The Justice of Information

Informational Justice

Information is a primary good. It may be, perhaps, the most important primary good we can imagine when we consider its role in the economy, the development of knowledge and culture and, as we saw in the last chapter, its impact on power in a society. How should this primary good be distributed? This chapter devotes itself to developing an answer to this question.

Before proceeding we need to clarify quickly our terminological shift. In this chapter we will talk mainly about information. We use this broader generic term to include abstract objects and knowledge of various kinds. The term ‘abstract objects’ has the specialised meaning assigned to it in the last chapter. Abstract objects are a species of information. When it comes to talking about justice and intellectual property it is better to cast the net widely and use a generic term like ‘information’. Information is the daily lifeblood of human agents as communicating beings. Talking about information rather than abstract objects captures the pervasive effect that intellectual property rights in information can have on the daily lives of people.

Discussions of justice proceed under certain conditions, one of the most common being that of relative or moderate scarcity. This, for example, is a condition that Rawls stresses as part of the
objective circumstances of justice.⁴ This condition does not hold for information. There can be a scarcity of information about a particular subject. People may be ignorant, or they may be restricted from having access to information by social norms or encryption technology. But, once in existence, information is not a scarce resource. The supply of information to one person does not diminish the amount available for supply to another person. Information has, in the language of economics, the property of being non-rivalrous in consumption. There is another contingent feature of information that matters for present purposes and that is its natural tendency to spread. Humans are information gatherers and exchangers. In a world full of digital technology and pathways the capacity of humans to spread information is greatly enhanced. The idea of a global electronic village increasingly approximates to reality.

Most discussions of justice choose some level of group life as their setting. Typically this group life is linked to the state. Part of the present discussion concentrates on justice between states; inter-state as opposed to intra-state justice. Global justice remains a critical long-term issue within international politics. The poorer states of the world seek to obtain the kind of economic riches that developed states have acquired. Because the developmental path has proved rocky and because, as is becoming increasingly clear in the environmental area, rich states have often developed at the expense of poor states, the normativity of justice has been utilised in an attempt to increase the developmental prospects of poorer countries. Much of the work by the United Nations on the new International Economic Order is redolent of this utilisation of the normativity of justice.²

In thinking about the problem of distributive justice there are a number of frameworks to choose from. Within traditional philosophy there is a choice to be made between contractarian approaches to justice and utilitarian or consequentialist accounts of justice.³

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And there is also the natural rights-inspired entitlement theory of Nozick. These traditional offerings face competition from feminist and post-modernist frameworks.

All theories have their critics. In choosing a theory in which to work up a normative argument concerning the distribution of information we will automatically acquire some opposition. Defending our chosen theory against its critics is not something that occupies any space in this chapter. That is not the point of this chapter. Our purpose is to think critically about the impact of intellectual property arrangements on the distribution of information. This is important to do, for intellectual property rights, by their very nature, create artificial conditions of scarcity for information, which should not be scarce. To this end we will choose Rawls’ theory of justice. There are several reasons for this. The theory is centrally dependent on the intersubjective agreement of persons and this, in metaphysical terms, is much less problematic than natural rights. His theory also has a strong a priori normative edge to it. For present purposes this is a strength rather than a weakness. We want a theory against which the distributive effects of intellectual property can be clearly judged. Unlike the case of utilitarianism, there is no dependence upon a complex summing procedure, which in any case is frequently impossible to do. Finally, because of its impeccable liberal pedigree, Rawls’ theory is not predisposed to be hostile to property rights. There is probably no other theory of justice in which intellectual property rights are likely to receive a fairer hearing.

We can now offer a more detailed statement of what we are seeking to achieve. Essentially, it is to try and outline what the relations between property and information ought to be through the lenses of a theory of contractarian justice. There are obviously very many factors that go to affect the distribution of information in the world: technology and its distribution, culture, language, social and economic networks, individual capacities and communicative skills are some examples. Institutional arrangements or organisations are undoubtedly important

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factors in this distribution and intellectual property systems are important aspects of institutional design that affect the spread of information.

Questions of institutional design or organisation are of interest to the theorist of justice in that a general theory of justice has implications for the structure and organisation of societal institutions. Rawls, for instance, argues that the institutions of constitutional democracy satisfy his principles of justice. Our purpose is to trace the implications of Rawls’ theory for the distribution of information and the role of property in affecting that distribution. By linking justice and property we are following Hume, who argues that the ideas of justice and property arise together to make conventions of non-interference in the possessions of others work properly on a societal scale. Since Hume, discussions of distributive justice have moved away from a concern with property to range widely over the distribution of all kinds of benefits and burdens. The object of distribution being discussed here is information and so it might be said that it is informational justice with which we are concerned.

Information as a Primary Good

Our way into informational justice begins with the claim that information is a primary good. Primary goods can be natural or social. For Rawls, the chief social primary goods are rights, liberties, powers, opportunities, income and wealth. These things are primary goods in the sense that every rational person is presumed to want them because they have such a crucial role in the implementation of one’s life projects, whatever they may be. Except in relation to self-respect, Rawls does not offer much in the way of argument to defend this list of primary goods. Instead he relies on the dangerous strategy of an appeal to self-evidence. This is dangerous because matters

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6 ‘A man’s property is some object related to him. This relation is not natural, but moral, and founded on justice. ’Tis very preposterous, therefore, to imagine, that we can have any idea of property, without fully comprehending the nature of justice, and shewing its origin in the artifice and contrivance of men.’ David Hume, A Treatise of Human Nature (1739; L.A. Selby-Bigge ed., 2nd edn by P.H. Nidditch, Oxford, 1978), Book II, part 2, section II, 491.


9 Id., 440–446.
taken to be self-evident may turn out to be only evident to one’s self. Information is too important to be left off the list of primary goods. Just as individuals can be assumed to want rights, liberties, income, wealth, self-respect and so on, we are suggesting that they want and need information. It is possible to push the argument for information being a primary good beyond an appeal to self-evidence.

One reason for thinking that information is a primary good is its crucial role in human planning. The idea of planning plays an important part in Rawls’ theory of the good. Persons in the original position are assumed to have a specific conception of the good. This means that they have life plans that form the basis for the judgements of value they make. Rawls’ theory of the good claims that ‘the good is the satisfaction of rational desire’. Rational desire is itself determined by a life plan devised through a process of deliberative rationality. Equipped with this conception of the good it is plausible to argue, as Rawls does, that rational persons in the original position would want a scheme of justice which delivered more of those primary goods which are necessary for the implementation of the good, rather than less.

The psychological premise that humans are creatures who live according to plans is defensible provided planning is thought of in the loose terms of individuals thinking about a way of proceeding to some goal or the satisfaction of some desire. It should not be taken to imply some notion of masterly long-term design. Having argued that the good for a person is tied to the existence of a rational plan for that person, Rawls argues that primary goods are those things that have a general utility in the execution of any life plan. Things which for Rawls are self-evidently primary goods are liberty, opportunity, income, wealth and self-respect. Why should information be added to this list? One reason is that individuals in the original position are rational life planners. While they do not know the specifics of their plan or anybody else’s, they do know that they will live in a

10 The original position is a hypothetical scenario in which rational individuals meet to choose principles of justice. They do so in ignorance of any information about how these principles will specifically benefit them as individuals. The purpose of this restriction is to make individuals think about principles of justice that might benefit them as members of a social group rather than as individuals directly.
11 Id., 93.
12 Rawls at 260 makes it clear that his theory of primary goods depends on psychological premises.
13 Id., 411.
society in which they will be in the business of planning. Given that individuals know that they will be the rational formulaters of plans, it is also likely that they will want some basic level of information and access to information as one of their primary goods. After all, the act of planning requires information. Plans take their shape according to the information available to the planners. The more information they have about the world to which their desires, purposes and goals relate, the more specific their plans can be. The less information individuals have, the more general their plans have to be. In a world where the amount of information available for planning was ever diminishing, a point would be reached where planning could not take place.

The importance of information as a primary good can be better appreciated when one focuses on the consequences of its imperfect distribution. Prejudices of various kinds are examples of imperfect information. The belief that because someone is of a certain skin colour they are therefore lazy, incompetent, less intelligent and so on is, in the dispassionate language of economics, an example of imperfect information. Imperfect information has both economic and social consequences. From an economic perspective the presence of stereotypes means that individuals will not attain their optimum marginal productivity, that is, some skilled and talented people will not be hired.14

Rawls’ theory requires a basic social structure in which citizens have equal rights to basic liberties. Our point is that more than this is needed. Citizens pursuing their equal rights need access to information so that they can make plans and correct decisions. Social institutions themselves have to treat information in ways that minimise distortions of their functions. At a general level this means trying to disseminate relevant and accurate information. Information is the primary good which citizens need in order to be able to make the abstract infrastructural principles of justice work in a concrete way in their daily lives.

Ironically it is information that participants in the original position are largely denied. This lack of information is designed to encourage the moral point of view. Self-interested planning becomes a risky proposition. While those in the original position are information-poor planners, it is more than likely that, while they were still in the original position, they would agree to a set of institutions that would allow them to be information-rich planners in their ultimate social world.

Before shifting to the next stage of our argument we can bed down the claim that information is a primary good by looking at the various definitional cloaks it wears. If one thing is clear, there is no one view of information that enjoys a transdisciplinary validity. The diversity of approaches to information suggests that information itself has a number of functions or roles. One approach sees it as a resource. This view of information gains some limited implicit recognition in Rawls’ list of basic liberties, some of which, like political liberty and freedom of speech, presuppose for their meaningful exercise access to and use of information. Likewise commodity-based perspectives of information draw attention to the fundamental wealth-creating role of information in society. Yet other definitional approaches to information emphasise the idea that information is itself a constitutive force in society. Here the idea is that information and information flows act, via various social feedback mechanisms, like the legal system and the marketplace, to alter social structures. Naturally the various definitional approaches can be debated, but when taken together they have a cumulative impact which suggests that information is a primary good that is foundational for some of the other kinds of primary goods that Rawls lists. It is, therefore, the kind of primary good that most rational individuals can be taken to want.

Distributing Information

We can now make some suggestions about how information stands in relation to Rawls’ two principles of justice. These principles are the ones which Rawls claims would be chosen by participants in the original position: a hypothetical position of ignorance in which

individuals do not know enough about their particular place in their social world to choose principles that maximise the benefits going to their place. These principles are widely known but, for the sake of convenience, we restate them. The first principle asserts that each person is to have an equal right to the most extensive basic liberty consistent with a similar liberty for others and the second claims that social and economic inequalities are to be ordered so that they ‘are both (a) to the greatest benefit of the least advantaged and (b) attached to offices and positions open to all under conditions of fair equality of opportunity’.16

Each principle has a separate sphere of operation. The first operates in what might be termed the political-social sphere, while the second governs what might be termed civil society. Civil society in its narrow sense refers to that part of the basic social structure that deals with those economic relations that surround production and distribution within a society. Thus the first principle regulates the distribution of basic citizenship rights such as the right to vote, freedom of speech and assembly, right to hold property and so on. The second operates on the distribution of wealth, income and questions of institutional design. The first principle has priority over the second. It follows that, for Rawls, individuals cannot trade up to a position of economic advantage by disposing of or compromising their rights of equality of citizenship and opportunity.

Rawls’ neat division of the social system into the two independent parts of the political and the civil comes under strain when we look at information. Initially one might think that information is a primary social good which, like income and wealth, would naturally vary in its distribution. But in some ways information shows the artificiality of the division which Rawls relies on. Information may be the kind of primary good that can be thought of in terms of a basic liberty. To Rawls’ classical list of political freedoms we might add the freedom of information. This, like other basic liberties, it might be argued, should be equally distributed in a society. The kinds of goals or interests that freedom of information serves overlap, at least to some extent, with those served by freedom of speech, a primary good explicitly mentioned by Rawls. One classical defence of freedom of

speech has been to argue that truth is more likely to emerge from an ungoverned than from a governed marketplace of ideas. A similar argument could be used to justify freedom of information. In fact, for the reductively minded, it might be possible to take the line that the free speech principle is a social convention designed to help facilitate the more important goal of information access and exchange, which in social and biological terms is critical to whatever joint enterprises humans undertake. Pursuing this line of thought is not something that needs to be done here. The important point is that information is a primary good that has a place in both political and civil society, that is in both of Rawls’ principles.

Information, once created, finds its optimal use when it is made available to all. This is an economic claim about information which, as it happens, converges with Rawls’ theory of distributive justice, when applying that theory to information. Within Rawls’ general conception of justice, primary goods are distributed equally. Equal distribution is the hypothetical distribution by which improvements are judged. Positive economics justifies the unequal distribution of information in terms of its incentive effect. (Although appropriation is the preferred way of thinking about the problem, it amounts to unequal distribution.) By allowing some individuals to control or own information and denying access to others, the belief is that more socially useful forms of information will be produced. This economic prescription for the production of socially valuable resources can be easily accommodated under Rawls’ difference principle (the second principle of justice). That principle allows inequalities provided that these work to improve the lot of the least advantaged. One can imagine cases where the unequal distribution of some socially useful information through, say, the patents mechanism would satisfy the difference principle and be therefore a permissible inequality. If it were really true, for example, that certain kinds of beneficial drug inventions would only have taken place because of the patent system then the temporary inequalities that the patent system creates in terms of access to information could be accommodated under the difference principle. This accommodation is made easier in the case of intellectual property rights since most of those rights have a fixed period. Formally at

18 In theory, however, trademark and trade secret protection can go on indefinitely.
least, they create only temporary inequalities. One implication of the difference principle for intellectual property rights, however, is that we should be wary of increasing terms of protection. By doing so we are formally increasing the period for which one important primary good is unequally distributed in society. Unless there are some very clear-cut gains to the least advantaged the difference principle cuts across increasing temporal bars to information.

A fundamental feature of Rawls’ two principles is that they have a lexical order. The first has priority over the second. Put shortly, this has the consequence that political liberties cannot be exchanged for economic gains. For our purposes, one consequence of this lexical ordering means that certain instrumental uses of property are prohibited. The right to hold personal property remains one of the basic political liberties of the citizen. However, when the background institutions that are to fit the two principles of justice are being formed, it necessarily follows from the lexical priority of the first principle that these institutions cannot adjust or create property rights in such a way as to subvert basic political liberties. An example will make this point more concrete. Copyright creates property in expression and property in expression clearly stands in tension with freedom of expression.\(^{19}\) Governments who own the copyright in politically sensitive documents or films can rely on copyright to prevent their circulation.\(^{20}\) One can imagine a society in which it was decided that the economic gains from having rights of property in expression outweighed freedom of expression and so freedom of expression suffered accordingly. It is just this kind of calculation which Rawls’ distributive theory rules out. From the point of view of his theory, the growth of property forms is not to occur at the expense of basic political liberties.

The instrumental nature of property in Rawls’ scheme reveals itself in his section on the background institutions of government where the functions of government, such as allocation and distribution,


\(^{20}\) In the Commonwealth of Australia v. John Fairfax & Sons (1980) 32 ALR 485, the Commonwealth government was able to restrain the publication of some official documents relating, amongst other things, to the East Timor crisis by relying on its copyright in those documents.
are mediated through changes in the definition of property rights.\textsuperscript{21} Although Rawls does not argue the case, he assumes, with some plausibility, that the continuous adjustments in rights of property are necessary ‘to correct the distribution of wealth and to prevent concentrations of power’ detrimental to fundamental political liberties.\textsuperscript{22} The wide dispersal of property is a necessary condition for maintaining the value of these liberties. Property rights do not, in Rawls’ theory, have the iron-clad guarantees of safety which, for example, Nozick gives to such rights in his theory. Rather than a primary protected status, they have a secondary instrumental status. Thus, in thinking through the design of major social institutions, the Rawlsian designer would use property rights as a tool to preserve political liberties and maximise access to, and the distribution of, primary goods such as information. It is hard to see how a massive propertisation of information is, in terms of the design of the basic social structure, consistent with the distributive requirements of the theory. Rawls’ theory does not, of course, rule out private property rights or suggest that there is no scope for intellectual property rights. Rather, in abstract terms, it implies that an evolutionary institutional trajectory that favoured the massive propertisation of information would be contrary to the distributive principles that the theory establishes for the purposes of just institutional design.

The sceptical, instrumental approach to intellectual property rights, which flows out of contractarian theory employing a Rawlsian procedural rationality, can be better seen once we focus on the idea of information and organisation as capital. Abstract objects, the last chapter argued, are an important form of capital.\textsuperscript{23} How might the parties in the original position deal with this knowledge? Putting the argument concisely, it seems reasonable to think that, since other kinds of capital resources such as minerals, land, talent, money


\textsuperscript{22} Id., 277.

\textsuperscript{23} The idea of information as a form of capital has been a steadily emerging theme to be found within the economics of information and organisation. Machlup’s work showed that a significant part of the US economy was involved in the production and dissemination of knowledge. Arrow’s work on organisation suggested that ways of organising for the reception, analysis and communication of information were fundamental to gaining economic advantages. For a survey of this literature, see D.M. Lamberton, ‘The Economics of Information and Organization’, in M.E. Williams (ed.), \textit{Annual Review of Information Science and Technology} (American Society for Information Science and Technology, White Plains, NY, 1984), 3; K.J. Arrow, \textit{The Limits of Organization} (New York, 1974); A.G. Ramos, \textit{The New Science of Organizations} (Toronto, Buffalo, 1981).
and so on would be distributed unequally and known to be so, the contractors in the original position would opt for a societal scheme which distributed at least one form of capital, information, as widely as possible. Monopoly rights over information, it would probably be agreed by those in the original position, should be severely limited. Why this position is a likely outcome can be seen more clearly if we look at the concept of human capital and how this intersects with intellectual property. The parties in the original position would know about the concept of human capital since there are no restrictions on knowledge of general laws and theories.24

Human capital has a disarmingly simple economic definition: ‘knowledge embodied in people’.25 Human capital theory begins with the assumption that human beings have a personal base of knowledge, skills and habits which they further through forms of education and training. The decision whether to increase this base or not is a matter of individual cost–benefit calculation.26 Roughly the chain of causation thought to hold true is that human capital as embodied knowledge and skills is the springboard for technological and scientific development which, in turn, is an important (or perhaps the) condition of economic growth. Human capital, in short, turns out to be foundational for economic development. So, by way of illustration, one important suggestion has been that in the United States, perhaps the biggest user of capital in the world the contribution of education to economic growth up to 1956 probably exceeded that of physical capital.27

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How does intellectual property link up with human capital? This is rather a big question and nothing like an answer can be given here. The first thing to observe is that there is a clear overlap between the two. Human capital is embodied knowledge and skills. Intellectual property rights are, via the mechanism of the abstract object, rights to knowledge. The way in which intellectual property rules are designed makes a difference to things like the rates of return on human capital investment and the formation of human capital. Pinning down precise relations between human capital and intellectual property is a major empirical and analytical project. Here is one possible relation. Intellectual property rights allow a price to be charged for knowledge and skills. An individual’s decision to add to her stock of knowledge and skills will clearly be affected by the price she has to pay for that knowledge or skill. As the scope and duration of intellectual property increases (more kinds of knowledge can be charged for over longer periods) there might be possible adverse outcomes for human capital accumulation. Raising the price of knowledge may mean that fewer people are prepared to invest in increasing their own stock of knowledge. Here is another possible outcome. The more people are encouraged through a general intellectual property consciousness to play the ‘let’s price our knowledge’ game, the more likely they are to hang on to that knowledge. After all, why diffuse any of it free of charge if you can make money out of it? But this also reduces the opportunity for others to build on their existing stock of human capital. The capacity of any one individual or organisation to exploit fully all the relational aspects of a body of knowledge is limited. Yet through the pricing of knowledge individuals may be encouraged to cling to knowledge that they do not have the resources to exploit fully or at all. A society with a highly developed intellectual property consciousness may find it is encouraging the underexploitation of its knowledge and human capital. One final example of the way human capital may be affected by intellectual property: copyright law regulates who may print books, who may import books and the scope of free access to books (fair dealing). The way that copyright law is designed has a profound impact on the supply of books and other copyright material to different groups in the community. The education sector, which is a major producer of human capital, is, quite naturally, a major user of books. The supply of books to this sector is critical to the performance of its task. It is for this reason that copyright regimes generally contain statutory licence schemes that allow educational institutions to make
use of books on terms more favourable than those given to private individuals. Compulsory licence schemes for the education sector can be thought of as a way in which the goal of building up human capital is maintained while allowing the private copyright owner a reward for his efforts. If the education sector were not given more liberal access to works under copyright then one consequence might be that the social returns from the investment in education would be lower. Property rules that limited the diffusion of knowledge within the education sector, or limited the access of that sector to knowledge, would mean, amongst other things, that there were inefficiencies in the use of existing human capital stock. Putting it another way, fewer people might be trained, or they might not be trained as well.

The preceding argument based on human capital only suggests some possibilities. It does not demonstrate them. It does, however, give rational actors in the original position another reason for treading cautiously in the design of intellectual property rights. It gives parties in the original position a reason for preferring minimal rather than maximal forms of these rights. Just how sceptically and cautiously intellectual property rights are to be treated under a contractarian theory of justice becomes clear when we transfer our attention to justice and relations between states.

Global Informational Justice

The move to inter-state relations forces some observations about the relationship between Rawls’ principles and international distributive justice. Some theorists have suggested that Rawls’ failure to globalise his theory of justice is a shortcoming. Beitz, for example, has argued that Rawls’ principles should not be confined to nation states because these states are not in fact the closed systems which Rawls assumes them to be. Rawls limits the conception of justice to a given individual nation state in the belief that once a sound theory is developed at this

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level other problems of justice, like those of international justice, will become more ‘tractable’. The nation state is for Rawls a convenient political identification of those individuals who participate in a society which is governed by rules that make that society a ‘cooperative venture for mutual advantage’.29 It is this cooperative scheme in relation to which some guiding principles for the division of advantages must be formulated.

If there were in some sense a world society with a scheme of cooperation that generated advantages and disadvantages then this would on Rawls’ approach allow one to generate principles that could be applied globally rather than nationally. Beitz tries to build the case for global distributive justice by pointing out that states are interdependent through their participation in international trade and financial systems. The argument involves recognising that various international regimes which relate to free trade, investment and monetary stability produce ‘a pattern of global interdependence’.30 This in turn generates advantages and disadvantages. The advantages lie in economic growth and productive efficiency. The disadvantages have to do with increasing the unequal distribution of wealth and the loss of sovereignty. The existence of an interdependent system with advantages and disadvantages leads Beitz to argue that there exists a global scheme of social cooperation which has to have global principles of social justice. Citizens of Rawls’ original position have now to think about their place in the world rather than the state. This modification does not change the choice of principles (according to Beitz and others).31

One possibility in the present context is to go along with an argument like Beitz’s for the global application of Rawls’ principles and then argue that societies or groups which are wealthy in terms of information, particularly technological information and human capital, are under distributive obligations towards poorer societies or groups. The precise content of these obligations would be a matter for argument. One would expect that there would be, at the very least, negative duties on information-rich groups not to restrict access to information. If there were a distributive theory of justice that could

30 C.R. Beitz, Political Theory and International Relations (Princeton, New Jersey, 1979), 145.
31 This point is also made by B. Barry, The Liberal Theory of Justice (Oxford, 1973), 129.
be applied internationally it could be used to evaluate critically the distributive effects of intellectual property within the world economy. For example, every time the international standard of protection for patent or copyright is raised, the cost of the information protected by those rights also rises. Clearly this has distributive implications for states within the global economy. (It also has, as our discussion of abstract objects and person dependency suggests, important consequences for power relations.) A global theory of justice could, then, help point the way to some set of morally desirable international property arrangements for the distribution of information and in particular abstract objects.

The problem, though, with using a theory of international justice to develop an argument concerning the distribution of informational capital is that it may be difficult to establish such a theory in the first place. Take, for example, an argument for global justice based on interdependence.\(^{32}\) It is undoubtedly true that, since Beitz proposed such an argument, states have become much more interdependent. The integration of financial markets, international standard setting, the increased scope of multilateral trading instruments to include services and intellectual property, the emergence of strong regional blocs like the European Union and the North American Free Trade Agreement, a consensus on the fundamentals of macroeconomic policy and its implementation through supranational regulatory institutions like the International Monetary Fund and the World Bank are just some aspects and examples of this greater interdependence.\(^{33}\)

Interdependence is a brute empirical fact about the modern world. The fact that there are trade and other economic interdependencies between states does not mean, though, that there is a scheme of mutual cooperation between those states in the social sense. The fact of interdependence does not necessarily entail the presence of the deeper social connections that characterise social groups. More seems to be involved in the mutual cooperation which is characteristic of a society, including shared values, norms, culture and some notion of group identity. It is plausible to say that mutual cooperation implies

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some degree of interdependence of an economic or non-economic kind, but relations of interdependence do not necessarily entail the presence of a scheme of mutual cooperation. A leap from interdependence to a global cooperative scheme with its implications of a superordinate group seems too great a leap to make. At a psychological level it is not clear that the extent to which individuals form social groups depends on the degree to which they are mutually dependent upon one another for the satisfaction of various needs and desires. Another explanation for group formation suggests that the crucial causal factor is an act of self-categorisation rather than the existence of interdependence amongst individuals. On this view group formation seems to precede interdependence.

There are other ways in which one might argue for global distributive principles. Beitz himself has suggested that a preferable route to demonstrating that the principles of justice apply to the world lies in focusing on the requirements for membership of the original position. For Rawls persons in the original position are equal moral persons who have the capacity to formulate a conception of their good and are ‘capable of a sense of justice’. For Beitz it is at least possible that such persons would choose to globalise the principles of justice irrespective of whether there was some international social cooperation. Whether or not such principles could be implemented in some practical way would depend on the existence of some international set of institutions or social scheme. The crucial point for Beitz is that the existence of global principles of justice is no longer dependent upon some international scheme of mutual cooperation.

Perhaps, though, we should consider the possibility that there is no satisfactory route to principles of world justice. Justice is a group phenomenon. It is when groups of individuals have to find ways of distributing resources or righting wrongs that justice is invoked as a value. To some extent the choice of group in relation to which the principles of justice are to have a functional role is arbitrary. We know, sociologically speaking, that individuals participate in many groups,

both primary and secondary. There is no reason in principle why these groups could not choose conceptions of justice. Rawls’ own open-ended description of society as a self-sufficient association of persons subscribing to a set of rules means that society is not necessarily equivalent to the group which is circumscribed by the boundaries of the nation state. Why, then, might we not have principles of world justice applicable to all persons in the world? There is nothing logically incoherent in this idea. The problem it meets with is the sheer heterogeneity in the world. The diverse patterns of beliefs, moral codes, cultural practices and conduct that exist in the world suggest that there is no world group or society to which the principles of global justice could be meaningfully extended. Groups do form and interact across traditional territorial borders, especially with modern communications technology, but the existence of international groups does not ground the existence of a world group to which global principles of justice might apply.

The evidence of heterogeneity makes one wonder whether persons in the original position would in fact seek to globalise the principles which they choose for their group. One cannot simply assume this as a matter of ideal theory. In the way such theory is practised by Rawls, original participants know about human nature and psychology, as well as the existence of cultural and moral diversity. They know that they will live in a world where there will be differences of culture, taste, temperament, religion and ideologies.37 The presence of this knowledge lends Rawls’ ideal theory a degree of plausibility. It means that the deductive powers of those in the original position are exercised in the light of some real-world facts. Without the input of those facts ideal theory would run the risk of becoming fantasy.

Working out whether the persons in the original position would globalise the principles of justice is not, as Rawls says of his whole project, an exercise in moral geometry, but is rather a more conjectural affair. There are some reasons why the original citizens might not be prepared to tread the path to global justice. The evidence of difference and heterogeneity might make them wonder about the feasibility of

37 It is the existence of differences which forms the basis of feminist critiques of Rawls’ theory. See S.M. Okin, ‘Justice and Gender’, 16 Philosophy and Public Affairs, 42 (1987).
institutionalising a global theory of justice.38 Perhaps the original participants confronted by such evidence might conclude that a global theory of justice might not, for psychological reasons, be a salient normative concept for all the different groups in the world. Then world justice, with its connotations of order and objectivity, might become the banner under which the intolerant and the imperialistic crusade to remake the world. What reason would there be for thinking that those charged with interpreting a charter of global justice would do so in a way that was sensitive to local conditions and customs? The desire for group sovereignty may well see the original citizens choosing to tie the principles of justice to some entity smaller than the world. Using some territorial unit like nation state to limit the application of a conception of justice is perhaps more anthropologically faithful to what the evidence tells us about humans, their natures and the cultures they invent.

Thus far we have given some reasons why a global theory of justice is going to be hard to deliver, at least in the context of Rawls’ theory. Nothing we have said rules out such a theory,39 but there are enough problems with it to suggest that for present purposes we should not pursue it. Nevertheless, working within the confines of a domestic rather than a global view of justice, it is possible to show that states would, under a contractarian theory of distributive justice, be committed to a sceptical instrumental approach to intellectual property rights.40 Such a theory of justice would require one or more states to avoid, under most circumstances, globalising a set of property standards for all states. It is time to make good this claim.

We begin with a brief description of the way in which Rawls handles the choice of principles to regulate relations between states, or what he subsequently comes to call the law of peoples.41 The law of peoples is simply Rawls’ distinctive term for those principles of right, justice and the common good that give a liberal conception of international

39 Some philosophers take the view that the dispute over transnational obligations has been settled: there are such obligations. See D. Jamieson, ‘Global Environmental Justice’, in R. Attfield and A. Belsey (eds), Philosophy and the Natural Environment (Cambridge, 1994), 199, 200.
justice its content. His discussion of justice between states in *A Theory of Justice* arises not out of concern for issues of resource distribution but rather the relation between civil disobedience and foreign policy.\(^42\) This does not matter, for it is his specification of parameters for his initial situation in which we are interested. Not surprisingly the procedure for developing principles to regulate international relations is similar to that chosen for the nation state.\(^43\)

Having chosen principles for the nation state, representatives of the state come together in a conference of nations to determine the principles of justice between states. Once again these principles are chosen under conditions of imperfect information. Representatives know that they are binding their state to some regulatory principles but they do not know whether their state is at the centre of trade or on the periphery, whether it is resource-rich or poor, the size of its territory and so on. The principles derived under such assumptions are, according to Rawls, basically the ones that form part of existing international law. They include principles of freedom and independence of peoples and their governments, equality of peoples, the right to self-defence and a commitment to the principle of human rights.\(^44\)

The bulk of Rawls’ analysis of the law of peoples takes place in the context of ideal theory. Essentially this means that agents are assumed to be faithful to the agreements and principles they devise. Rawls devotes little attention to non-ideal theory in the context of the law of peoples. Non-ideal theory recognises that the actual world is an imperfect place, full of inequalities and abuses of power. No longer is everyone presumed to act justly. The existence of brutal regimes like those of Pol Pot and Hitler are recognised. The object of non-ideal theory is to provide some answers as to how an ideal liberal conception of justice for an international society of peoples might best be implemented.\(^45\) Of interest here are Rawls’ brief remarks about the operation of non-ideal theory under unfavourable conditions. Basically, for Rawls the problem of underdeveloped and unstable societies stems from a failure of political culture and social organisation


\(^{44}\) Id., 55.

\(^{45}\) Id., 71.
rather than a lack of natural resources or capital. Rawls says nothing beyond this about the application of non-ideal theory to international relations, relations in which weak or helpless states and hegemonic states often figure.

Rawls, it is fair to say, makes a somewhat sparing use of his procedure when he discusses principles of international justice. He really only uses the first stage of his original position to identify the key principles of justice for peoples. But there are in his theory of domestic justice three other stages in which the original position is modified so that a constitution can be chosen and social and economic policies can be developed and applied through law. These same stages could not be applied to principles of international justice. Amongst other things, the representatives of states in the original international position would not be meeting to decide the powers of a constitutional world government. It is not world government but rather cooperative association that the representatives of states would be seeking to achieve. This seems a plausible assumption. On the other hand, representatives at this international justice conference would be interested in choosing some basic international structures and institutions that made cooperative life between their respective states possible. Naturally these would have to be consistent with the law of peoples which they had worked out in the original position. Rawls’ emphasis at the domestic level is on describing a basic structure (essentially that of constitutional democracy) that is consistent with the principles of justice. Our use of his method has a different purpose in mind. We want to argue that certain international arrangements for intellectual property would be inconsistent with those principles that were chosen to underwrite international law. We are, in other words, suggesting that the contractarian theory of justice, when extended to

46 Id., 76–77.
international relations, excludes as unjust certain basic arrangements for intellectual property. This claim is supported by the following line of reasoning.

Participants in the international original position, we have noted, would be interested in coming to some accord concerning the basic institutions and structures that might economically and politically affect their respective nation states. At the very least, financial and trade interdependencies would provide them with a reason for thinking about the kinds of international regimes they would want to implement. After all, the original parties are rational planners and so would want any scheme of justice for peoples to be capable of meaningful implementation in an interdependent world. More particularly, these original planners of justice would want to ensure that the principles of justice which governed international relations did not jeopardise the viability and operation of the conception of justice they had chosen at the national level. One outcome of Rawls’ method, if repeated with different groups, might be the creation of more than one version of justice. This is a possibility because, even after participants in the original position have been stripped down to their rational frames, they might still retain the cultural and social traces of the state or territory of which they are representatives and which in a deep sense form part of the common understanding of that group of people.49 Rawls’ method, if repeated amongst different peoples, might lead to the construction of local variants of justice as fairness. One issue which would then face participants in the international conference would be to think of ways in which local conceptions of justice could survive in an economically interdependent world. Solutions to this problem would not be easy to find. One possibility is that participants would seek ways in which to institutionalise conditions of non-interference in their affairs. The condition of non-interference, hardly surprisingly, is strongly present in Rawls’ list of core principles for the law of peoples. Peoples are free and independent and they have a duty

of non-intervention. It is at this point that we can return to thinking about how the participants at this justice conference would plan the fate of intellectual property.

International arrangements for property would be high on the agenda for parties in the international original position. Why so? We need to remind ourselves of some of our earlier discussion. In the previous chapter we argued that property is a form of sovereignty and that intellectual property, under certain conditions, gives rise to enormous levels of threat power. Clearly this has implications for the condition of non-interference. Depending on their form, international arrangements for intellectual property could easily contravene this condition and so would be an important subject for discussion by participants. Related to this, participants would have to think very carefully about the relationship between the territoriality of property and the impact of any international arrangement on that territoriality. We need to clarify this crucial point.

Property (including intellectual property) has been for most of its institutional life a highly territorial institution. Legally speaking, this has meant that the rules which govern property rights have been determined by a sovereign who has jurisdiction over a particular physical area. Territoriality, like property, is a notion that is linked to sovereignty and the state. One aspect of the definition of sovereignty is the power of the state over territory. Territory is also intimately related to foundational concepts within political philosophy. Locke, for instance, at various points in the Second Treatise links territory to government, community and citizenship. Roughly the picture one gets in the Second Treatise concerning property and territory is that government is under an obligation to act in a way which is consistent with the property interests of a group of individual property holders, that group having at the very least a territorial identity. It is also clear from our discussion in Chapter 3 that for Locke the property rights of an individual within the state can be adjusted by the state. Governments have the power to regulate property. This power has to

51 For a discussion, see Island of Palmas Case (1928), vol. 2 Reports of International Arbitral Awards, 831, 838–840.
be exercised in a way that is consistent with the goals of natural law. But governments have, when it comes to making regulatory decisions concerning property rights, leeways of choice:

For it would be a direct Contradiction, for any one, to enter into Society with others for the securing of and regulating of Property: And yet to suppose his Land, whose Property is to be regulated by the Laws of the Society, should be exempt from the Jurisdiction of that Government, to which he himself the Proprietor of the Land, is a Subject.35

It is hardly surprising that Locke should think this. The importance to governments of being able to adjust property rights cannot be underestimated. In Chapter 6 we identified four crucial functions of property. One way in which to think about property, although not the only way, is to see it as a coping mechanism that states use to adjust to internal and external stresses. Given the importance of the property mechanism to states, its territoriality is not surprising.

Our question, then, is: what basic arrangements would parties in the international original position choose for property? Obviously the stakes are high. The preceding discussion shows the importance of property’s territoriality to the state. Our question really has two parts. Would those in the original position seek to make international arrangements for intellectual property? If so, which arrangements are they likely to prefer and which would they reject on the grounds that they were not consistent with the principles of international justice? The answer to both questions depends in large part upon the state of knowledge of the original participants. It is important to bear in mind that, at the stage where the participants come to conclude an arrangement for property, they have already chosen principles of justice that govern international legal relations. Following Rawls’ idea of increasing the levels of knowledge in the original position as the parties move to greater levels of institutional particularity, we can say that in the context of the property discussion the relevant level of knowledge of the parties is the following. Parties would know that they represented states in a world in which human and physical resources were scattered unevenly amongst those states. They would know that states organised themselves in different ways, that states

were in very different stages of economic development and that there were social and cultural differences between peoples. The parties would not know the specific societies they represented, although they would be broadly aware of the kind of society they were representing. This last condition is important. Even though the parties would have chosen the principle of justice by the time they came to discuss the arrangements for property, detailed identifying information might lead some representatives to try and fix property arrangements to suit their own situation or at least tilt those arrangements in their own favour. The assumption of rationality continues to apply to the representatives.

Under these conditions, would participants choose to make an international arrangement for property? The answer is probably yes. Property rights remain fundamental to trade and so states would be likely to choose some minimal level of protection that safeguarded any trade interest that their state might have at some point in such rights. For instance, a state that had an advantage in design work would be keen to see those designs protected, but at the same time would only want minimal obligations in areas of intellectual property where it was weak. Prudent, rational representatives would probably opt for an international framework for intellectual property protection that allowed the territoriality of property to remain. It would be a framework that imposed minimal rather than maximal obligations on states, a framework which did enough to reward invention and provide an incentive for individuals to invest in creativity and innovation.54

Would participants in the original position rule out some basic arrangements for intellectual property as inconsistent with their chosen conception of justice for peoples? One arrangement which they might exclude on justice grounds is a globalised protectionist scheme of intellectual property. Before considering why, we need to make clear what is meant by a globalised protectionist scheme for intellectual property. Intellectual property becomes globalised when it loses its territoriality. It loses its territoriality when the principles, standards and policies of intellectual property become determined

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54 Much like the framework which did in fact emerge at the end of the 19th century in the form of the Paris and Berne Conventions. See footnote 57.
by a supranational regulatory institution rather than states.\textsuperscript{55} States, when it comes to intellectual property, become, as it were, law takers rather than law makers.\textsuperscript{56}

We can say that an arrangement for intellectual property protection is protectionist if (1) it favours longer periods of protection rather than shorter; (2) it propertises more areas of information rather than fewer; (3) it imposes substantive standards of intellectual property protection uniformly on all states; (4) it has few or no discretionary mechanisms that allow nation states to adjust substantive standards and the levels of protection to suit their level of economic development.\textsuperscript{57} The converse of these propositions would characterise a non-protectionist scheme.

There are perhaps a number of different arrangements for intellectual property that parties at the justice conference might develop. A little earlier we suggested that they would consider some minimal scheme of international protection for intellectual property rights. The one arrangement they would reject, though, is a globalised protectionist scheme. Such a scheme would be rejected on the ground that it was

\textsuperscript{55} The World Trade Organization can be thought of as a prototype of such a supranational organisation. For a more detailed discussion of the role of such organisations in the emerging supranational regulatory order, see P. Drahos and R.A. Joseph, 'Telecommunications and Investment in the Great Supranational Regulatory Game', 19 \textit{Telecommunications Policy}, 619 (1995).

\textsuperscript{56} The Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement represents a significant shift towards the globalisation of property. Any country wishing to enter the multilateral trading system has to implement the agreement. TRIPS is to be found in Annex 1C of the Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations concluded at Marrakesh, 15 April 1994. For the implications of the change in intellectual property protection, see F.K. Beier and G. Schricker (eds), \textit{GATT or WIPO? New Ways in the International Protection of Intellectual Property} (Munich, 1989).

\textsuperscript{57} What we have in mind here are the kinds of adjustive mechanisms open to states under the Paris Convention for the Protection of Industrial Property 1883 as revised, and the Berne Convention for the Protection of Literary and Artistic Works 1886 as revised. For example, both these conventions recognise the principle of national treatment. This principle requires member states of the conventions to extend the same rights to foreigners as they do to their own nationals. The principle of national treatment does not necessarily produce a uniform global scheme of intellectual property protection because the principle does not allow a country to insist upon a reciprocity of substantive standards of protection. The fact that country A creates extra rights for its nationals, for example, does not mean that it can require country B to recognise those rights as a condition of country A recognising the rights of country B’s nationals. See F.K. Beier, ‘One Hundred Years of International Cooperation – The Role of the Paris Convention in the Past, Present and Future’, 15 \textit{International Review of Industrial Property and Copyright Law}, 1 (1984); H.P. Kunz-Hallstein, ‘The United States Proposal for a GATT Agreement on Intellectual Property and the Paris Convention for the Protection of Industrial Property’, 22 \textit{Vanderbilt Journal of Transnational Law}, 265 (1989).
inconsistent with the principles of justice for peoples. Parties in our
international original position would not be prepared to assent to
developing property rights in this way. They would be worried by the
impact of such a scheme on the sovereignty of peoples and the balance
of power in the world. As rational agents, they would not want to
enter the world of dependency relationships (discussed in Chapter 7)
concerning resources that such a scheme would entail. Why would
the representatives of peoples agree to an arrangement which, for
instance, allowed the ownership of the world’s microbial processes
and cultures to fall into the hands of a few collectors?

In order to appreciate why this negative outcome concerning the
property rights of states is likely, we need to remind ourselves that,
under the constructivist procedure for principles of justice (that is,
the original position), information that is likely to produce bias and
distortion on the part of the parties applying the principles of justice
is denied to those parties. Clearly a globalised protectionist model
would be favoured by an information-exporting country. Such a
model would maximise that country’s economic gains. If one were a
net importer of information within the world economy and the regime
of global property rights was highly protectionist then, on simple cost
grounds, as a net importer one would not be in favour of such a regime.
Why would one as a matter of trade agree to a system which raised the
price of a non-rivalrous good like information? One might do so if one
thought that at some future time one was going to be a net exporter.
It might be rational to remain in a system in which one took some
short-term losses in order to take profits in the long run. 58 But this is
more a reason for rational agents to adopt some flexible international
framework for regulating the intellectual property of all peoples than a
reason for adopting a globalised protectionist scheme that advantaged
only some. In any case these kinds of narrow economically self-
interested calculations would not be open to parties in the original
international position, because the information necessary to make the
calculations would be denied to them.

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58 For a discussion of the possible benefits of intellectual property protection for developing
countries, see C.A.P. Braga, ‘The Economics of Intellectual Property Rights and the GATT: A View from
Under the constraints of the constructivist view of justice, parties in the original position would have to think more broadly and less partially about the role of property and states. Any property arrangements would have to be consistent with type principles of justice already included in the law of peoples. And so property rules would have to be developed in a way that upheld the autonomy of peoples. Taking the autonomy of peoples seriously would almost certainly rule out of contention a global protectionist scheme for intellectual property. The reasons in part lie in the lessons of history. The existence of hegemonic powers in world history is a fact. Hegemonic powers must have control over raw materials, the sources of capital, markets and competitive advantages in the production of highly valued goods.\textsuperscript{59} Once a global protectionist system of intellectual property rights was in place, those few countries which had a build-up of human capital might be tempted to use the system of global property in order to gain some kind of permanent ascendancy or hegemony over other states. Human capital, like physical resources, has always been unevenly distributed amongst states. A state with a high build-up of human capital has, all other things being equal, a greater capacity to produce the kind of scientific and technological knowledge that is important to economic growth than a state which has a low level of human capital. Whether or not a state captures the economic benefits of the knowledge it generates depends on a vast array of factors. These include the state’s organisational capacity, its processes of commercialisation, the prevailing business culture, its legal infrastructure and the presence of other capable competitors. While knowledge remains a public good, a state with high levels of human capital investment may in effect be producing an international public good for states with lower levels of human capital investment.\textsuperscript{60} A global protectionist scheme that allows for the ownership of economically important abstract objects (and therefore economically important knowledge) presents any potential hegemon with a temptation of biblical proportions. The previous chapter argued that abstract objects are a foundational form of capital. It was argued that these objects are capital in themselves as well as being a gateway to other important kinds of capital resources. The temptation for any potential hegemon is to use a

\textsuperscript{59} R.O. Keohane, \textit{After Hegemony} (Princeton, 1984), 32–33.

\textsuperscript{60} In the 1960s the US and the UK had high expenditures on R&D without corresponding high economic growth. Japan experienced high economic growth for a correspondingly small outlay on R&D. See B.R. Williams, \textit{Technology, Investment and Growth} (London, 1967), chapter 1.
global protectionist system of intellectual property to institutionalise its control over vital capital resources. For hegemonic power based on abstract objects to be stable, many of those objects have to shift from being non-rivalrous, nonexcludable objects to non-rivalrous, excludable objects.

There are two further aspects to a hegemonic power based on abstract objects that would shape the application of the law of peoples to international property arrangements. Briefly, they are these. Hegemonic power over abstract objects would not be power just over economically important objects but, potentially at least, over local cultural objects. The chapter on Hegel is suggestive of this: we argued in Chapter 4 that personality, through a global system of intellectual property, has the potential to reach into other social worlds and communities. This may well have negative outcomes. Local or territorially based cultural objects may be appropriated for use in global markets. Those with a comparative advantage in the generation, appropriation and delivery of abstract objects become colonisers of a different kind. Sacred objects become commercial objects.\(^{61}\) Equally the meaning of these local objects for their communities may fade as communities find themselves swamped by a global trade in such objects, a trade that sates global market demands rather than meeting local community needs.

There is one last point to make. A global protectionist scheme of intellectual property might not only create opportunities for a hegemonic state. In Chapter 6, making use of Madison’s argument about the property origins of factions, it was argued that intellectual property rights had a dangerous inner logic. The ownership of intellectual property rights allowed owners to shape the opportunity sets of others. This, we suggested, was a major incentive for the formation of intellectual property factions. If we are right about this, a global protectionist scheme for intellectual property would help to promote the formation of global factions. One danger of this is global rent seeking. The price of a global protectionist scheme for intellectual property would be that it would give opportunistic actors the chance to engage in directly unproductive, profit-seeking

\(^{61}\) For examples of the way in which Australian Aboriginal art has been appropriated, see _Yumbulul v. Reserve Bank of Australia_ (1991) 21 IPR 481; _Milpurruru v. Indofern Pty. Ltd._ (1995) 30 IPR 209.
activities. Multinational elites might be tempted to increase their profits through the simple stratagem of persuading a supranational body to ratchet up levels of protection for abstract objects already in existence. It is hard to see how the wealth transfers involved in such activities could be thought to be consistent with either Rawls’ domestic principles of justice or those of the law of peoples. At the domestic level, the increase in private power a highly protectionist intellectual property scheme would cause would not be consistent with either of the two principles of justice. The wealth transfers that such a scheme would involve would not be consistent with the second principle. At the international level a protectionist global arrangement is hardly likely to be agreed to by parties in the original position. Such an arrangement offers too many opportunities for any hegemon to entrench its hegemony. The loss of control by states over the property mechanism has too many adverse consequences for it to be seen as consistent with the independence of peoples.

Conclusion

This chapter represents something of a preliminary venture into the justice of information and then a somewhat restricted one, in that it sails exclusively under a Rawlsian flag. The case for regarding information as a primary good of a political as well as an economic kind is very strong. Under conditions of Rawlsian procedural rationality for justice, the role of any property scheme in relation to information should be to minimise proprietorial control over information. This is true at both the domestic and global levels. It is not consistent with the principles of justice at either of these levels to use a protectionist scheme of intellectual property to create conditions of artificial scarcity for the primary good of information. This is a modest but important consequence of our argument. Theories of global justice often seek to impose duties of redistribution of some kind on well-resourced states. Establishing such positive global duties within the context of Rawls’ theory is difficult. Our argument does not seek to establish such

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62 The essence of such activity is that an agent makes a profit without providing corresponding goods or services that form part of a utility function. See J.N. Bhagwati, ‘Directly Unproductive, Profit-seeking (DUP) Activities’, 90 Journal of Political Economy, 988, 989 (1982).

a positive duty when it comes to considering property arrangements for abstract objects. It does suggest that a protectionist intellectual property system achieves the opposite of what is sought to be achieved by positive distributive duties. It encourages a redistribution back to opportunistic actors.

Our argument has been a negative one. It concludes that protectionist arrangements for intellectual property should be excluded by contractarian principles of national and international justice. They are excluded because such arrangements constitute a deep interference in the distribution of information, a primary good which by its nature is not a scarce resource. Parties in the original position, our argument suggests, would never agree to an arrangement under which some high level of this primary good, a good that mattered to them both politically and economically, fell into the orbit of private power. This raises the question of what we ought to do when it comes to making arrangements for intellectual property protection. Nothing in our argument so far commits us to a blanket rejection of all intellectual property forms: A rough answer to our question is this. Under a contractarian, constructivist view of justice, property is not the basis for justice but an instrument of justice. By the time the original parties come to consider property rights, the principles of justice are already out in the open. This commits the original parties to thinking about property rights in an instrumental fashion. Thinking instrumentally about intellectual property is the subject of the next and last chapter.

A final comment before closing. One of the interesting consequences of looking at the justice of information is that it shows that the principle of some things being held in common may be defensible, not simply as a normatively desirable social goal, but because it may have some purchase in the system of production.64 Liberal theories of distributive justice have been, it has been suggested, ‘singularly equivocal’ in their treatment of economic causality.65 A possible explanation might be that these theories appear isolated from economic models of production because those economic models have been relatively unsophisticated in terms of understanding the dynamics of economic causality.

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64 For the pessimistic view that common ownership has no relevance to production, see J. Dunn, ‘Property, Justice and Common Good after Socialism’, in J.A. Hall and I.C. Jarvie (eds), *Transition to Modernity* (Cambridge, 1992), 281.
65 Id., 283.
growth. After all, it was only with the work of Machlup that the beginnings of some genuine understanding of the role of information in the American economy began to develop. Concepts like human capital will, in the long run, probably prove to be more sensitive to human actors as intentional agents. When it comes to a consideration of the role of knowledge, theories of distributive justice and theories of economic growth may find a common meeting place. What we have said about information at least hints at this possibility.