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### **Economy and aesthetic of public knowledge**

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## **Economy and aesthetic of public knowledge**

**Alberto Corsín Jiménez**

### **Abstract**

This paper places in anthropological perspective some of the conceptual assumptions behind the so-called new knowledge economy. In particular, I am interested in the rise of knowledge as a global political artefact: as an object that inhabits public spheres and that is rapidly acquiring public stature itself. There are two aspects to this political economy that concern me. First is the influence of a global economic philosophy of public choice on the conceptualisation and use of knowledge as an ethical commodity. The second aspect impinges on social theory and has to do with how we imagine our own sociological intelligence when confronting an epistemic regime where 'society' is said to already know itself as the product of a knowledge distribution. The reflexive turn evokes a playful reversibility (moving in and out of knowledge and society) whose effects for social theory the paper tries to elucidate at different points in the argument. The paper, in sum, explores the place where the politics, economy and intellectual aesthetics of new knowledge cross roads.

### **Key words**

Public knowledge, science and society, ethics, knowledge society, public goods, anthropology.

## **Economy and aesthetic of public knowledge**

This paper places in anthropological perspective some of the conceptual assumptions behind the so-called new knowledge economy. In particular, I am interested in the rise of knowledge as a global political artefact: as an object that inhabits public spheres and that is rapidly acquiring public stature itself. There are two aspects to this political economy that concern me. First is the influence of a global economic philosophy of public choice on the conceptualisation and use of knowledge as an ethical commodity. Here the public moment of knowledge is held in place by a novel aesthetic – a global ethic – with political effects of its own. The second aspect impinges on social theory and has to do with how we imagine our own sociological intelligence when confronting an epistemic regime where ‘society’ is said to already *know* itself as the product of a knowledge distribution. The reflexive turn evokes a playful reversibility (moving in and out of knowledge and society) whose effects for social theory the paper tries to elucidate at different points in the argument. The paper, in sum, explores the place where the politics, economy and intellectual aesthetics of new knowledge cross roads.

Echoing Cori Hayden’s work on the ways in which nature has recently been given a ‘public’ property (Hayden 2003), I shall argue that what is taking shape at this cross-roads is an emergent *political philosophy of publicization* (PPP). The paper explores this novel assemblage from three vantage points, which are also overlapping dimensions, or moments, of this political philosophy. The first moment concerns the place of the notion of publicness, or a public domain, in economic discourse, with special reference to the way ‘public goods’ are said to populate certain economic constituencies. My interest here is what the *production* of things public entails (cf. Latour 2005).

The second moment is concerned with the actual conversion of knowledge into a public good and its insertion in a larger political economy of global flows. I want to explore here what the sociological imagination of public goods as a residual largesse does to our social theory, and how this gets reconfigured under conditions of globality.

The third moment concerns the actual policies and political processes through which knowledge, having been defined as a global public good, is then given a concrete institutional shape. This is where knowledge takes an aesthetic form. Among the political artefacts I look at here are republican decision-making processes, patenting, networking and so-called science-society dialogues. These have all become exemplars of the way knowledge is said to acquire ‘public’ status today.

My overall claim, briefly put, is that the emerging PPP is articulating a global ethic of open society which in fact disguises the work that goes into the making of knowledge *productively public*. There is an optical distortion at work, where an ideology of ethical conduct and values disguises concrete conditions of production. ‘Knowledge’ and ‘globality’ appear thus as proportional reflections (or reversibles) of one another, the former carrying ethical overtones, the latter a political economy. To best explain the political illusionism on which this trick is built I turn now, briefly, to a historical vignette, where the lessons of optical exaggerations are exemplified paradigmatically.

### **The political exaggerated**

All political thought evinces an aesthetic of sorts. Dioptric anamorphosis, for instance, was the ‘science of miracles’ through which Hobbes imagined his Leviathan. An example of the optical wizardry of 17<sup>th</sup> century clerical mathematicians, a dioptric anamorphic device used a mirror or lens to refract an image that had deliberately been distorted and exaggerated back into what a human eye would consider a natural or normal perspective. Many such artefacts

played with pictures of the faces of monarchs or aristocrats. Here the viewer would be presented with a panel made up of a multiplicity of images, often emblems representing the patriarch's genealogical ancestors or the landmarks of his estate. A second look at the panel through the optical glass, however, would recompose the various icons, as if by magical transubstantiation, into the master's face.

Noel Malcolm has exposed the place that the optical trickery of anamorphosis played in Hobbes' political theory of the state (Malcolm 2002). According to Malcolm, the famous image of the Leviathan colossus that furnishes the title-page of Hobbes' book came as an inspiration to Hobbes following his encounter with a dioptrical device designed by the Minim friar Jean-François Nicéron. Nicéron's design involved a picture of the faces of twelve Ottoman sultans which, on looking through the viewing-glass tube, converged into the portrait of Louis XIII (Malcolm 2002: 213). Seduced by the structural symbolism through which such optical illusions could be used to represent *relations* between political persons (e.g. between the state and its subjects) (Malcolm 2002: 223), Hobbes commissioned an iconographic representation of similar effects for the title-page of his book. Here the image of the colossal Leviathan rises over the landscape energized by a mass of small figures. These morph by congregation into the body of the monarch, that hence takes a life of its own. A projection onto a one-dimensional surface of the dioptric trick, the figure of Leviathan aimed to capture the political innovation of Hobbes' theory of representational personification. For Hobbes, the aggregation of the political will of multiple individuals into an overarching sovereign person brought about a political transubstantiation: the many became the One, which contained, but also transcended, the many. This is why for Hobbes the theory of (political) representation is a theory of duplicity and duplication: it calls for the critical capacity to see oneself as both the creator of a political object (the body politic) and its subdued servant; both a distant outsider to the body and in partial identity with it. This entails, as Malcolm puts it, 'a curious structure of argument that requires two different ways of seeing the relation between the individual and the state to be entertained at one and the same time.' (Malcolm 2002: 228)

Building on the implications of Malcolm's analysis for our theories of the state, Simon Schaffer has recently offered a phantasmagorical reinterpretation of the place of optical illusionism in political perspectivism (Schaffer 2005). For Schaffer, the dioptric capacity to 'see double' is in fact but a first step towards the cancelling of all visions but the sovereign vision. According to Schaffer, dioptrics enables this parallax shift because it rationalizes as illusory all political perspectives that do not conform with the One: outside the body politic all visions are but the visions of political phantoms (Schaffer 2005: 202; on parallax shifts see Žižek 2006). In 17<sup>th</sup> century politics this was easily accomplished, according to Schaffer, because outside the rule of sovereign law – as Hobbes noted – lay only a chaotic state of nature, shaped by mistrust, fear, witchcraft accusations and the mischievous play of invisible phantoms. The rise of Leviathan exterminated the invisible, neatly aligning, in a supreme gesture of political illusionism, the planes of the natural and the phantasmagorical.

Hobbes' Leviathan appears thus as a supreme trickster figure, at once enabling and concealing its own source of agency. Power, the power of the state, is in this sense but an aesthetic effect: the effect of a parallax shift, the holding and aligning together of two perspectives in one optical illusion. In what follows, I take Malcolm and Schaffer's insights into the aesthetics of our political imagination to explore the conformation of the new economy of knowledge as a global public good. My claim is that 'knowledge' today has become an aesthetic of sorts: a political object that carries its own external (dioptric) moments within. This is especially relevant for the analysis of the economic commons, where the re-description of knowledge as a 'public good' is dangerously close of acquiring Leviathanic proportions.

I start by looking at the history of the rise of the public in economic discourse. This will take us to review some of the anamorphic artefacts (the public domain, the economic commons and global justice, networks, ICTs, republican politics) that nurture the theory of (global)

political justice on which the idea of knowledge as an expandable good is taking shape. I conclude with an observation about the kind of social theory that it takes to think about political justice and ethics in a society where ‘knowledge’ itself is equated to the sociology of our political economy.

## **Public productions**

The pure theory of public expenditure, classically outlined by Paul Samuelson in 1954, first provided an economic definition of public goods (Samuelson 1954). Two conditions were required for a public good to obtain: non-rivalry and non-excludability. Non-rivalry means that my consumption of a good does not prevent others from consuming it; non-excludability means that no one can be excluded from gaining access to a good. The classic example of a public good used to be air, although this has now been qualified due to pollution quotas. Economists now have a preference for quoting mathematical theorems (and ‘knowledge’ at large) as examples of pure public goods, since my knowledge of an equation does not compete with anyone else’s, nor does it exclude them from learning the equation (Stiglitz 1999: 308).

Perhaps the most remarkable feature about the economic theory of public goods is that it defines publicness in terms of consumption. Non-rivalry and non-excludability are both consumption functions: it is an agent’s private access and enjoyment of a good that creates the notion of publicness as a ‘residual category’ (Kaul & Mendoza 2003: 80). This complicates the political sociology of public economics in extraordinary ways. Here I want to restrict my attention to two such complications, which I believe are central for better understanding the epistemic regime underlying the political philosophy of the so-called knowledge economy.

The first aspect about the definition of public goods that I would like to focus on concerns the actual forces behind the making of public goods. I noted above that non-rivalry and non-excludability are both qualities proper of a consumption function. In this vision, public goods are goods that come into existence by virtue of being ‘extracted’ from the market through the forces of demand. This is significant for one principal reason: it leaves unaccounted for how the goods are assembled or manufactured to start with; in other words, who produces them. There is a huge irony in this omission because, as it turns out, the history of the idea of public goods is inextricably bounded to the history of the state as a fiscal agency (Desai 2003). It is the state that has historically been most involved in the production – and sustenance – of public goods.

The origins of institutional interventions in the economy (by the state, church, private capitalists) runs in parallel to what E. P. Thompson famously called the rise of the ‘moral economy of the crowd’ (Thompson 1971).<sup>1</sup> At the turn of the 18<sup>th</sup> and 19<sup>th</sup> centuries, when the exponential growth of industry crowded populations in and around the fringes of expanding urban centres, a moral sentiment of economic injustice set the precedent for the imagination of what we would call today the public domain. Thompson boldly observed that these sentiments were in fact ‘market’ inspired, in the sense that what most participants in 18<sup>th</sup>-century food riots in England wanted was for market traders to respect the (paternalistic, Statute) laws of the market. These laws established proper marketing procedures to prevent farmers and middlemen from striking underhand deals outside the market place, such as withholding corn from the market in order to push its price up, or selling large quantities of it on a small sample basis to foreign buyers. Most rioting aimed therefore at ‘setting the price’, that is, to try to get the market to work properly (Thompson 1971: 108). Thus, insofar as the state had to move in to compensate for the upheaval created by the establishment of free trade and the subversion of the paternalistic model, the provision of goods with a remit of ‘universal beneficence’ (the closest thing to what a public good is today) faithfully mirrored the moral sentiment of the original ‘market’ economy. In other words, what the move from a

‘moral economy of provision’ to a ‘political economy of free market’ (Thompson 1971: 128) in fact accomplished was to reinvent ‘the statutory market’ as ‘public domain’; a move given historical and sociological credence by the transition from the poor-law era to the welfare state (Harris 2002; Trattner 1998).

The rise of the welfare state as a sociological object came hand in hand with the rise of moral individualism. Although no doubt part of a much larger and complex historical economy, the constitution of the public domain as a concern of welfare economics in the 19<sup>th</sup> century ran in parallel to, if not actually captured, the moment when the idea of society ‘re-distributed’ itself into a political economy of rights-bearing individual claimants; that is, when the concept of ‘social justice’ (vs., say, charity or reciprocity) finally consolidated (Fleischacker 2004; Jackson 2005) According to Jose Harris, for example, Edwardian social reformism

subordinate[d] the analysis of specific social problems to a vision of reconstructing *the whole of British society*, together with reform of the rational understanding and *moral character of individual British citizens*... both policies and people were means to the end of attaining *perfect justice and creating the ideal state*.

(Harris 1992: 126, emphasis added)

In the U.S., by contrast, the appearance of the federal government as a major dispenser of welfare aid in the nineteenth century took the shape of public land distributions (Trattner 1988). In this context, the political economy of the public domain became modelled on what Arthur Schlesinger Jr. has called a ‘hand-out system’ (cited in Trattner 1988: 350), where the idea of public wealth stood somehow as an imaginary *spatial outside* from which one could extract or exploit national or commercial riches. The utopianism of the frontier ideology was thus translated into a concrete, self-expanding landholding patrimony (Iglesias 2006), against which a nation of settlers constituted themselves as citizens by staking out their claims; the public domain and the republican ideal thus gaining conceptual independence insofar as they mirrored the individual labouring aspirations of an agrarian society (Huston 1998).

If we establish that Western society created itself as a total economic object by externalizing its own internal public, that is, by turning its moral sentiments about market justice inside out into a political economy of market distributive rights, it follows that about the same time economic intelligence must have had to confront the problem of collective preferences: how to measure collective welfare when only the agency of individual consumers is visible sociologically. Indeed, the very nature of this problem in fact signalled the birth of the marginalist revolution in economics in the 1870s,

when the analysis of subjective utility had grounded value theory on the demand side... [and] focus was no longer on the duty of the sovereign, but on the demands of the individual consumer. The public sector appeared no longer as an awkward, albeit necessary, exception to the laws of economics.

(Musgrave 1985: 8)

Instead, public provision became a problem of efficiency in use and allocation, which made society disappear as a total sociological object. From thereon ‘society’ made only an appearance on the margins of every economic transaction as a proportional remainder to the operation.<sup>2</sup>

The problem of collective preferences points to economists’ efforts at trying to look for the social good, when the social good appears to aggregate and disaggregate mysteriously into all types of social agencies: now a public, now a market; now an individual, now a moral sentiment; now a political artifice, now a subjective choice. Marginalism solved this problem for public economics by positing the state as the invisible agency behind the production and

sustenance of the public domain. Desai has called this phantasmagoria ‘the Samuelson fiction’: the idea that there exists ‘a collective mind, an ethical observer to whom preferences are somehow known’ (Desai 2003: 72) Although the consequences of not acknowledging the political bargaining processes shaping fiscal decision-making had in fact been noted by Knut Wicksell in 1896 (Musgrave 1985: 9-15), for most of the 20<sup>th</sup> century the problematic nature of the collective mind that takes to adumbrate collective preferences was barely taken notice of - although it would, in time, lead to the development of ‘sociology of knowledge’ as a field of inquiry concerned with the types of intelligence through which society comes to ‘know’ itself, a point to which I shall return below.

In terms analogous to the Leviathan’s hiding of its own aesthetics of representation, the ‘Samuelson fiction’ effectively disguised that the public domain was but the ethical dioptric artefact through which the ‘moral economy of the crowd’ had been travestied into the ‘political economy of free trade’. Known to them as a fictive sociological ethics, the question of aggregation was in fact what led Durkheim and Mauss, amongst others, to insist that the problem was equivocally conceived, for the question to ask was not how, and which, economic values represent societal choices but how society devolves itself into economic, religious or political values (e.g. Durkheim 1974; Mauss & Hubert 1964). In this light, it was clear that ‘public choice’ was the name of an (economic) ethics for a society that had never before needed one. The ethics of the public domain was nothing more than the aesthetics of marginalist economics.

## **Externalities**

The process of production of the public domain hidden from view, public economics gradually fetishized its own conception of the public as a spatial outside: a spatial political endowment articulated by the market (vs., for example, a landholding federal government). This goes back to the second of the complications I mentioned above and relates to how the economic idea of the public good is borne out by the definition of ‘publicness’ as a *residual* moment of a consumption function.

Another way of looking at this is to say of public goods that they are a special case of externalities (Cornes & Sandler 1996: 6). At work here is the idea that economic transactions are always best carried out in the marketplace, because if something is of concern to an economic actor, they will do their best to make sure that the market signals and makes room for such interests. Having said this, it is recognized by economists that sometimes a transaction has consequences (positive or negative) that overflow the market and spill over to agents who were not party to the transaction (on market overflows see Callon 1998; on spillovers see Frischmann & Lemley 2006). These instances give rise to ‘externalities’. Environmental pollution or the unintended consequences of a scientific innovation are well-known cases of, respectively, negative and positive externalities.

The definition of a public good as an externality, or as a residual precipitate of a market transaction, carries its own social theory. First of all, this model works by stabilizing ‘market’ and ‘society’ as distinct arenas of interaction: externalities move from one to the other, hence their separation. Second, and perhaps most interesting, the model gives an ethical impetus to the *movement* of the externality itself. It is the externality (insofar as it has been recognized as one) that carries already an ethical baggage, inasmuch as identifying and accounting for externalities counts as an ethical or political corrective (Barry 2002). A stable residence for ethics is therefore opened-up within the (already imagined) space between market and society. Ethics emerges thus as the product of a double movement: first comes the separation of society into discrete and stable objects; next comes the repair work (ethics) that needs be done to keep the effects of the separation invisible, or to minimize them. This double movement echoes the epistemological effects of the 19<sup>th</sup> century imagination of society as a total welfare

object *and* an aggregate of individual moral claimants. I call this general reduplicative orientation of the ethical, the ‘reversibility of ethics’, to capture the idea that the appearance of the ethical always carries with it an attempt at concealing some aspects of its own production.<sup>3</sup>

Now the ethical reversibility of public choice theory builds up to a type of sociological imagination that is intrinsically escapist. Here an idea of ‘society’ is summoned from where some sort of trans-local or trans-social representational category is said to hold society (ethically) together: an ethics *external* to society is demanded for, and remains anchored in, sociological categories *internal* to our social imagination.

Two examples of the reversible orientation of ethics can be found in Marilyn Strathern’s recent and insightful analyses of corporate patenting and political processes of republican representation (Strathern 2002). According to Strathern, corporate patents are designed to provide society with the benefits of scientific applications; thus, whilst they recognize the fruits of invention, patents also *internalize* the spirit of disclosure of information that guides good practice in science. At the same time, however, patents *externalize* the competitive drive of the market. Patents make explicit and obvious to the research and industrial community that the benefits of scientific discovery are reaped by those who innovate first. So an internal movement (patenting) creates its own external domain (a market with predatory compulsions). This is an example of an ‘externality’ that, by way of anticipation, effectively pre-empts its own public: an internal externality (Strathern 2002: 254).

Her second example looks at the public inquiry carried out by the Canadian Royal Commission on New Reproductive Technologies between 1989 and 1993. The Commission was set up to gather information on the different opinions held by Canadian society on matters of technoscience applied to human reproduction. Strathern observes that implicit in the model of Canadian society that the Commission worked with there was an assumption about ethical-cum-political representation being a question of ‘balance’. It was assumed that Canadian society would be characterized by a multiplicity of perspectives and interests groups. In this pseudo-republican theory of society, the ‘balancing’ of this diversity of perspectives became therefore a metonym for a particular ethical model, where ethics is again a reconciliatory space for a number of reversible moments: individuals vs. society or state vs. multiple constituent groups.<sup>4</sup> One way or another, the ethical is the space that mediates separation; and this separation is a precipitate of an imagination of society as a (dis)aggregative object. As she puts it: ‘In the balancing of the two approaches [individual vs. society, state vs. interest groups], we might ask what value was being given to *balance* itself.’ (Strathern 2002: 260, emphasis added) In this light, what is at stake is that the commissioners’ latent principles of moral reasoning became another *internal externality*, because in opting for proposing as a model of Canadian society their own vision of how society aggregates into a balanced whole, they chose to leave out those participants in social life whose vision of society did not match the commissioners’ parts-to-whole aggregative identity, such as religious minorities. Religious groups were framed-off the model of society because they carried their ethics within: they are not willing to make their ethical choices in the space opened up by the balance of consultation (Strathern 2002: 261). Their ethics is not external to them, hence their becoming, for modern Canadian society, an externality.

Neither patents nor republican decision-making processes are economic public goods *sensu stricto*. But their sociological imagination, I have hoped to demonstrate, shares the same premises. Like public goods, patents and republican politics inhabit sociological spaces that are always external to, and contingent on, their very summoning. Thus, to return to the original question about the political imagination of public goods as externalities, we can now say that this is sociologically flawed on three counts: (i) it takes the market vs. society distinction for granted; (ii) it grants ‘public’ or ethical status to the life of the good outside the market; (iii) there are no such ‘outside’ or ‘insides’ to markets or societies anyway: these are



ethical geographies proper and exclusive to the contemporary Euro-American sociological imagination.

I would like to end this section on a theoretical note, by suggesting that the rise of the aesthetics of public choice may also be seen as a product of the parallax shift or reversible logic described above: how the opening of a gap between an inside (a market *distributional* base) and an outside (a public, *collective* good) calls for concealing the sociological intelligence (e.g. the productive agency of the state) informing the distinction. Steve Fuller has made a similar point of epistemology when noting that when public goods are ‘understood as a *collectively* defined product whose use is defined *distributively*... virtually anything can be reclassified as a public good.’ (Fuller 2001: 191)<sup>5</sup> Of course, the conflation of the political (distributive) and the popular (collective) has a long, complicated history of its own in political thought (again, Hobbes’ *Leviathan* is an example), but I want to suggest that in the terms of an aesthetics of political representation the logic of reversibility is indicative of a more general anthropology of political proportionality: i.e. how different societies’ sense of self-recognition distributes itself in different proportional guises, which consolidate sociologically by concealing their own disproportions.

### **From the ‘political economy of free trade’ to the ‘economy as global commons’**

Having set the scene of how the public value of goods was imagined in a political economy dominated by the state and market forms, I would like now to explore how the shift to a global economy is giving rise to a novel political aesthetics of the global as an ethical artefact, and in particular the effects that this is having on our conception of knowledge as a public good.

In the era of globalization, the collapse of statism as the predominant form of political economy has had a massive impact on our theories of political justice: on the imagination of the political as something that, echoing Strathern, appears to be in need of a new ‘balance’. A new global ethics, and new global governance institutions, are being called into place to prevent the ‘political’ and the ‘economy’ to go their own ways (Nagel 2005; Nussbaum 2006). An important corrective mechanism in this gigantic rebalancing exercise has been the call for a redefinition, and making robust, of the ‘commons’ (Strathern 2004). A revised and updated extension of the frontier and landholding ideological tropes (the spatial outsides) of the 19<sup>th</sup> century public domain (cf. Kanbur & Riles 2004), the commons has here emerged as a defining signpost of the contours of the new political economy (Dietz et al. 2003). The regulatory framework of the state now passé, so the argument goes, only the (ideal of a) commons can stand up to the forces of private interest. Although discussions over the ‘tragedy of the commons’ are of course far from recent (Hardin 1968; Ostrom 1990), the exponential increase in the availability of information brought about by new information and communication technologies (ICTs) has given rise to serious concerns over an ensuing enclosure of the global knowledge pool (Boyle 2003). An input and outcome of its own production process, ‘information’ is said to have undergone an important epistemic transformation under the impact of ICTs: its very momentum and velocity of transformation has turned it into a self-defining public good, an object that continually overflows into something greater than what it is; an expanding externality (Benkler 2006).

Much has been written about the economic, social and technological fundamentals of the new information society. Here I just want to refer to what I see as those elements of a novel political aesthetic/ideology of open democracy that often accompany the exaltation of the knowledge economy as an expandable good. Two processes are at stake, rehearsing the ideological tropes of 19<sup>th</sup> and 20<sup>th</sup> century statist and market political economies of the public: the hiding of the forces that make knowledge *productively* public, and the imagination of a *spatial outside* to society’s knowledge of itself.

Even the most sophisticated and subtle of legal and political theorists often conflate the open-source properties of new knowledge with a theory of open society as democratic practice. James Boyle, for example, having developed an original analysis of the creative remaking of the public domain by the open source movement as a process that is parasitic on the complex, *modular structure* of the net, goes on to draw an analogy between Popperian social ethics and the ethics of the net: ‘all the mottoes of free software development’, he writes, ‘have their counterparts in the theory of democracy and open society’ (Boyle 2003: 47).<sup>6</sup> The same is true of Yochai Benkler’s robust defence of a political economy of creative commons, where the net’s decentralization of production is presented in terms coterminous with the enhancement of individual freedom and social justice (Benkler 2003a; 2003b). And the very same image, of an infinitely expandable pool of democratizing knowledge, can be found in recent attempts in economic theory at providing a global update to the theory of public goods (Kaul 2003; Kaul et al. 1999). A standard operation here is to redefine the notion of publicness by levering and further disaggregating the political. Inge Kaul and Ronald Mendoza, for example, in a work that aims to re-invigorate the field, define ‘publicness and privateness [as] social constructs.’ (Kaul & Mendoza 2003: 86) According to Kaul and Mendoza anything can be a public good today – so long as it has the potential to be so. Thus the standard definition of public goods (non-rivalry and non-excludability) is expanded to include both a good’s ‘special potential for being public’ and goods that ‘are de facto public’ (Kaul & Mendoza 2003: 88). In this context, actuality and potentiality are idioms that summon an image of the political as a globally evanescent field. Such evanescence turns any problem of social choice into a matter of conjunctive politics (being in the right place at the right time) and make the definition of public policy verge on the idea of a social movement (cf. Williams 1995), where as long as a good inhabits the public sphere, we are talking of a public good.

The problem, of course, is where does one locate the public sphere in a global world? (cf. Sen 1999; Sivaramakrishnan 2000) Kaul and Mendoza opt for identifying it in the play of three kinds of political processes: (i) the publicness – or participatory nature – of decisionmaking; (ii) the publicness – or equity – of the distribution of benefits, and; (iii) the publicness of consumption (Kaul & Mendoza 2003: 92). However, a closer inspection reveals that these are but reformulations of the political processes that Desai has noted as already burdening the statist theory of public finance: the problems of *preference revelation*, *political bargaining* and the identity of the *productive* agency behind public goods (Desai 2003: 64). And, in this order, these are also the sociological fictions – the political aesthetic - that we have seen as burdening the ethical imagination of Euro-American society when it posits itself as a political entity occupying an institutional space *outside* its own productive sociality: when society is something that stands outside the market or at arm’s length of the state, or a value arrived at (internally) through distributive representation.

### **A new Leviathan?**

In actual fact it is far from clear that the structural organisation of the political economy of new knowledge is levering the *production* of knowledge in significantly novel ways. Paul David and Dominique Foray recognize that a society rich in knowledge infrastructure still faces the problem of how to organize itself *politically* in order to make its knowledge *productive* (David & Foray 2003: 44). The political visibility of *productivity* is absolutely central here. Grahame Thompson’s detailed examination of the configuration of production processes in knowledge-intensive economies has shown, for instance, that most economic growth emanates from industrial bases where clustering and institutional aggregation are predominant, favouring a return to a craft mode of production that Thompson dubs an “‘engineer-based” approach to knowledge’ (Thompson 2004: 571). Far from being a precipitate of its expansionary and global reach, the public goodness of knowledge (should we want to call it that) seems therefore to obtain when an effort is made into making knowledge

*productively public*, which is something that happens in specialized, intensive, craftsmanship ways.

In an interesting confrontation with the economists' definition of science as a public good, Michael Callon has paid close attention to the actual organisation of *production* in a knowledge environment (Callon 1994). According to Callon, the public goodness of science obtains through the localized dynamics of scientific communities, when these are seen as techno-scientific environments dedicated to reproducing themselves as heterogeneous *networks* (linking, in classical actor-network fashion, objects, materials, ideas, texts, discourses, people). It is not information, then, not even knowledge, as economists and legal scholars maintain, that lends the knowledge economy its global political purchase. For Callon, the public value of knowledge evinces in the radial activities of networks themselves: it is their capacity at proliferating and expanding *as networks* that enacts out the *public* element of (scientific) knowledge. Knowledge can only be reproduced as a thing insofar as its very *production* process can be reproduced too: hence

the flaw in concentrating on one particular link in the chain of costs, instead of taking them as a whole. Asserting that an isolated copy of a statement has a use value is like saying that a photograph of a cigarette provides as much satisfaction as the cigarette itself!

(Callon 1994: 405)

Callon's suggestive take on the conditions under which science becomes productive does not tackle, however, the reasons why science, as an enterprise, should mobilize a political economy deserving of the *public* ethic. 'Science', he writes, 'is a public good when it can make a new set of entities proliferate and reconfigure the existing states of the world.' (Callon 1994: 416) But he does not explain why 'proliferation' entails or carries a public corollary. For Callon, the public value of knowledge is given by a normative political theory, which in his scheme remains unproblematized, as he himself acknowledges (Callon 1994: 418). Thus, whilst he explores how knowledge takes a productive turn he does not explain why that productivity should assume a public profile too. Publicness is simply seen as an emergent aspect or dimension of the proliferation of networks, where these mirror the expansionary, horizontal qualities of the open society model.

It would seem, then, that we need a better understanding of how publicness itself is produced as an economic and political artefact – or at least some good intellectual history on why the concept of the public should be associated to an ethical geography of openness and transparency.<sup>7</sup>

A good place to start our search might be the notion of 'network'. Although Callon's network is conceptually very different from that of the open society advocates, it shares with them a momentum of horizontal expansiveness and proliferation: as the standard view has it, it is in the network's interest and benefit to reach out and grow; therein lies too its wealth and political value (cf. Knox et al. 2006). When looked at closely, however, the very organizational form of the network as a globally productive artefact takes on a rather different guise. Anthropological work has shown that the 'imperative to connect' that animates the new network economy is more often than not short-circuited by organizational problems at the local level: the politics of the office weigh more than the supra-politics of the network good (Green et al. 2005). Reporting on ethnographic work on the effects of a European Union funded project to create an 'information city' in Manchester, Green et. al. note that in the places they studied the attempt to use networking to create an 'imagined community' that transcended national borders failed not because people were being short-sighted about the long-term benefits of a network economy but, rather, because they knew only too well that the political is *not* an evanescent field. Although the networks certainly enabled connections,

these connections were far from the uncomplicated business that the network rhetoric imagined: the network was therefore as much an effort in and a result of disconnection as of ‘imagined’ – and imperative – connection. It is precisely because people were *already* connected (in various ways) that getting the network’s ‘fantasy of pure connection’ to work proved often so insurmountable (Green et al. 2005: 818).

This brings us to a point that was hinted at before but only now takes the dimension of a truly political aesthetic. I refer here to the imagination of ‘networked knowledge’ as a political artefact itself. The work of Annelise Riles has already become a classical referent here (Riles 2001). Riles is an ethnography of the political activities of transnational aid and feminist workers, where the network is the primary form of intra- and inter-institutional bureaucratic communication in the world of international development. In Riles’ ethnography, transnational aid workers spoke of networks as both social *and* political artefacts. For them, the network was an *aesthetic* device, one of many ways to represent the relationships between bureaucratic actors; but they were also keen users of the network and would enthusiastically embrace its technological and design possibilities, re-describing existing relationships in network guise and imagining new possible relations through the conditions for networking. It is this recursive aesthetic of the network, now political artefact, now expression of sociality, which, according to Riles, gives the network its current political predicament.

Riles says that this re-versioning by her informants of every social moment in network terms is indicative of a vision where ‘sociality is seen twice’ (Riles 2001: 23-69). The idiom is of course reminiscent of Malcolm and Schaffer’s description of political illusionism. Resuming the vocabulary of 17<sup>th</sup> century optics, we might say that Riles’ informants indulged in another version of dioptric vision: they all know that they hold a perspectival view on ‘reality’, in other words, that there are other ways (than networking) of looking at things; and they also know that this one perspective they hold is an optical trick. What calls for our attention, then, as Riles poignantly insists throughout her study, is the examination of the anamorphic devices – such as the network – that allow this one perspective to come into view – and rest.<sup>8</sup> The network’s anamorphism emerges then as the aesthetic used by transnational NGO activists to effectively displace their own rhetoric about themselves. This is why networks have become the most extended *form* of institutionalized liberal rationalism, an ideological aesthetic (both materialist and idealist) that shapes the political organization of bureaucratic work everywhere.

It is at this juncture that the conversion of the network aesthetic with the theory of global public goods and the political economy of the information commons sets off its own train of political consequences. Caught up between these three discursive formations, ‘knowledge’ gradually assumes the features of a global political aesthetic: an ethical good of global public proportions.

The extent to which ‘knowledge’ has been caught up in this triangulation is best apprehended if placed in the context of knowledge’s own rise as, in the words of Richard Hull, ‘a unit of analysis’ (Hull 2000; Hull 2006). Hull has shown how this coming-into-being of knowledge was shaped by the ideological struggles that, in the first half of the 20<sup>th</sup> century, aimed to find a resting place for knowledge *outside society*. An intellectual battle fought over by the likes of Hayek, the Polanyi brothers, Popper and Mannheim against the alleged totalitarianism of Lucacs’ sociology, the force of the debate consolidated the opinion that what was at stake was ‘how to develop meta-theoretical positions (about science, economics, sociology and philosophy...) which could challenge positivism while retaining the validity of “positive” (in a weak sense) understandings, descriptions and prescriptions for the world.’ (Hull 2000: 325) The Hayekian view that equated knowledge with individual freedom won the day. Here knowledge stood for the reflexive capacity of individuals to bring themselves to action, a view that located knowledge at once inside (tacitly dispersed amongst individuals) and outside society (an outcome of people’s choice of action vis-à-vis others), and in so doing effaced the

ethical impetus (recognized by Lucaks) that comes from knowing your place in society. This is why for Hull the current interest in the place of science (or knowledge) in society – as in public understanding of science programmes – is misplaced, because the question of the ethics of knowledge is first and foremost a question about the concepts of our social theory (Hull 2000: 326).<sup>9</sup>

Hull describes for the fields of the sociology of knowledge and science a shift in epistemic assumptions that echoes some of the changes we have already encountered in the historical development of the theory of public choice – and its extension to the new networked knowledge economy. Here the economists' old concern about the *intelligence* required to think *collectively* about society developed into a question about the *collection of intelligence*; or as Nico Stehr puts it, a historical shift from the 'politics of knowledge' to 'knowledge politics' (Stehr 2003: 643). Whereas in the days of statist intervention society appeared as a residual artefact, the sociological leftover on the margins of an intelligent economic allocation, the rise of knowledge as a unit of analysis gradually made knowledge appear everywhere, a sociologically reflexive datum, and the problem became instead that of identifying the exact location of society. Nigel Thrift has described this feature of our age as indicative of capitalism's reorganization around 'the whole of the intellect' (Thrift 2006: 296), whereby a new distribution of the sensible as sheer contingent possibility (like those public goods which are now recognized as global social movements) becomes the location of surplus value: where anything that society knows and values becomes 'knowledge' and 'value'. Echoing Riles we might therefore say that the problem here has become one of figuring out whether society is in the network or the network in society – or perhaps these are both optical illusions and the question is misplaced to start with. Hence the political evanescent and the reversible externality: the sociological imagination that is always escaping from itself.

We can now start to see why the political imagination of the new knowledge economy as a network economy of commons takes a sociological toll. For when the idea of public knowledge becomes co-extensive with globality - when society is always external to itself, accountable to the productive demands of a global other – the terms 'knowledge' and 'public' emerge as reversibles: they accomplish the dioptric trick of making one 'see double'; they provide, paraphrasing Noel Malcolm, a curious structure of argument, where social ethics and the production of knowledge are conflated, by optical illusion, to the inextricable epistemic regime of a global economy. Public knowledge appears thus as both the aesthetic of a new global capitalism *and* the epiphenomenon of a new political philosophy of publicization.

### **Inside public knowledge**

Perhaps the best known of all accounts of the new politics of public knowledge is Helga Nowotny and her associates' description of the ethical and political requisites for robust Science-Society encounters (2001). According to Nowotny et. al., the production of scientific knowledge has recently undergone a paradigmatic, Kuhnian transformation: science's unilateral engagement with society has turned around, and the validation of knowledge as scientifically robust is no longer a matter for scientists to resolve on their own. It has become instead a larger social agenda. Today *society* decides what makes good science. The question of robustness – of finding out how society decides on these matters – is therefore crucial. New public forums, which Nowotny et. al. call *agora*, must be opened-up to accommodate the institutional expressions of robustness (Strathern's analysis of the Canadian Royal Commission's republican consultation being an example). This is where ethics kicks in. We need, for instance, to trust our scientists; our scientists also need to be responsible (O'Neill 2002a; O'Neill 2002b). Trust and responsibility emerge thus as society's new idioms of self-exteriorization: what society comes to look like, and how it comes to 'know' itself (via institutional audits), in the 21<sup>st</sup> century. In this scenario, science's new institutionalization fares as society's public knowledge.

The public relations that institutional audits of trust and responsibility do for science today have become paragons of 21<sup>st</sup> century republican science politics. They are emblems of science's new governance models, developed as an alternative or update to Michael Polanyi's famous (pseudo)republican theory of a secretive, secluded and authoritative scientific community (Polanyi 1962; see also Fuller 2000). The appeal to the republican analogy is interesting, because it imagines a space for the politics of knowledge-making within the discursive framework of deliberative democracy. It re-situates the question of the governance of knowledge within a political economy of public choice.

The new republicanism hopes to make society politically solvent in science matters by giving science a 'public' profile – although how the public gets to occupy this institutional reflective space remains a contested matter (Irwin 2006; Wilsdon et al. 2005). What is seldom noted, however, is the sociological value awarded to 'the public' as a positive (ethical) political location. Much like it did in the statist and market versions of the public domain as a fictional aggregative intelligence, the public of 'scientific citizenship' models tends to make its appearance on stage as a self-evident reconciliatory collective: an extrinsic ethical good, whose political value derives from adding a 'balance' to competing or disputed knowledge projects. As a functional sociological object, then, 'the public' helps re-establish society's loyalty to and political symmetry with scientific experts (Maranta et al. 2003). However, we know from our brief encounter with republican decision-making processes that the 'balancing' of political perspectives does not always entail a fair assessment of what different communities esteem and hold valuable as scientific knowledge. When it comes to making sense of and deploying 'knowledge' to keep our social world alive, publicity and publicness often mean different things to different people. Rather than something 'added' politically to society, a conception of 'the public' may be something already internal to social life – an existing body or form of knowledge, of which 'science' might be an integral part (or not), defining of how people know their place in society. Seen in this light, 'public knowledge' might be better conceptualized as the self-contextualization<sup>10</sup> of an imaginary science-society dialogue.

What would a public that is not chosen for its political value as an external balance – that it is not an expression of normative public choice theory – look like, then? How should one think about such self-contextualized bodies of knowledge?

Anthropologists think ethnographic descriptions can be a route to elucidating such bodies of self-contextualized knowledge. Two examples illustrate the point.

Monica Konrad has described the way people with cases of known hereditary (genetic) diseases in the family (e.g. Huntington's) respond to predictive genetic testing technology by deploying kinship genealogy as bodies of both bio-archival and moral knowledge (Konrad 2003). She reports the case of Rex Kingston, one of six siblings 'lucky' enough to have come away from predictive testing 'clear' of Huntington's disease. He shares in fate with two nieces, Mabel and Nelly. The rest of the family has tested positive. Rex, Mabel and Nelly's structural position in the family genealogy is given a new moral description by kin members: they have 'got off', escaped the disease; but theirs is too, now, the responsibility of caring for the ill. The body of kinship knowledge elicited by predictive testing technology has transformed the family's internal culture of relatedness: Rex, Mabel and Nelly now feel 'outsiders', 'bonded through exclusion'. A new morality of kinship values has re-articulated family relations through idioms of 'misfortune, regret, and divisiveness.' (Konrad 2003: 351) Had they decided to withhold the results, or to vary the genealogical path through which to make them available to the rest of the family, things might have been different. Thus, genetic and kinship knowledge mutually animate and transform each other, so that '[r]elatedness may recede from view or, conversely, knowledge itself may seem excessive.' (Konrad 2003: 353) Disclosure of genetic information – making knowledge 'go public' – is therefore far from a straight warrant to ethical normativity. Much the contrary: ethics only *starts* to take shape

when people redefine ‘disclosure’ through a variety of strategies of elicitation, secrecy and concealment: deciding what to tell and what not to tell, to whom, and when. What Konrad calls ‘genealogical ethics’ takes shape through ‘kinship trajectories of conception and [genetically transmitted] secrets’; it is the movement and ‘life of secrets’ (Konrad 2003: 354), within and along familial lines, that shapes ‘public knowledge’ about the ethics of the new genetics.

My second example comes from the work of Marilyn Strathern (2005). She describes the way medical technologies have enabled in certain contexts an analogy between reproductive and intellectual creativity, as when speaking of parents’ mental conception (to have a child) taking legal precedence over his or her surrogate mother’s biological inception; the child’s relation to his or her legal parents thus sustained on a conceptual not a conceptive relation. We see here people mobilizing ideas about kinship (what is a relative, what counts as a relation) to rethink ideas about property in bodies and knowledge (the body-to-be of a child as *conceptual* not *conceptive* potency). Kinship and knowledge appear thus as reversible epiphenomena of the same epistemic structure: two conceptual orders that can revert to structurally analogous idioms (relatives and relations, concepts and conceptions) to explain their sameness and differences from one another. Ethnographic reversibility allows us to move between ‘knowledge’ and ‘society’ without the need to consolidate either as a distinct sociological institution.

## **Conclusion**

Unlike self-contextualizing ‘public knowledge’, the call for a ‘public’ reconciliation between Science and Society imposes a conception of political governance on bodies of knowledge that have already taken account of each other. The new ‘public relations’ come to supplant an existing ethnographic order with a political aesthetic that takes pride in the possibility of ‘seeing double’ – seeing society and science, the state and the market, the collective and the distributive – as parts of the same ‘structure of argument’. This is also the structure that political argument takes when society becomes ‘a whole intellect’, as Thrift puts it: when all is knowledge that knows itself. Under the conditions of such an omniscient political economy, only a new Leviathan inhabiting the margins, moving out towards the global – the way an externality works – can sanction our ethics. From this perpetual outside, the new Leviathan holds internal differences together and allows us the illusion of seeing things from within and without, in unified perspective.

If dioptric anamorphosis was the political aesthetic of Hobbes’ Leviathan, I have opted to characterize the new Leviathan’s as a political philosophy of publicization. There is much in publicization that is reminiscent of Hobbes’ theory of the state as a duplicitous representation. Like the reduplicative structure (i.e. representative and representational) of Hobbes’ theory of theatrical politics, the PPP creates the fiction or illusion of a society that knows itself. Knowledge of society comes in the guise of some surrogate conceptions of a collected and collective supra-intelligence, e.g. republican decision-making, the pre-emptive market coordination of patenting, networking or public understanding of science programmes. In each case, the possibilities for knowledge are subtly internalized through their very externalisation. I have called this internal-to-external oscillation, or self-externalizing movement of the political, a ‘reversible orientation’, and have made a distinction between aesthetic and ethnographic reversibility; the PPP provides a normative example of the former; Konrad and Strathern’s descriptions of self-contextualized knowledge make excellent examples of the latter.

In the PPP, the aesthetic reversibility of our contemporary political economy has found ideal conditions for its reproduction by giving an ethical dimension to its spatial outsides. We create our ethics by outsourcing our politics: to ‘know’ science we need trust and

responsibility, properly delivered through audit metrics; politics contributes to society's knowledge of itself through (self-styled) economic information. Thus, in a society that lives under the illusion and spell of the PPP 'public knowledge' is the knowledge that it takes to make competent use of our political economy. If my description of the political philosophy of publicization is therefore anything to go by, it seems that the only sociological location available for describing the ethical landscape of our time is that remaining space that accrues *after the economy*.

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<sup>1</sup> My interest is in the rise of the 'public' as an economic object with political predicament. Habermas' famous study of the constitution and transformation of the public sphere as a category of bourgeois society (Habermas 1989) makes only passing reference to the historical significance of the public in public economics; his is a study in political theory not the sociology of political economy. In a later work, he has recognized the importance of E. P. Thompson's study of the making of the English working class for imagining a plebeian public sphere that was coeval with the hegemony of the bourgeois political imagination (Habermas 1992)

<sup>2</sup> Marginalism represented the final and total de-socialization of the 'political economy of free market'. We need remember that although the classical economists certainly liberalized the economy, they did not 'forget' society (O'Brien 1975). Smith, Ricardo, Mills et. al. all worked with models of an agrarian society, and in this sense their economics remained sociologically robust in important ways. Marginalism, on the other hand, did away with all this: there is no sociology proper in marginalist economics.

<sup>3</sup> Habermas uses the imagery of a dialectic of 'inwardness' turned 'publicness' to describe the historical development from *representative publicness* (the public stature of dignitaries, kings, etc.) to *bourgeois publicity* (the public sphere as we have come to recognize it). He dubs this dialectic the 'institutionalization of a privateness oriented to an audience' (Habermas 1989, Chapter 2). This movement, inside-out from an individual's singular public stature to the plural collective status of bourgeois publicity, echoes the logic of reversibility that I have described above.

<sup>4</sup> I take up the question of neo- or pseudo-republicanism later on, when addressing the issue of contemporary calls for the 'governance' of science and knowledge. Briefly, it is important to observe at this juncture that the organisation of the political in accordance with the idea of a common good – a *res publica* or public 'thing' – is a contested matter in political theory: republicanism is no stable notion. Some versions of the history and theory of republicanism hold dearly to the influence of Locke and observe to the importance of principles of liberal individualism (Pettit 1997); some attest to the importance of the place of a public philosophy within the republican ideal, thus embracing a robust communitarianism (Sandel 1996); others are built on the tradition of civic humanism (Pocock 1975); whilst yet others follow a neo-Roman tradition of liberty (Skinner 1998). Why and how the 'public' becomes a 'balance', then, is far from being a straightforward question (for an anthropological remark on the idea of the 'balance' or 'proportion', see Corsín Jiménez 2007).

<sup>5</sup> Elsewhere he re-describes this confusion as an ontological mystification on the part of economists, who have created an asymmetry between their definitions of knowledge *production* (understood as the production of the objects or materials that contain the knowledge – "the nature of the good itself is specified "objectively"") and knowledge *consumption* (understood as the consumption of the 'knowledge' or ideas contained in the objects – 'the value derived from the good is specified "subjectively"'). The asymmetry contributes to the hiding of the fact that knowledge is always knowledge *for someone* (Fuller 2002: 28).

<sup>6</sup> Deleuze's evocative description of the rise of pragmatism in late 19<sup>th</sup> century American society will serve here as an example of why one should not mistake a sociology of modularity (which he labels *pachwork* or *archipelagian* sociality) for a sociology of open democratic practice (Deleuze 2005 [1993]). Using Herman Melville's wonderful *The Confidence-Man* novel as an example, Deleuze shows the difference between the genuine 'trust' of archipelagian sociality and the masquerade trust of institutional democratic life. True democratic trust obtains not in open societies but in dispersed and archipelagian ones (see also Corsín Jiménez 2005; Graeber 2006).

<sup>7</sup> I will not touch on this latter issue here. Of course, Lefebvre's comments on transparency in *The production of space* are seminal in this respect (Lefebvre 1991: 27-30). For a localized ontology of



space politics see Corsín Jiménez (2003); for a general overview of the place of the spatial in the political, see Doreen Massey's recent *For space* (2005).

<sup>8</sup> Riles extends her analysis of 'networks' to include other bureaucratic artefacts, such 'documents', 'paperwork', 'newsletters' or 'matrices'. For ease of exposition, I use the term 'network' here to encompass all such devices.

<sup>9</sup> Steve Fuller has charted a similar genealogy for the rise of the knowledge society, tracing it, like Hull, all the way back to 1920s Vienna, and making Hayek too the main character of his list of suspects (Fuller 2001; Fuller 2002 13-16). For both Hull and Fuller the appearance of 'knowledge' as a political object indexes a problem of institutional intelligence: how to divide society up for economic redistribution.

<sup>10</sup> Nowotny et. al. give the name 'contextualization' to the mutual co-invasion of science and society (Nowotny et al. 2001).

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