a set of more or less informal and flexible social relationships within that space is most essential to formalising it. In other words, we create the possibility for property only by doing what we do within certain places.

Our ideas about the meaning of space are inseparably tied to our conceptions and experience of property, work, family, community and nationality. They are a function of the entire web of activities and relationships in which we are embedded.[5] We make many kinds of spaces by doing what we do: social space, organic space, symbolic space and geographical space, to name only a few.[6] For example, a conversation in a workplace can be viewed as creating many different types of social

and symbolic spaces all at once. The conversation creates and maintains interpersonal spaces, or relationships between people; attitudinal spaces, or cultures; organisational spaces, within which social behaviours are regulated; and ideational spaces, in which special ways of knowing are preserved, such as in an economics department of a University or a legal firm.[7]

But these social and symbolic spaces are of a distinctly different nature than the much more concrete kinds of space I am discussing here (such as the land and buildings in which a workplace conversation might take place). Social and symbolic spaces are activity spaces and thus are time-bound. Geotechnical spaces – like land, sea and air – exist independently of what people do; they <u>contain and constrain</u> what people do (you cannot grow potatoes in the ocean); and they share a common aspect in that they can only be occupied exclusively: two different people, or groups, or factories, or cities or nations cannot occupy the same geotechnical space at the same time. It is simply an impossibility. The same holds for 'electrospace', or what is commonly called radio spectrum: a particular frequency cannot be used at the same time by different people or organisations.[8] Like land, electrospace must be occupied monopolistically if it is to be used for any purpose whatsoever. Electrospace is the geotechnical aspect of cyberspace; it is the concrete, geotechnical area within which digitalised symbolic and social spaces are produced, reproduced, and exchanged by means of conscious human activity.

<u>The historical significance of the meaning of space</u>

There have been three significant periods in recent history during which the meaning of space has been redefined at the most fundamental levels throughout the West: the formalisation of feudalism at the end of the twelfth century; the enclosures

movement between the mid-fifteenth to late-eigteenth centuries, which ended

feudalism and created private property and the nation-state; and the definition of

airspace and electromagnetic space, which began at the end of the nineteenth century,

quickly giving rise to twentieth century nationalism. During these periods,

relationships between the people and groups of people who carried on activities in

these spaces were also legally redefined and formalised at the most fundamental

levels. It should be noted that these three periods correspond to the widespread

availability of new media, respectively: paper, the book, and the radio.[9]

     The current period is potentially as significant as these three preceding epochs

in western human history because of an historically rare re-organisation of

electrospace, once again facilitated by new media-related activities. But the

significance of a privately owned global electrospace appears to have gone largely

undiscussed in terms of its <u>concrete</u> spatial aspect, perhaps because it now seems to be

pure social activity (whether commercial or otherwise). Since the discovery and

technicalisation of electromagnetic spectrum, up until quite recently, 'nations of the

world have never departed from the basic "world property" concept' of radio

spectrum rights, and 'such rights have in practice been treated as one of the most

important bases of politico-economic power' throughout the twentieth century.[10] In

other words, the global privatisation of electrospace is – at least potentially – the

global privatisation of that same power source. It is the privatisation of the space in

which the production, distribution, exchange, and consumption of 'consciousness' (or

'knowledge') commodities have formed the basis of the most expansive, powerful and

violent system of political organisation in human history for more than a century.[11]

The centrality of electrospace to any cybereconomics

Electrospace 'is to communications today as land is to crops and water to fish. It is a peculiar natural resource, one whose politico-economic and social aspects have largely been ignored by social scientists'.[12] The tendency of social science to ignore the spatial aspect of electrospace continues. However to understand the historical significance of its "privatisation", it is imperative that the spatial nature of electrospace be understood. Electrospace is currently being "cleared" of its occupants and "enclosed". The assumption underpinning this trajectory is that internet traffic will 'migrate from personal computers to devices like cell phones and hand-held computers', and that the spectrum must therefore be privatised.[13] Whether or not internet traffic does "migrate" to cellphones and hand-held devices remains to be seen. But the imperatives from legislators and business that bandwidth must be cleared for such an occurrence are very insistent.

The public nature of the area currently being sold off (or given away) is well-evidenced by the nature of its incumbent occupants. For example, in the the US, the 'Defence Department, law enforcement authorities and public safety organisations' are expected to 'shift' their entire communication systems to other, less 'useful' spaces.[14] That ought to be enough in itself to raise questions about the social efficacy of the current round of global bandwidth privatisations. Electrospace is literal and concrete rather than virtual and symbolic space, just like land. It must be understood as such to understand its historical significance.

The consciousness of electrospace as a concrete space was far more prevalent when radio first emerged as a dominant medium.[15] What brought this aspect to the fore was a heightened sense of nationalism throughout the most technologically

advanced countries, especially following the unprecedented slaughters of World War One. A concern with mass propaganda, most notably in the United States, brought with it the realisation that 'radio communication is particularly susceptible to national control' because, more than other medium, electrospace 'requires some control if it is to serve any human purpose whatsoever'.[16]

It was therefore quickly realised that electrospace is a geotechnical space because it can only be used effectively if occupied exclusively. Over the last century, it has become the ultimate in public resources, like air and water. Electrospace is the non-depletable, concrete resource upon which any cybereconomy, if it is to exist at all, must be built.[17] The ultimately concrete nature of electrospace has slid, for the most part, into the realms of incomprehensibility for people. It has become, once again, as conceptually opaque as the idea of privately owned land, around which the relations of capitalism were first organised. Electromagnetic spectrum exists everywhere at all times and all frequencies. But because it is most generally sold in lengths of time (like, for example, a thirty-second radio or television advertisement), it is most readily understood as such.

Alternatively, legislators treat electrospace like "raw material", or as a kind of 'space in the fourth dimension' which should, according to the tenets of neoliberalism, be left 'open to private exploitation, vesting title to the waves according to priority of discovery and occupation', but that is not the case:

> the wave length is not a fourth dimension, for there is also breadth and depth of wave (amplitude and frequency) and doubtless the correct analogy is the whole electro-magnetic field; but private property in any natural field or wave is only a human convention and one that it would be dangerous to extend to this new-discovered continent.[18]

A new-discovered continent, indeed; all-pervasive, and clearly all of a piece. But those words were written in 1924. Today electrospace is potentially a global rather than national space—it is our only potentially global, concrete activity space. Unfortunately, it has become passé if not entirely "invisible", both as space and as a source of social power. It has been relegated to the realm of myth because it is generally sold and understood as quantities of time. But in political economic terms, the time aspect is invariably and inevitably tied to labour, to what people do. In any cyberspace, the activities that must be technically redefined, appropriated and commodified are the products of conscious human activity.

Human activity and space: Time and the labours of consciousness

If any concrete space is to become private property with economic significance, the pre-existence of an established network of social activities is an absolute prerequisite.[19] Like the ownership of space, the formal ownership of human activity and its products is a matter of law: 'How does one become an owner of productive stock? How does one become owner of the product created by means of this stock? Through positive law'.[20] The legal distribution of property rights in the ownership of human activity and interaction is perhaps the most overt aspect of any transition in human social relations. John of Salisbury's Policratus is historically instructive in this respect.[21] It comes

> just before the important turning-point in institutional development at the end of the twelfth and the beginning of the thirteenth century, when legal precision began to be stamped on a number of previously indefinite relationships, and when feudal independence tended to become consolidated into definite organs of political control.[22]

Similarly today, new forms of legal precision are being stamped on human social relations at the most intimate levels of existence.[23] There is also a pervasive sense, as there was during the enclosures movement, that there exists an unbreachable social and <u>conscious</u> distance between the people who define rules for human behaviour, for value creation, and for almost all forms of human activity, and those who are bound by those rules but are excluded from making them.[24]

Social space, social distance, and consciousness commodities

Like the legal definition of geotechnical spaces, "official" definitions of social relationships are a function of legal expertise. The same holds for other social technologies, such as policies that define the legitimacy of wage- and money-forms, production technologies, management techniques, and the way in which legally sanctioned violence (war and punishment) is organised. As such, expert legal and political definitions also formalise and fix (to a certain extent and for a certain time) the meaning of particular aspects of social space. Legal definitions transform informal relationships into formal and legal ones, rendering flexible and variegated social relationships as relatively inflexible symbolic spaces, such as systems of law or management. It was from strenuous and sustained efforts in these directions that the historical development of wage labour became the dominant method of appropriating human energy – human life – or what political economy calls <u>labour</u>.

This remains the case in the emergent "knowledge economy", although pre-capitalist labour relations are once again becoming dominant forms of appropriation ("casualisation" and "outsourcing"). The aspect of "labour" which is technologised and commodified in cyberspace is its <u>conscious</u> aspect. Consequently, today's most frenetic legal activies are concerned with the ownership of the products of

consciousness, or 'intellectual property'.[25] With the not-so-gradual development of a global, privately-owned electrospace, a practical, artificial, humanity-wide split is being effected (technologically and at law) between labours of the muscle and labours of the mind. The artefacts of consciousness that people produce in the constitution, reconstitution and transformation of their social spaces are quite necessarily the commodity-forms of any cybereconomy. I have elsewhere identified this as a definitve aspect of 'hypercapitalism'.[26] Although the activities and social relations that correspond to new commodity forms continue to differ in levels of legal and economic formality, the aspects of humanity which are to be formalised in the cybereconomy include every facet, function and product of consciousness.[27]

"Information" produced for people, by people, about people (and their environments) is supposedly the basic commodity form of any cybereconomy. Art, science, culture, education, communication and commerce are said by legislators to be the main social domains within which cybercommodities are to be created.[28] But to focus solely on the commodity forms produced within specific activity spaces is to miss most of the picture, namely their social, biological and environmental sources. With increasing attention given to intellectual property regimes, a new formality is being stamped upon existing social and biological relations of "globalised" humanity. More particularly, legal formality and money values are being placed on the conscious relationships that people have with particular symbolic artefacts.[29]

Today, in the development of intellectual property rights, relations between such intimate and abstract "things" as words, sounds and genes are being formalised at law. These, in turn, are designed to be imposed world-wide.[30] Flippantly defining commodities of consciousness as 'goods of the mind', or biotechnological products as

commodities derived from the 'essence of life', does little to clarify the picture.[31]
Such a view misses the point that these are already freely existing relations. But they
are being technically redefined so as to be ownable and sellable as quickly as they fall
within technological and legislative reach. As such, their redefinition is nothing less
than the largest and most pernicious attempt at outright theft by a powerful group of
elites in the history of humanity, if only because of the sheer size of the current
human population. Individuals are currently buying the gene pools of whole countries,
with the governments of Tonga, Estonia, and Iceland selling intellectual rights in their
constituencies' gene pools.[32]

Underpinning the global expropriation of abstract human activity is a set of
contradictions inherent in any cybereconomy, at least as it is currently conceived of
by its technocratic designers. These are: the assumed predominace of the exchange-
values (money) over production-values; the collapse of distribution and consumption
into the same moment as that of production and exchange; and the subsumption of
use-value (useability) under the logic of exchange-value (sellability). Consequently
the production of money becomes an increasingly irresistable imperative.[33] But
money is just the idea of value given a (sometimes) physical form. To fully unpack
these collapsed relations would take far more time and space than I have here. But a
brief excursion is necessary to comprehend the historical significance of these actual
and conceptual implosions. Largely for convenience, I describe the significance of
these trajectories under the term value-relations.

Value-relations, spatial consciousness, and the alien realities of cyberspace

The idea of value 'is intimately associated with the most remote experiences
of the human race. Ever since it has been possible to predicate desirability of

anything, have values existed'.[34] That is the definition of value in the broadest and most abstract terms possible: the social <u>desirability of anything whatsoever</u>. Value-relations are those aspects of the social within and during which the <u>desirability</u> of any given aspect of our environment is produced, attributed and expressed by people. Value-relations are expressed as patterns of social 'preference' and 'decision-taking', or, what can be called evaluative 'patterns'.[35] Such patterns are largely the result of historical normative work. In other words, evaluative patterns – actively expressed perceptions of value – also specifiy the <u>acceptability</u> of what is perceived to be desirable within a given social domain.

Because they are expressed choices, evaluative patterns peculiar to any given social group exist at the expense of other possible value-relations. In a globally mediated social system, <u>ideally</u> encompassing the whole of humanity, the very concept of value takes on very complex dimensions. Paradoxically, and perhaps because faced with such vast complexity, value has been narrowed at the policy level to the most singular and simplistic system, namely price. Discourses of efficiency, growth, progress and control derive their logics and techno-logics almost exclusively from this illusory, "thingly" system of value:

> The more production comes to rest on exchange value, hence on exchange, the more important do the physical conditions of exchange – the means of communication and transport – become for the costs of circulation. Capital by its nature drives beyond every spatial barrier. Thus the creation of the physical conditions of exchange – of the means of communication and transport – the annihilation of space by time – becomes an extraordinary necessity for it.[36]

And this is precisely what has happened: exchange-value has become an end in itself, and the 'annihilation of space by time' is achieved by the <u>conceptual</u> implosion of concrete space (electrospace) and social space (human activity) into mediated <u>time</u>

(conscious labour) through the manipulation of spatial consciousness. Value-relations have thus become expressions of space over time (how fast money circulates globally). Paradoxically, the larger this number – the closer it gets to a mathematically undefined term where circulation time equals zero – the greater the perceived efficiency! [37] In similarly vulgar terms, conscious social activity (social and symbolic space) is measured in terms of "the speed of thought" because, 'expressed passively, the magnitude of labour appears as an amount of space; but expressed in motion, it is measurable only in time'.[38] When understood entirely as time, social space is annihilated by imperatives for speed.[39] There has never been so much human activity dedicated to the production of consciousness commodities. And time is money. It is also the most ancient and basic measure of human life: 'In Stoic physics there is no simple location, no analytical space', nor did there exist a 'common sense' distinction between time and space during the archaic period – 'time was the only reality, and space still had to be discovered –or invented– by Parmenides after 500 B.C.'[40] Space, in all its contemporary aspects, is a very new concept.

The destruction of space by time takes place by means of increased rapidity in social exchanges.[41] In terms of value-relations, this is expressed as a relationship between the fastest possible speed at which perceptions of value can be exchanged across the greatest possible space. Perceptions of value thus become the primary commodity forms of cybereconomic production processes. The production of mediated perceptions of value across vast geographical and electrospaces is simultaneously an ongoing and immediate complex of consumption (destruction), circulation (distribution) and exchange. A paradox of this globally imploded system is that by decreasing time distances between people, it simultaneously annihilates existing perceptions of social space. Therefore, in any fully developed cybereconomy,

the alienation of conscious human activity from its source, along with the perceived value of that activity, is complete.

Concluding remarks

It is a commonplace bias of every age to think of itself as historically unique. At some level, this is necessarily true for every moment in history. But there are very few ages during which the relationships between great masses of people and their concrete spatial environments are redefined on such a far-reaching and fundamental level as they are today. The privatisation of global electrospace – perhaps – distinguishes the current era from any other as historically unique. The enclosures movement was another such age, as was the formal definition of the feudal system in Europe during the late twelfth century. These periods combined the "legal" formalisation of previously informal networks of social relations with the "legal" redefinition of concrete space.

While electrospace is generally treated by legistators as little more than a complex time-bound conduit – a medium – for symbolic activities and institutional organisation, it is not <u>only</u> that. It is quite literally a concrete space in the most precise economic definition of the word. Its most incomprehensible aspect is that it can only be traversed at a single speed—the speed of light. The speed of electrospace is its most confounding aspect. It conflates space and time precisely because of its speed. But electrospace nevertheless retains its concrete spatial characteristics. It is everywhere, all the time, at all frequencies. It is, as far as we know, the non-depletable, omnipresent foundation upon which any future cybereconomy will be built.

But there is more to grasping political economy than the technical definition and reallocation of property. We must grasp the domains of human activity that legislators are redefining, harnessing and exposing to commodification in the emergent space; the commodity forms of the economy and their relationship to their "producers" and "consumers"; the value-relations upon which exchange, circulation and distribution are premissed and enacted; and the global web of institutions that are ostensibly responsible for defining all of these aspects. Most importantly, we must consider which aspects of human social activity are to be commodified within this space, and whether such aspects <u>ought</u> to be legally commodified. And since electrospace is <u>global</u> – in fact it is our <u>only</u> global space – we must understand the relationship of those institutions who would claim proprietorship over what must become the property base for fiefdoms over the most abstract, intimate, abstract <u>and</u> concrete aspects of humanity. These are the foundational tasks for any future political economy in cyberspace.

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