

***Value Theory, Economic Paradigms and Rawls - Exchange
versus Production in the Theory of Justice.***

by

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Abstract

Rawls relies heavily on the version of economic theory represented by Koopmans (1957) when constructing his theory of justice. In this paper it is argued that the Koopmans's economics is representative of that theoretical tradition in which *exchange* forms the basis of value. As such, it lacks a notion of *cooperation* that is sufficiently strong to support Rawls's conception of society as a "cooperative venture for mutual advantage". The individualistic basis of the exchange paradigm is contrasted with that of the *production* paradigm, in which labouring activity is seen as the source of value. The latter yields a notion of cooperation arising out of the importance of the *viability* of productive arrangements. It is argued that this stronger concept of cooperation is more suited to Rawls's expressed social vision than that consistent with the focus on allocative *feasibility* in the exchange paradigm. Hence, as Rawls's social vision is more compatible with that underlying the production paradigm, his reliance on the exchange paradigm is problematic. However, his argument is inextricably linked with the latter, a state of affairs that results in fundamental inconsistencies in his position.

Introduction*

Given the fundamental importance of the material ‘skeleton’ of society that is embodied in its economic activities, economic theory has a central role to play in any analysis of economic justice. In his major works, Rawls [1971 (henceforth *TJ*), 1993 (henceforth *PL*)] explicitly identifies the representation of neoclassical theory provided by Koopmans (1957) as a source that supplies the requisite economics underlying his argument for his principles of justice (*TJ* p66n).¹ I have argued elsewhere (Bradford 2000a) that Rawls’s reliance on neoclassical economic theory lies behind his declaration that the issue of the specification of property rights over the means of production is irrelevant to the derivation of the principles of justice (*TJ* p258, *PL* p298). Furthermore, inconsistencies between the implications of this form of economic theory and the requirements of Rawls’s argument render his position on property rights untenable.

The essence of my argument is that, throughout his theory of justice, Rawls relies on an unsustainable distinction between the ‘economic’ and the ‘political’. This distinction stems from his failure to appreciate the political aspects of the concept of ‘property’ and the concomitant definition of ‘ownership’. Ultimately, Rawls’s difficulties lie in his dependence on theoretical paradigms in economics in which *exchange* rather than *production* is taken to be the sphere appropriate to the theory of value. In line with these theoretical approaches, Rawls ignores the role of the social relations of production, and the relationship they in turn bear to the specification of ‘ownership’ as it pertains to the means of production. By thus depoliticising the question of ‘property’, Rawls is able to maintain a distinction between narrowly ‘economic’ concerns (distribution) and those that are ‘political’ (discourse related to rights other than those of non-personal property). Furthermore, the question of the ownership of the means of production can be separated from that of the derivation of the principles of justice.

The issue can be reconfigured as a response to the implicit question: how would the conclusions of those in the original position be different if they were to consider a theoretical system other than that of Koopmans (1957) as representative of the principles of economic theory, this system being part of their information set in the deliberative stage of the original position (*TJ* pp. 137-38)? The theoretical ‘template’ employed to structure conjectures concerning the functioning of the productive system is of central importance for a theory of economic justice, not only for its role in determining the impact of postulated actions on the productivity of the system and the distribution of its product, but also for the relationship between its underlying *theory of value* and its associated *social vision*.

Social Visions and Value Theory

Theoretical systems in economics are far more than explanatory frameworks for economic outcomes. Founded as they are on fundamental premises about the source of value, they are also rich in implications and assumptions concerning the basis for social

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¹ In fact, the explicit reference occurs only in *TJ*. However, on those occasions when economic issues arise in *PL*, the reader is referred, for detail, to those sections in *TJ* for which the acknowledgment of debt to Koopmans is relevant. Hence, there is no evidence that the theoretical economic basis to Rawls’s arguments changes between the two works.

interaction. It is these that the *social vision* associated with a particular theoretical system represents.² Hence, the social vision will comprise, in part, an account of the motives of individuals with respect to both isolated individual actions and actions in combination with others. It will include fundamental propositions concerning the relation in which individuals stand to one another, and the degree to which individual situations are interrelated, that serve as a basis for understanding individual motivations. In short, as Bortis (1993 p358) has it, it is a vision “of how society broadly works and what it is”; an answer to the question “what kind of society is being described?” by a particular theoretical framework.

The answer to this question yields important constraints on the normative and positive theoretical conclusions consistent with it. Thus it is vital for a theory of justice that the social vision upon which it is based is congruent with the social vision implicit in the economic theory used to decide economic questions.³ In the case of Rawls’s approach, the requirement is for congruence between the social vision held to motivate those in the original position, and that implied by the chosen theoretical account of the functioning of the economic system.

Rawls’s theory of justice is definitely based on a particular vision of the fundamental nature of society. He begins *TJ* by stating a conception of society, a social vision, to which he adheres and accords great importance throughout his body of work:

a society is a cooperative venture for mutual advantage...typically marked by a conflict as well as by an identity of interests (*TJ* p4).

The purpose of the principles of justice is to provide the foundation upon which the basic structure can be formulated so as to distribute the benefits and burdens of this system of cooperation in an acceptable way:

Since the primary subject of justice is the basic structure of society, these fair terms are expressed by principles that specify basic rights and duties within its main institutions and regulate the arrangements of background justice over time, so that the benefits produced by everyone’s efforts are fairly distributed and shared from one generation to the next (*PL* p16).

As human survival must be the paramount goal of the basic structure, and this goal cannot be separated from material needs, it follows that the productive system, the manner in which human beings interact to satisfy their material needs and desires, is integral to society understood as a “cooperative venture for mutual advantage”.⁴

² Pasinetti (1986) refers to a ‘social philosophy’ rather than a ‘social vision’. The latter is used in the current work in line with Bortis’s (1993) reference to Schumpeter’s use of the word ‘vision’ to represent the “preanalytic cognitive [acts]” that underpin theory formulation (p358).

³ It is no less important for economic theory taken in isolation. Nell (1998) argues at length (and in depth) that neoclassical theory is representative of capitalist economies only as they were up until WWI, before the growth of corporations. Dobb (1945) is highly critical of the idea that capitalist and (planned) socialist economies must be subject to the same economic ‘laws’ despite their fundamentally different natures.

⁴ Georgescu-Roegen (1986) notes that the common characteristic of “life-bearing structures” is the struggle for survival. Human beings, in common with some other animals, employ “exosomatic organs” (tools) but alone engage in the *production* of tools. Georgescu-Roegen includes institutions such as money, the market, and enterprises of different kinds in a wide definition of these exosomatic organs and thus conceives of human existence as a “complex bioeconomic web” in which the crucial factor is production.

From this conclusion follows another, that the fundamental bases of *theories* of the productive system, theories of *value*, are of prime importance to analyses of justice.

The term ‘theory of value’ can be understood in a number of overlapping senses. Whitaker (1904), following von Wieser, distinguishes between a ‘philosophical’ and an ‘empirical’ account of such theories. The former concerns the ultimate nature, essence or origin of value, while the latter pertains to the relation between value and observed exchange values. Whitaker also notes the distinction between the theory of value regulation and that of value measurement. In this case the former corresponds to the theory of relative price determination (Dooley 1990) and the latter to a standard in terms of which the values of individual commodities can be stated and compared.⁵ Differing accounts with regard to the origin of value can be characterised as either ‘objective’ or ‘subjective’ (Dobb 1945, Pasinetti 1986). Finally, there is the distinction between a theory of value used for positive (analytical, descriptive) and for normative (evaluative, prescriptive) purposes (Sen 1978).

Theoretical systems based on a particular theory of value will reflect this range of distinctions throughout their structure. However, with regard to the link between the theory of value and the social vision underlying any particular system, the most important considerations in the context of justice are those associated with the ‘philosophical’ and ‘normative’ aspects. An account of the origin of value reflects a social vision. ‘Value’ is the product of human interaction; the assumptions made about the domain of the latter must shape the explanation of the source of the former. In terms of economic theory, the ‘philosophical’ aspect of a theory of value determines the proper interpretation of prices for normative purposes. The answer to the question of how prices *ought* to be interpreted, in light of the standard of value, is inextricably linked to the meaning of ‘efficiency’. Indeed, claims about the efficiency properties of the ‘solution’ to a theoretical system are only intelligible if it is known what prices are meant to represent within that system. Since theories of justice, such as Rawls’s, rely on efficiency results in their treatment of economic matters, it follows that the bases of these results, theories of value, are critically important to such investigations.⁶

Rival Paradigms: Exchange and Production

Two major approaches to this question are evident in the history of economic thought. One places the source of value in *utility*, the other in the expenditure of human energy or simply *labour* as a reflection of the difficulty of reproduction of commodities. Frequently the distinction is presented in terms of the aspect of social interaction given analytical priority in the theoretical traditions based on the rival accounts. Thus, the contention that the source of value is utility gives rise to theories

⁵ There is scope for considerable controversy on this point concerning the question of whether or not the rate of profits is a ‘price’ or not. This is the case in the Walrasian approach in which ‘capital’ is considered a factor of production on a par with land and labour (Harcourt 1972), but not in non-neoclassical approaches to capital theory (Harcourt 1979). For example, Pasinetti (1974) concludes that the long-run rate of profits is determined independently even of ‘capital’ itself; a result clearly inconsistent with the interpretation of the rate of profits as a ‘price’ of scarce ‘capital’ (p144).

⁶ This does not mean that the ‘positive’ or ‘empirical’ aspect of value theory is inconsequential; the question of what forces actually determine observed prices is obviously important in terms of assessing institutional forms in practice and implementing the requirements of justice. However, as the arguments for theories of justice typically incorporate the efficiency properties of *idealised* outcomes of economic theories, it is the normative implications of the associated theories of value that are more fundamental.

based on *exchange*, whereas the alternative focus on labour yields theoretical approaches in which *production* is given pride of place. At this level, the distinction relates to that subset of social activity through which the source of value manifests itself.⁷ Exchange is the social activity through which mutually desired transfers of goods occur, whereas production is the social activity in which labour is expended in order to create goods. This focus on social activities related to the source of value is most compatible with the idea of a social vision. Accordingly, these activity-related labels will be used in what follows with the corresponding source of value highlighted where necessary.⁸

As utility is the source of value in the exchange paradigm, it is not surprising that, as Robbins (1935) notably declares, choice in the face of scarcity is a central theme of its theoretical elaborations. The problem of economics is conceived exclusively as an *allocation* problem. Hence, exogenously given technological production possibilities, individual preferences and initial endowments are the fundamental parameters (Hahn 1982). The activity of production is construed as a series of exchanges between the owners of parametrically given input endowments for the purposes of transforming them into outputs (Pasinetti 1977 pp. 25-6). *Feasibility* is a critical concept in the exchange paradigm; the starting point of such analyses being the production possibilities set, implied by the set of resource constraints and technologically permitted factor combinations, and the relation to it of individual preferences (Walsh and Gram 1980 p404).

As the result of an allocation procedure, equilibrium prices are to be interpreted as indices of relative scarcity (Cohen 1993, Pasinetti 1986); Walsh and Gram (1980 p406) note that prices in this tradition are ‘duals’ to the concepts of opportunity cost and the relative scarcity of factors as represented by the ‘intensity’ with which the constraints of particular factor supplies bear upon total output.⁹ Thus the impossibility of satisfying individual demands given the finite nature of productive resources gives rise to a set of prices which act as a coordinating mechanism to balance the desired against the possible. Variations in relative prices represent realignments in the desire/possibility tradeoff and so indicate the efficient directions for reallocation of resources. As factor prices represent incomes to factor owners, and all factors (including ‘capital’) are treated on an equal footing, the distribution of income is no more than an epiphenomenon of the solution to the allocation problem.

By contrast, the production paradigm focuses on the question of the *reproduction* of existing productive structures in which the social relations of production reflect the social division between the owners of the means of production and those who must sell labour power to them. The analytical focal point of production-related theories is the economy characterised by *specialisation*; individuals may be involved in producing only a fraction of a particular commodity, but nevertheless for subsistence they require access to the consumption of a wide variety of goods (Pasinetti 1986).

In such an economy the concept of *viability* is central. The organisation of production must be such that sufficient gross output is produced to ensure that both

⁷ Dobb (1945 p19) observes that any theory of value “necessarily constitutes an implicit definition of the general shape and character of the terrain it has decided to call ‘economic’”.

⁸ This usage conforms to that of other discussions of this duality. For example, see the papers collected in Baranzini and Scazzieri (1986).

⁹ Hicks (1960 p707) contends that the “special property” of a competitive price system is that it brings these implicit differential intensities to the fore.

the existing workforce and stock of equipment can at least be maintained and reproduced. Where a surplus is generated, the question of allocation arises. The rate of growth of the system will depend upon the distribution of the surplus between consumption and investment, which in turn arises out of the behaviour of the various income classes.

Thus the sociological aspects of production and distribution in a growing economy are to the fore in the production paradigm; as Dobb (1945 p20) notes, value is a *social* relationship according to this approach rather than the subjective *individual* phenomenon of the exchange paradigm. Furthermore, the distribution of net income among ‘factors’ of production is not the outcome of exchange but a reflection of the sociological relations between income classes as reflected in the structure of production (Nell 1967).

As the production paradigm is rooted in the pre-Classical idea of the distinction between ‘value’ and ‘riches’, understood as parallel to the distinction between what is given by nature and that which must be obtained through the application of human energy (Dobb 1945 p20), prices in this tradition represent indices of the difficulty (“toil and trouble”) of producing particular goods, where the ‘difficulty’ is explicitly interpreted in terms of the *labour* which must be devoted both directly and indirectly, the latter being embodied in previously produced means of production, to the production of extra output (Pasinetti 1986 p423).¹⁰ Fundamental to this approach are representations of techniques of production as time patterns of labour, which are related to time patterns of output.

Koopmans’s (1957) framework, the basic economic reference for Rawls, is clearly in the ‘exchange’ tradition.¹¹ Competitive equilibrium is defined as

a balancing bundle of choices...and a system of prices, one for each commodity, such that if all ‘values’ are computed at those prices,

- (a) the choice of each consumer is preferred or equivalent to all other choices in his consumption set that are of equal or lesser value,
- (b) the choice of each producer yields the maximum value attainable in his production set,
- (c) the value of commodities released by each resource holder is the maximum value attainable to him under Postulate 4,

where Postulate 4 is that

¹⁰ Understood here as difficulty of reproduction rather than the disutility of effort.

¹¹ Cohen (1993) argues that general equilibrium theory abandons the *analytical* scarcity theory of value in favour of an *empirical* version founded on assertions that the conditions which vitiate the analytical theory are sufficiently rare in practice for the overall thrust of the argument to be maintained. The references he cites to support his view are from Arrow and Hahn (1971) and Bliss (1975), both works published considerably later than Koopmans (1957). Indeed, Koopmans acknowledges the contemporaneous general equilibrium research program of Arrow and Debreu as more advanced *extensions* of his own framework (pp. 58-59). Pasinetti (1986) presents an account that is conflict with Cohen’s. He argues that the intertemporal equilibrium models represent a reinterpretation of the symbols of the older models which nevertheless preserves the meaning of prices in terms of scarcity (p421). In any case, even if the inability of modern equilibrium theorists to assign unambiguous signs to the effects on prices of parameter changes represents an abandonment of the scarcity theory of value, it is nonetheless true that Koopmans’s stated interpretations of prices are consistent with it. This is the source of the importance of the exchange-production duality for Rawls’s project.

each resource holder controls a nonnegative quantity of each commodity which is not a type of labor, and chooses to release of each such commodity a nonnegative amount at most equal to what he holds (pp. 44, 46).¹²

He asserts also that

the price system carries to each producer, resource holder, or consumer a summary of information about the production possibilities, resource availabilities and preferences of all other decision makers (p53).

The exchange paradigm is evident in Koopmans's conception of competitive equilibrium, and the language thereof is reminiscent of Rawls's reference above to the conflict (hence variegation) of interests inherent in the idea of society as a cooperative venture, and the 'competing claims' interpretation of the subjective circumstances of justice.¹³ Furthermore, Rawls makes explicit reference to individual evaluations of outcomes when he argues that the

idea of social cooperation requires an idea of each participant's rational advantage, or good. This idea of good specifies what those who are engaged in cooperation, whether individuals, families, or associations, or even the governments of peoples, are trying to achieve, when the scheme is viewed from their own viewpoint (*PL* p16).

Cooperation and the Source of Value

There is tension, however, between conflict and cooperation in Rawls's social vision, and it is reflective of inconsistencies between the social vision implicit in the

¹² The concept of a "resource holder" who "controls" quantities of commodities represents yet another aspect of the *ersatz* "pre-institutionalism" of Koopmans's approach. What meaning can be attached to 'control' in the absence of a specification of property rights? Where the 'commodities' concerned include produced means of production the capitalist/socialist question is suggested immediately, and the question of social relations between owners and non-owners becomes germane. The confusion is common among those working in the general equilibrium tradition. Bliss (1986 pp. 372, 375) asserts glibly that "given endowments" represent no more than a "degenerate" case of a "full" production set. This is consistent with his earlier definition of 'capitalistic' production, derived from the noun 'capital' rather than 'capitalism', as processes employing produced means of production without regard to wider social arrangements (1975 p5 n2). Both are insufficient as they, incredibly, rely on a concept of 'endowment' which somehow does not involve the rights typically associated with 'ownership'. Why in this situation do individuals agree to *trade* rather than simply engaging in the Hobbesian "war of all against all" in order to satisfy their desires through the accumulation of booty in the form of the 'endowments' of others? Behind the model there must be the "exogenous enforcement" of Bowles and Gintis (1993a, 1993b) in the form of a State which protects the 'rights' of individuals to be free of such treatment. This pre-supposes a structure of property rights; the model is *not* pre-institutional at all.

¹³ Thus:

one can say, in brief, that the circumstances of justice obtain whenever mutually disinterested persons put forward conflicting claims to the division of social advantages under conditions of moderate scarcity (*TJ* p128).

In *PL*, the subjective circumstances are reinterpreted as the existence of the pluralism of fundamental moral views that Rawls holds to be typical of modern democracies. A moment's reflection, however, suffices to show that from such pluralism must follow "conflicting claims to the division of social advantages".

exchange paradigm and social visions in which cooperation is fundamental. Rawls defines 'cooperation' as

distinct from merely socially coordinated activity, for example, from activity coordinated by orders issued by some central authority. Cooperation is guided by publicly recognized rules and procedures that those cooperating accept and regard as properly regulating their conduct (*ibid.*).

Compare this to the following observation on the exchange paradigm by Hennings (1986 p223):

There is...more to the process of price determination than a process in which demand and supply are equated. It is also seen as a process in which individual economic behaviour is coordinated in such a way as is required for mutual compatibility. In this interpretation, market equilibrium is not, as is often argued, a state of harmony. On the contrary, market equilibrium is the result of an equilibration of opposing forces. The basic assumption is that there are conflicting interests; that they are of the same nature as the conflict between traders on a market who have contrary interests, but depend on each other; who are prepared to give and take, but adhere to shared rules; and who therefore aim to find a solution to, rather than a compromise between, their divergent interests such that all involved are satisfied with the eventual outcome, and are prepared to accept it as final.

The similarity between the two passages is striking, reflecting Rawls's sympathy with aspects of the social vision of the exchange paradigm. The difficulties posed for his project are no less significant, however.

First, his rejection of cooperation as "mere" coordination sits uneasily with the *raison d'être* of the price system in the exchange paradigm which is to provide a coordinating mechanism.¹⁴ The reference by Hennings to "shared rules" is of no real help here, despite the resonance with Rawls's own words, as in this context these must be based on a system of property rights. Such a definition violates the requirement, *fundamental* for Rawls, that the theoretical scheme underlying the 'economic' aspect of justice as fairness be pre-institutional in character.¹⁵

¹⁴ It is notable that Rawls employs the tactic of 'hiding' possibly troubling features of capitalism and its theories by employing an overtly authoritarian example, in this case forced central 'coordination'. By so doing he attempts to bypass the fact that private market activity as described under the exchange paradigm is very much an example of "merely socially coordinated activity" which thus falls outside his own definition of 'cooperation'. In *TJ* his praise for the market as an institution is based, at least implicitly, on its efficacy as a coordinating mechanism (pp. 270-272). Further, when discussing the nature of justice in a world without scarcity, Rawls states that

even here the theory of justice has an important theoretical role: it defines the conditions under which the spontaneous coherence of the aims and wants of individuals is neither coerced nor contrived but expresses a proper harmony consistent with the ideal good (*TJ* p281).

From this it appears that Rawls's identification with the exchange paradigm is so strong that he even begins to interpret the theory of justice as if it were a competitive equilibrium price vector!

¹⁵ In other words, a claim by Rawls that the exchange paradigm and justice as fairness are compatible in terms of their social vision would tie the conception of justice to a particular institutional framework. This would be inconsistent with Rawls's reliance on *historical dominance*, the claim that the specification of property rights over the means of production is unrelated to the question of justice, and

Furthermore he is at pains to stress that the “rational good” involved in cooperation is not simply mutual advantage, as in the exchange paradigm, but the wider notion of ‘reciprocity’, which involves evaluation of benefits with respect to a publicly affirmed benchmark of ‘equality’ (*PL* p17).¹⁶

These problems stem from the picture of society conjured up by the exchange paradigm and the analytical consequences thereof. As has been noted by a number of authors (Sen 1977, 1981a, 1981b; Rizvi 1991; Bryant 1998), general equilibrium outcomes need not guarantee that all individuals will reach a subsistence level of income when the economy in question is characterised by specialisation stemming from an extensive division of labour. As there is no reason to expect *a priori* that in equilibrium any given bundle of commodities will have a non-zero value (or one sufficient for subsistence), no guarantee can be given that there will be no individuals who, in that situation, are unable to trade and thus survive. The analytical consequences of this possibility are serious. Where there are individuals who are unable to trade, discontinuities may appear in the excess demand functions. Such discontinuities threaten the proofs of the *existence* of a competitive equilibrium price vector, and thus the usefulness and coherence of the theoretical systems derived from the exchange paradigm.

Koopmans (1957) explicitly acknowledges this ‘survival’ problem, and suggests, amongst other alternatives, a stationary-state interpretation of the Arrow-Debreu model in which the economy is assumed to comprise “self-sufficient farmers who do a little trading on the side” (p62).¹⁷ This is not only an answer to the analytical problems posed by specialisation to the exchange paradigm. It also represents a *social vision* in which economic agents are situated with respect to others such that they have no *need* to interact with one another, but will do so if they can perceive some advantage in it. It is an essentially Hobbesian vision of individuals who would rather not interact with their peers, but may be dragged kicking and screaming by Reason to do so if mutual benefit can be perceived through the exchange of goods. In such an eventuality, a mechanism for coordinating their interactions is required. Enter the exchange paradigm and the price vector which ‘supports’ a competitive equilibrium.¹⁸

The insightful analysis of Bryant (1998) reveals that this social vision is still evident in more sophisticated attempts to deal with the analytical implications of the ‘survival’ problem within the exchange paradigm. Bryant examines the various assumptions used in the literature to supply both sufficient conditions and necessary conditions for the existence of competitive equilibrium.¹⁹ He finds that a constant element in the various devices is the assumption of completely arbitrary relationships

should be determined by the history and traditions of the society in question. For more extensive consideration of historical dominance, see Bradford (2000a).

¹⁶ An example being the difference principle itself whereby ‘equality’ would encompass those inequalities that are necessary to improve the welfare of the least well-off.

¹⁷ However, true to the reluctance of the ‘positive’ theorist to become misty-eyed over emotive issues such as starvation, Koopmans then relates a conversation with Debreu in which the latter pointed out that the life plan formed by Arrow-Debreu consumers in response to the price system includes a specification of longevity based on resource holdings and the ability to work. Thus, survival need only be guaranteed into the first period. Subsequently, in Koopmans’s words, “the amount and initial distribution of resources and skills in the population [will] determine the pace and extent, if any, of starvation” (1957 p63). Implications of the exchange paradigm such as this are obviously inconsistent with justice as fairness.

¹⁸ Hicks (1960 p707) holds that “something like a price system is inherent in any problem of maximisation against constraints”, in other words, whenever fundamental economic questions are construed in terms of the exchange paradigm.

¹⁹ For detailed bibliographical references for the various assumptions, see Bryant (1998).

between the theoretically distinct objects that represent the fundamental parameters of the exchange paradigm.

The assumption of *interior endowments* holds that each individual is assumed initially to possess sufficient amounts of each good to ensure survival even after disposing of some positive amount of all goods. Alternatively, a commodity can be defined as *desirable* if adding it to any consumption bundle raises utility, and labour defined as *productive* if it can be used to produce a desirable good. The ‘survival’ problem can then be avoided by assuming that each individual is endowed with productive labour. A pair of individuals is regarded as *resource-related* if for any increase in the quantity of goods originally held by the first, there exists a reallocation of the economy in which the second is strictly better off and no other worse off.²⁰ The ‘survival problem’ is thus avoided by assuming that resource-relatedness holds for every pair of agents; in other words, everyone has something that someone else wants. The related notion of *irreducibility* pertains to subgroups of the economy and holds that an economy is irreducible when there exists no partitioning such that one of the resulting subgroups is unable to supply any good desired by the complementary group. Hence the economy cannot ‘fragment’ into non-interacting groups. At the level of the individual this implies that each person is capable of supplying some good desired by all others in the economy at positive prices of sufficient magnitude to ensure survivability.

Quite apart from the theoretical shortcomings of these devices identified by Bryant, it is obvious that they reflect, to differing degrees, a social vision in which individuals are drawn to each other by the desire for goods rather than bound to each other by need or any other ties. The assumption of interior endowments resembles Koopmans’s ‘farmers’ device in that the necessity of interaction is explicitly obviated. The other devices are more subtle, ensuring that the motivation to trade will always be sufficiently strong to preclude ‘survival’ problems. Nevertheless, the underlying conception of individuals is atomistic; parametrically endowed individuals seeking an efficacious method of coordinating their holdings for mutual (utility) gain, rather than specialised agents organically integrated in a “complex bioeconomic web” (Georgescu-Roegen 1986) dependent upon the structural integrity of the whole for their survival.

The property-owning democracy of Meade (1964), cited by Rawls, presents another version of the orthodox picture, in which widespread ownership of property delivers a degree of individual autarky sufficient to make interaction with one’s fellow citizens a matter purely of *choice* (for perceived gain), rather than of *necessity* for survival.²¹ In Meade’s case there is an extra twist. He assumes that the property-owning democracy is a society characterised by extensive automation; so extensive, in fact, that the proportion of any individual’s income that is earned through labour supply is very small (p 41).²² The extremely high labour productivity implied by this assumption underpins the freedom of individuals *in sensu diviso* to choose to work or not by ensuring that (almost) the same degree of freedom is available *in sensu composito*. In a society where the need for work has been drastically reduced, the ‘survival’ problem will be of little relevance even if the ownership of property is not dispersed to the extent assumed by Meade.²³ The social vision inherent in Meade’s

²⁰ This relationship can be *indirect* if the individuals are linked by a sequence of reallocations.

²¹ In fact, Rawls prefaces his discussion of the institutions of a just basic structure by assuming explicitly that the hypothetical economy in question is a property-owning democracy (TJ p274).

²² Reprinted in Meade (1993). Page references relate to this source.

²³ The PropDem is the industrialised analogue of the hunter-gatherer economy. Sahlin (1972) relates that hunter-gatherer societies were characterised not by excessive requirements of effort intensity in

PropDem thus mirrors that of Koopmans's autarkic farmer society: individuals atomistically situated, rather than organically integrated, able to refrain entirely from social interactions if their utility is not thereby enhanced.²⁴

Cooperation and Rawls's Social Vision

Whether such an environment yields behaviour that is sufficiently *cooperative* in a sense strong enough for Rawls's purpose is questionable. Such a society, in which no individual is bound to any other by *need*, in terms of survival, seems unlikely to generate the kind of fraternity regarded by Rawls to be part of the well-ordered society. The social vision of the exchange paradigm is not cooperative in the sense of a cooperative, bound together by the knowledge that the failure to 'hang together' will mean the 'hanging' of each separately; the citizens of such a society need not feel that they share with their fellows a role in a greater ongoing enterprise related to their survival *in toto*. The fact that their social interactions are volitional means that institutions can be construed merely as background constraints ensuring the compatibility and coordination of their behaviour.

Furthermore, it is not clear what principle would serve to indicate the extent of 'reciprocity' in such a society. For Rawls, 'reciprocity', an element of the idea of fair terms of cooperation, is distinct from mere mutual advantage (*PL* p17). Yet in a world where all interactions are strictly volitional and gain-centred, what principle, beyond the voluntariness of exchanges, could be employed to determine whether the benefits of interaction are fairly distributed? Surely the *need* for a benchmark stems from the *need* for interaction?

The tension between the two senses of 'cooperative' behaviour (coordination for mutual advantage versus integration necessary for survival), on the one hand, and 'need', on the other, is evident when Rawls discusses cooperation in the context of social unions (*PL* pp. 321-3). There he uses the analogy of an orchestra made up of specialised musicians who must coordinate their activities in a specific manner if they are to achieve the mutually desired goal of playing a piece of music well. The complementarity of human talents means that individuals 'need' each other in order to realise their individual gifts. This conception of cooperation is clearly consistent with that inherent in the exchange paradigm.²⁵

Yet, Rawls also acknowledges that individuals depend on others not only for the fruition of their talents but also for "the material means of well-being" (*PL* p322). This obviously involves a very different notion of the necessity for interaction. The violinist in Koopmans's 'autarkic farmer' world, or in Meade's PropDem, 'needs' cellists in order to do justice to a Vivaldi concerto, but not in the same way that a

order to eke out a miserable subsistence, but by the very low level of labouring activity required to satisfy physical needs. It is increasing economic sophistication that is associated historically with greater demands on individuals in terms of labour supply, and the concomitant dwindling of leisure time. The PropDem, through the automation assumption, is thus reminiscent of a much earlier phase of human social history.

²⁴ Meade's treatment of 'property' shares sins of omission with that of Rawls. Both shy away from the *political* aspects of the theory of property that arise from the nature of 'property' as a human construct that establishes social relations between individuals (Macpherson 1973 p121). Meade (1964) acknowledges the problem of uncodified power but fails to adequately examine the ways in which alternative definitions of property rights address the problem. Instead he relies on a wider distribution of capitalist 'property' to dilute its undesirable consequences. For a more detailed treatment, see Bradford (2000b).

²⁵ Rawls goes further, holding that the conception of society as a social union of social unions reflects the need for, and benefits from, the coordination of the complementary activities of social unions.

worker producing light globes in an industrialised economy ‘needs’ the rest of the productive system to function so that he or she can be assured of adequate access to the necessities of life.

The latter form of need is accorded little importance in the exchange paradigm; the social vision underlying such theories provides little or no scope for it to operate, or for the social relations engendered by it, and their manifestation in institutional forms, to be other than nugatory. The omission is most glaring in the case of what is, in material terms, the most important set of institutions: those relating to *production*.²⁶ Hennings (1986 p239) observes that

looking at production from the point of view of the exchange paradigm implies, first and foremost, that most of the ‘sociological’ aspects of production as a social institution are set aside. What counts are economic factors. Institutional aspects can be dealt with in principle, but in fact rarely are. The exchange paradigm provides professional blinkers rather than eye-patches. Nevertheless, to analyse both production and distribution as ‘species of exchange’ tends to relegate to the background those aspects of the institutional organization of production and distribution which relate to hierarchies, to access barriers, and other forms of social coercion and social restrictions.

The social vision of the exchange paradigm renders the social relations of production uninteresting, as the basic mode of individual interaction is trade rather than production under conditions of specialisation.²⁷ Dobb (1945 p22) holds that the subjective utility basis of the exchange paradigm precludes the classification of ‘productive’ contributions to production in terms of the activity or process from which such contributions originate. Instead, commanding a price equates to making a ‘productive’ contribution, thus putting labour on a par with the ownership of capital, the provision of finance, and even the possession of intangibles such as ‘goodwill’.²⁸

²⁶ Bortis (1990 p81, emphasis in original) provides a most telling statement of the importance of production as an institution. He notes that

the technical and social organization of *production* represents the basic economic (macro-) institution upon which other economic institutions related to distribution and spending are built. The economic institutions form, in turn, the material basis of society, which ‘supports’ political, legal and cultural institutions in the widest sense.

Rawls’s attitude toward property rights, the basic liberties and the basic structure reflects a failure to appreciate the importance of the above.

²⁷ The extent to which this is true is strikingly illustrated by Robbins (1935 p65) who relates a sense

almost of shame at the incredible banalities of much of the so-called theory of production – the tedious discussions of the various forms of peasant proprietorship, factory organisation, technical education, etc., which are apt to occur even in the best treatises on general theory...

²⁸ The semantic issues relating to whether the contributions of particular kinds of economic agents are ‘productive’ or not are contested, even within the production paradigm. Ellerman (1984 p868) distinguishes between the ‘responsibility’ that labour holds for the outcomes of productive activity, and its quality of being ‘productive’. He holds that all inputs are ‘productive’ in the sense of being “causally efficacious”. In this he is at odds with Cohen (1979), who distinguishes between ‘productive’ contributions, which include those of inanimate inputs and providers of financial services, and ‘producing’ contributions (labour), which serve as the *sine qua non* of the outputs. Cohen’s position accords with that of Dobb (1945) and Pasinetti (1981), the latter with regard to the fundamental

Further, it is not possible to differentiate one type of income from another; nor to classify types of income as ‘necessary’ or ‘unnecessary’ according to whether they contribute to the viability of an economic system or not. Fisher (1897) rejects the distinction between ‘productive’ and ‘unproductive’ goods and that between goods for supporting labour and those used for ‘unproductive’ consumption. He further dismisses as “sophistical” the question of whether the distinction between capital and other goods lies in the “nature of the goods” or the “intention of the mind of the capitalist” (pp. 199-200). As individual utility flows are fundamental for Fisher, the notion of social relations of production cannot be sensibly defined.²⁹ As such, there is no scope for locating any aspect of the ‘political’ within the realm of production.

The production paradigm does not shy away from institutional aspects grounding value, as it does, in the social process of production involving the contribution of labour. In the social vision of the production paradigm, individuals are specialised as a result of an extensive division of labour and, being necessarily non-autarkic, *must* engage with others in processes of *production* in order to survive. Hence interaction with others is a *necessity* if society is to remain viable. Individuals are faced with the generalised requirement that they contribute to the process of generating a gross output at least sufficient to renew and maintain the existing population and institutions, and a surplus sufficient to allow growth to proceed. This awareness of a role in keeping society ‘alive’ is conducive to the formation of the view of society as a cooperative venture. Deeper still lies the fact that all each person is ultimately capable of contributing is *labour*. Productive processes may be more productive when material aids or “exosomatic organs” (Georgescu-Roegen 1986) are employed, but the fundamental asymmetry between capital and labour cannot be avoided.

[A]n instant’s reflection will suffice to make anyone realise that the whole structure of capital goods would not exist all if labourers didn’t exist, while the contrary is not true. If we were to imagine, for a moment, that all capital goods were suddenly to vanish...a terrible crisis would of course ensue. But those people who could survive the crisis would start the whole process of capital accumulation all over...Labour alone can make all the capital goods. If we were to imagine the opposite catastrophe – the disappearance of all human beings – we can very well realise what would follow: absolutely nothing. Capital goods alone can make nothing (Pasinetti 1981 pp. 199-200).³⁰

asymmetry between capital and labour, which will be discussed subsequently.

²⁹ The social vision of the exchange paradigm reflects the political theory of ‘possessive individualism’ (Macpherson 1962 p3) whereby society is construed as

a lot of free equal individuals related to each other as proprietors of their own capacities and of what they have acquired by their exercise. Society consists of relations of exchange between proprietors. Political society becomes a calculated device for the protection of this property and for the maintenance of an orderly relation of exchange.

Since, as Lerner (1972 p259) has it, economic transactions are “solved political problems” it is not surprising that theorists in the exchange tradition accord little weight to the questions of conflicts of interest between labour and capital, and their effects at the micro and macro levels.

³⁰ Earlier, the point is made even more forcefully:

Labour, Land and Capital stand for three different categories of men (*sic*): men as workers, men as owners of land and men as owners of capital. For it is clearly Man, in his multifarious roles and activities that is the only mover and the only beneficiary of the process of production

Hence the assertion that embodied labour represents the proper foundation of value represents a social vision which “stresses the *necessarily cooperative* aspects of an organised society” (Pasinetti 1986 p424 emphasis in original). The sense in which this society is ‘cooperative’ is that each mortal human being recognises the necessity of yielding a major proportion of their total period of existence, their labour time, in social relations with their peers in order that a particular shared social construction (*their* society), which existed before their birth, will continue to exist in the present, and on after their death. The social nature of production, its necessity for our survival, and the fact that its foundation is labour, which is inseparable from our very selves, are the factors which fuse to form the strongly cooperative social vision associated with the production paradigm.

Thus the ‘cooperative’ aspect of Rawls’s social vision requires that the economic theory utilised in the original position reflects the production paradigm, rather than that of exchange. The former is certainly more consistent with Rawls’s account of intergenerational justice, which is couched in terms that can only be sensibly interpreted in terms of a surplus approach (*TJ* pp. 284-293).³¹ The ‘conflicting interests’ aspect is quite consistent with the production paradigm, in that there is no reason why market exchanges cannot be the basis for deciding how the consumable part of the surplus is allocated between individuals (Bortis 1993). Furthermore, Rawls’s notion of ‘reciprocity’ can be interpreted in the light of the fact that all must contribute labour in the production of value, and that a labour-based standard might be therefore employed in judging the distribution of the surplus.³²

(Pasinetti 1981 p23n29).

³¹ Hence:

once just institutions are firmly established, the net accumulation required falls to zero. At this point a society meets its duty of justice by maintaining just institutions and preserving their material base (*TJ* p287).

each [generation] passes on to the next a fair equivalent in real capital as defined by a just saving principle. (It should be kept in mind here that capital is not only factories and machines, and so on, but also the knowledge and culture, as well as the techniques and skills, that make possible just institutions and the fair value of liberty) (*TJ* p288).

This vision of just accumulation as maintenance of the viability of just institutions is at odds with the most developed versions of the exchange paradigm. Rawls’s reference to Ramsey (1928) is particularly unhelpful (*TJ* p286n21). Bliss (1975 p296) demonstrates that the “extended accumulation history” of a multi-good Ramsey model is as consistent with oscillatory outcomes, where capital or consumption per head “go [indefinitely] through a sequence of steps, like a ballroom dancer, [going] from a starting position through one turn and another back eventually to the same position – and then off again through the same routine” as it is with a process of steady accumulation and monotonically rising per-capita consumption. Such an outcome is strongly incompatible with Rawls’s image of just accumulation.

³² This approach may also be more consistent with Rawls’s reliance on the Aristotelian Principle as a basis for the ‘thin theory of the good’ and the rationality of the parties in the original position. The Principle holds that, *ceteris paribus*, humans enjoy the exercise of their innate and trained capacities, and that this enjoyment is proportional to the extent of the capacity utilised, and the degree of complexity required (*TJ* p414). Quadrio-Curzio and Scazzieri (1986) relate production to the ‘creative’ instinct in human beings which they hold to be more fundamental than the ‘acquisitive’ instinct underlying consumption (pp. 404-5). It is ‘creative’ behaviour that calls upon innate and acquired talents and thus relates to the Aristotelian Principle. For a detailed treatment of the role of the Aristotelian Principle in Rawls’s theory, see Bradford (2000c).

Finally, Rawls restricts his focus in his later work to modern, constitutional democracies (*PL* p11). These are societies characterised by an extensive division of labour, and the specialisation it entails, and so are more fruitfully analysed in the context of the production paradigm.

Conclusion

The obvious inconsistencies between key aspects of the social vision underlying justice as fairness, and that implicit in neoclassical economic theory, leaves Rawls in a difficult position. If his argument is to retain its form, then he must cling to the distinction between ‘political’ rights and ‘economic’ rights, and the lexicographic ranking of the former over the latter. However, in order to maintain this position he must ignore social relations of production entirely, treating production as merely as another aspect of exchange. From this he can derive his conclusion regarding the orthogonality of property rights over the means of production to the derivation of the principles of justice. Clearly, he can find the grounds for such an approach in the theories of the exchange paradigm.

However, Rawls’s social vision incorporates an aspect of material need that implies that social cooperation must be stronger than mere coordination. It is precisely this strong form of cooperation that is alien to the exchange paradigm, based as it is on a social vision in which individuals are atomistically situated, and on theory of value in which utility determines the value of commodities.

By contrast, the production paradigm is compatible with the strong notion of cooperation required by Rawls, as it stems from a social vision in which individuals are organically interlinked via *necessary* relations of production. Yet, as the source of value in this approach is labour (representing difficulty of commodity reproduction), the social aspects of these interlinkages cannot be ignored. Thus, if Rawls is to obtain the strong cooperation he requires, he must abandon the ‘political/economic’ distinction that plays so large a role in his overall argument. Avoidance of such a catastrophic outcome can only be bought at the expense of leaving the theory unable to deal with fundamental aspects of reality in modern economies, such as specialisation and the division of labour.

This dilemma illustrates graphically the pitfalls associated with uncritical reliance, in one discipline, on theoretical frameworks imported from another. Where there is debate concerning the fundamental bases of theory, a form of sensitivity analysis must be performed to ensure that the final argument does not demand too much of, or become excessively tied to, the imported framework.

More fundamentally, Rawls’s difficulties suggest that, in his schema, a crucial question facing those in the original position is: what is the source of value? From the answer to this follows a conception of society, the economy and the interrelations between the two, all of which bear on the choice of property rights regimes and the derivation of the principles of justice.

The one thing that is then clear is that the placement of the crucial ‘fork’ so far back along the ‘road’ of reasoning renders untenable Rawls’s contention that the *form* of the basic structure, in terms of the specification of property rights, is irrelevant to the question of justice.

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