

Veblen *Contra* Clark and Fisher: Veblen-Robinson-Harcourt lineages in capital controversies and beyond

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In the midst of Joan Robinson's critique of neoclassical capital theory, she remarked 'that Thorstein Veblen had made my point, much better than I did, in 1908'. Robinson was referring to Veblen's attacks on the capital theories of J. B. Clark and Irving Fisher. With little written on these earlier capital controversies, one purpose of this article is to fill in the historical record by providing a capital-specific examination of Veblen's attacks and Clark's and Fisher's responses. The second purpose is to explore the unique connections between the Veblen/Clark/Fisher and the Cambridge capital controversies by focussing on three authors: Veblen, Robinson and Harcourt. These controversies shared clashes of fundamentally different visions of economic life, as well as differences regarding the historical contextualisation of the meaning of capital and the role of social institutions. The adequacy of equilibrium analysis and ideology also play more complex roles compared to other capital controversies conducted within a largely shared vision.

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1. Purposes and issues

In the midst of Joan Robinson's critique of neoclassical capital theory, she remarked 'that Thorstein Veblen had made my point, much better than I did, in 1908' (Robinson, [1970] 1980, v. 5, p 116). Robinson was referring to Veblen's attacks on the capital theories of J. B. Clark and Irving Fisher. With little written on these capital controversies,¹ one purpose of this article is to fill in the historical record by providing a capital-specific examination of Veblen's attacks and Clark's and Fisher's responses.

These capital controversies were part of a recurring series—amongst Eugene von Böhm-Bawerk, J. B. Clark, Irving Fisher and Veblen at the turn of the twentieth

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¹ Exceptions are Dimand's (1998) examination of the Fisher/Veblen debate with a view to understanding why the American economics profession followed Fisher's path rather than Veblen's; Tilman's (1992, pp 18–37) presentation of the general theoretical issues in the Fisher/Veblen debate; and 10 pages in Dorfman ([1934] 1966, pp 280–89) on both the Clark and Fisher interchanges with Veblen.

century, then in the 1930s amongst Frank Knight, Friedrich von Hayek and Nicholas Kaldor, and finally in the Cambridge capital theory controversies of the mid-1950s through the mid-1970s. In writing the history of these many controversies—alone and with Geoff Harcourt—three common issues have emerged.² The first is the meaning and measurement of capital in the analysis of industrial capitalist societies. The second is the adequacy of equilibrium as a method for analysing processes of capital accumulation. The third common issue is the role of ideology and vision in fuelling controversy when the results of simple models are not robust. These three issues appear in the Veblen *contra* Clark and Fisher controversies.

There are unique connections between the Veblen/Clark/Fisher and Cambridge controversies that set them apart. Only these controversies involve clashes of fundamentally different visions of economic life, as well as differences regarding the historical contextualisation of the meaning of capital and the role of social institutions. The adequacy of equilibrium analysis and ideology also play more complex roles compared to other controversies, where differences were debated within a largely shared vision.

A second purpose of this article is to explore the unique connections between the Veblen/Clark/Fisher and the Cambridge capital controversies by focussing on three authors: Veblen, Robinson and Harcourt. Robinson, in the opening quote, established the link between her work and Veblen's. Harcourt's recent Veblen-Commons Award from the Association for Evolutionary Economics (Prasch, 2011) signifies his work's link to Veblen. Harcourt is linked to Robinson as her colleague and biographer.³ The ideas shared amongst these authors will help us understand the implications for both economic theory and political action.

2. Veblen's critiques of neoclassical economics and capital theory

Veblen uses Clark and Fisher as representative agents of 'modern economics'. His attacks are general, but with author-specific details in 'Professor Clark's Economics' (1908C)—a review of Clark's (1907) *Essentials of Economic Theory*—and in extended reviews (1908B, 1908D) of two of Fisher's books. Veblen (1908C, p 150, 161) discusses 'Mr. Clark's work, not as a body of doctrines peculiar to Mr. Clark or divergent from the main current', and claims 'Mr. Clark's doctrine of capital ... does not differ substantially from the doctrines . . . of . . . Mr. Fisher or Mr. Fetter'. Similarly, Veblen describes his famous article, 'The Limitations of Marginal Utility' (1909A), in a letter to E. R. A. Seligman as 'in great part suggested or at least provoked by Mr. Fisher's books . . . and by other writings of the same school published during the last two or three years' (Dorfman, 1973, pp 232–35).

The chronology of the Veblen *contra* Clark/Fisher controversies appears in Table 1, which organises publications into three categories: Veblen's general critique of neoclassical theory (including capital theory), his attack on Clark and his interchanges with Fisher. There is no surviving correspondence between authors in the Veblen, Clark or Fisher archives to supplement the published record.

² See Cohen (1984, 1989, 1993A, 1993B, 1998, 2003, 2006, 2008, 2010), Cohen and Drost (1996) and Cohen and Harcourt (2003, 2005).

³ Although not Robinson's student, Harcourt wrote an extensive paper on *The Accumulation of Capital*, which Robinson approved of, and in 1956 came to the third of three sessions of the research students' seminar to answer questions arising from the Harcourt paper. See also Harcourt and Kerr (2009).

Table 1. *Chronology of the Veblen contra Clark/Fisher capital controversies*

Year	Veblen on neoclassical (capital) theory generally	Veblen/Clark	Veblen/Fisher
1898	Veblen (1898)		
1899	Veblen (1899A, 1899B, 1900)	Clark (1899)	
1906			Fisher (1906)
1907		Clark (1907)	Fisher (1907)
1908	Veblen (1908A, 1908B)	Veblen (1908C)	Veblen (1908D)
1909	Veblen (1909A)		Veblen (1909B)
			Fisher (1909)
1930			Fisher (1930)

2.1 *Why economics is not an evolutionary science*

Veblen’s critique is rooted in how neoclassical economics falls short of his ideal conception of economics as an evolutionary science whose ‘prime postulate . . . is the notion of a cumulative causal sequence’ (Veblen, 1900, p 266). He seeks an account of an endogenous process in which the existing institutional structure at a moment in time conditions the decisions of individuals, but individuals’ actions can transform that structure, leading to a new set of conditions and a new set of decisions and actions. This is ‘a cumulative process of adaptation of means to ends that cumulatively change as the process goes on, both the agent and his environment being at any point the outcome of the last process’ (Veblen, 1898, p 391).

Because individuals are agents as well as ‘the outcome of the last process’, the individual is not the fundamental unit of analysis—‘an adequate theory of economic conduct . . . cannot be drawn in terms of the individual’ (Veblen, 1909A, p 629). Institutions play a central causal role. ‘Habitual modes of activity and relations have grown up and have by convention settled into a fabric of institutions. These institutions . . . have a prescriptive, habitual force of their own’ (Veblen, 1909B, p 300).⁴

For Veblen, an adequate economic theory must explain the mutually determining interaction over time between individual agency and institutional structure. That explanation must be historically specific because ‘habitual relations . . . being of an institutional character, vary as the institutional scheme varies’ (Veblen, 1909A, p 629). By implication, universal explanations applicable to all societies are not acceptable.

In contrast to his ideal, Veblen characterises neoclassical economics⁵ as concerned with universally applicable natural laws that emphasise the ‘static’ forces bringing an economy to an equilibrium consistent with ‘the ordained goal of supreme human welfare’ (Veblen, 1899A, p 128). As an example, Veblen (1908C, p 160 n1) cites Clark’s (1907, p 43) claims about marginal productivity: ‘We endeavor simply to ascertain

⁴ Veblen’s ‘habits of action and thought widely current in a social group are institutions. Institutions, while thus fundamentally no more than habits, come to have a prescriptive force and authority in limiting the activity of individuals, whose instinctive ends must be achieved through these established and socially sanctioned channels’ (Homan, 1928, p 300).

⁵ Veblen identifies Clark, Fisher, Alfred Marshall and J. N. Keynes as neoclassical exemplars and offers occasional asides about the Austrians and the Historical School.

how badly the loss of one hoe would affect us or how much good the restoration of it would do us. This truth . . . has a universal application in economics; for primitive men as well as civilised ones must estimate the specific productivity of the tools that they use⁵.

The outcome of these universal natural laws is a static equilibrium. Veblen (1900, p 255) claims, accurately, that Clark's economics 'deals not with the dynamics, but with the statics of the case'. Clark sees his own economics as a continuation of the classical political economy emphasis on 'natural' prices, wages and interest, and in Clark's (1907, pp v–vi) interpretation, 'This term *natural* as thus used, was equivalent to static'. These forces of 'static' or 'natural' law are enduring. 'Static influences that draw society forever towards its natural form are always fundamental, and progress has no tendency to suppress them' (Clark, 1907, p 198).

The natural order towards which an economy always tends—the static outcome—is the hedonistic best of all possible worlds, 'a net aggregate of maximum pleasurable sensations of consumption' (Veblen, 1909A, p 635). For Veblen (1909A, p 620), 'Marginal-utility theory is of a wholly static character. It offers no theory of a movement of any kind, being occupied with the adjustment of values to a given situation'.

2.2 Veblen's capital critique

Veblen's critique of the neoclassical capital concept, although sprinkled throughout his work, is centred in two *Quarterly Journal of Economics* articles (Veblen, 1908A, 1908B). Veblen rejects the universally applicable concept of capital as equipment as well as explanations of interest based on its productivity. In a historical process of cumulative causation, Veblen instead conceives of capital as the accumulated technological/industrial experience of the community.

As items in a process of cumulative change . . . these productive goods are facts of human knowledge, skill, and predilection; . . . The physical properties of the material accessible to man are constants: it is the human agent that changes,—his insight and his appreciation of what these things can be used for is what develops. . . . The changes that take place in the mechanical contrivances are an expression of changes in the human factor (Veblen, 1898, pp 387–88).

In a variation on Marx, Veblen argues that this accumulated experience is a collective good; however, industrialisation has made the possession of capital goods a prerequisite to effective use of the common knowledge and skill, giving the capitalist owner dominance and the ability to command a return.⁶

Veblen's response to 'those who make much of the productivity of capital' is that 'all tangible assets owe their productivity and their value to the immaterial industrial

⁶ The précis at the head of Veblen (1908A, p 517) nicely summarises his argument: 'The knowledge of ways and means is a communal product . . . —Access to the common stock of technological knowledge is necessary to the production of a livelihood . . . —With the advance of industrial arts the possession of material equipment has become a requisite to the effective use of this common stock of knowledge and skill . . . —Hence the great advantage of owning capital goods . . . and hence the dominant position of the owner-employer in modern economic life'. Dorfman ([1934] 1966, pp 285–86) describes the Marx-Veblen parallel this way: 'In Marx the productive agent in economic life is labour, in Veblen it is the accumulated expertise and initiative of the race, techniques created by man for human use. Veblen, like Marx, holds that capital goods cost nothing but labour, and that all gains to capital, aside from those going to the working community, are surplus gains, but Veblen maintained that capital goods are instruments of production only by virtue of the technological knowledge possessed by the industrial community'.

expedients which they embody or which their ownership enables their owner to engross. These immaterial industrial expedients are necessarily a product of the community, the immaterial residue of the community's experience, past and present' (Veblen, 1908A, pp 539–40).

This emphasis on communal technological knowledge is part of Veblen's conception of capital as 'intangible assets' as opposed to 'tangible assets'.⁷ The value of a firm stems not from the productivity of its tangible assets but mostly from its intangible assets like goodwill and monopoly power.⁸ Veblen's explanation of the return to capital also includes institutional factors—a historically specific credit system⁹ and monetary conditions affecting credit and the capitalisation of the firm.¹⁰

Given the importance of intangible assets and historically specific conditions, capital for Veblen is defined not as a collection of physical equipment but as historically specific business practices. The 'concept of capital is, substantially, a habit of thought of the men engaged in business, . . . defined in practice by the consensus of usage in the business community. A serviceable definition of it, therefore, . . . can be got only by observation of the current habits of thought of business men' (Veblen, 1908D, p 113).

Veblen's general critique of neoclassical theory provides the framework for understanding the specific controversies, to which we now turn.

3. Veblen *contra* Clark

It is a stretch to label the Veblen-Clark interchange a 'controversy' because Clark never responded to Veblen's attacks. Possible explanations include Clark's pride in the achievements of his favourite student at Carleton College, respect for Veblen's abilities,¹¹ and the pains Veblen takes to separate his criticisms of Clark's ideas from Clark the person. Veblen pays tribute to Clark's 'gift of engaging the affections as well as the attention of students in his field. Yet the critic is required to speak impersonally of Mr. Clark's work as a phase of current economic theory' (Veblen, 1908C, p 148). Despite

⁷ "Tangible assets" . . . designate pecuniarily serviceable capital goods, considered as a valuable possession yielding an income to their owner. Such goods . . . are "assets" to the amount of their capitalizable value, which may be more or less closely related to their industrial serviceability as productive goods. "Intangible assets" are immaterial items of wealth, immaterial facts owned, valued, and capitalized on an appraisalment of the gain to be derived from their possession. These are also assets to the amount of their capitalizable value, which has commonly little, if any, relation to the industrial serviceability of these items of wealth considered as factors of production' (Veblen, 1908B, pp 104–5).

⁸ 'Successful strategies of [limiting supply and raising prices to "what the traffic will bear"] may, by force of custom, legislation, or the "freezing-out" of rival concerns, pass into settled conditions of differential advantage for the given business concern, which so may be capitalized as an item of intangible assets and take their place in the business community as articles of invested wealth' (Veblen, 1908B, p 107).

⁹ 'Interest is . . . a phenomenon of credit transactions alone. But a money economy and the consequent credit transactions which give rise to . . . interest can emerge only on the basis afforded by the mature development of the institution of property. The whole matter lies within the range of a definite institutional situation which is to be found only during a relatively brief phase of civilization' (Veblen, 1909B, p 299).

¹⁰ 'Credit extensions tend to inflation of credit, rising prices, overstocking of markets, etc., likewise without a visible or securely traceable correlation in the state of the industrial arts or in the pleasures of consumption; that is to say, without a visible basis in those material elements to which the hedonistic theory reduces all economic phenomena' (Veblen, 1909A, p 634).

¹¹ In a letter of 3 April 1906 to Seligman, Clark wrote: 'Veblen and Cummings have attended my lectures [at the University of Chicago] and I have greatly enjoyed their society. Veblen is, if I can judge, the ablest of the six economists here . . . though of course Laughlin is the best know. Veblen is a quiet mouse-like man who has such a gift of reticence that one has to force things out of him in order to get any impression of what he is capable of' (Dorfman, 1941, p 116).

the lack of response, Veblen's criticisms and Clark's own positions can be organised around two of three issues common to all capital controversies: the meaning and measurement of capital and the adequacy of equilibrium analysis.

3.1 *Meaning of capital*

Economists conceive of capital both as a homogeneous fund of financial value flowing amongst alternative uses to establish a uniform rate of return, and as a heterogeneous collection of specific capital equipment used in production. All twentieth-century capital controversies experience a tension between these financial and physical conceptions of capital when, for modelling purposes, one conception is emphasised to the *relative* neglect of the other. Although this tension appears in the Veblen-Clark interchange, an additional tension in the meaning of capital—as universally applicable or as historically and socially specific—plays a key role.

Clark uses simplified examples of the 'solitary hunter' and 'the economy of the man who works only for himself' to highlight the universally applicable concepts and natural forces at work in a modern competitive system.¹² Veblen (1908C, p 152) dismisses this conjectural economic anthropology, referring to Clark's examples as a 'highly mercetricious misrepresentation'. Veblen counters with an actual anthropological example illustrating capital as the accumulated technological experience of the community rather than as physically productive equipment.

The economic unit has been not a 'solitary hunter,' but a community . . . in which, . . . women seem . . . to have been the most consequential factor instead of the man who works for himself. The 'capital' possessed by such a community—as, e.g., a band of California 'Digger' Indians—was a negligible quantity. . . . What . . . the life of the group depended on absolutely, was the accumulated wisdom of the squaws. . . . The loss of the basket, digging-stick, and mortar, simply as physical objects, would have signified little, but the conceivable loss of the squaw's knowledge of the soil and seasons, of food and fiber plants, and of mechanical expedients, would have meant the . . . starvation of the community (Veblen, 1908C, p 152).

In this community, 'the "capital goods" needed for putting this commonplace technological knowledge to use are a slight matter,—practically within the reach of every one'. In contrast, as industrialisation advances and large-scale capital goods become necessary for production, this 'enabled the owners of goods to corner the wisdom of the ancients and the accumulated experience of the race' (Veblen, 1908C, p 154). For Veblen, the social dimension of capital is more important than the financial or physical dimensions.

Clark differentiates 'true capital'—a monetary fund of value that is permanent, homogeneous, malleable and perfectly mobile—from 'capital goods'—transitory, heterogeneous, specific equipment.¹³ In comparing terminology, Veblen (1908C, p 162) describes Clark's terms as equivalent to his own "'pecuniary capital" and

¹² Clark (1907, p 158) describes the law of distribution as based on the doctrine of final productivity which is 'one of those universal principles which govern economic life in all its stages of evolution'.

¹³ Earlier, Clark (1888, pp 9–10) describes the connection between true capital (often abbreviated to capital) and capital goods: 'Ask a manufacturer, "What is your capital?" and he will probably express his answer in dollars. Ask him, "In what is your capital invested?" and he will specify the buildings, machines, land, materials, etc., in which his productive fund now chances to be embodied. These concrete things will figure in his thoughts as the containers of his capital; while the content itself will appear to him to be a value, an abstract quantum of wealth. He will think of it as a fund that is permanently his, though it may not retain for a single day its exact present form of embodiment. . . . Capital is, in this view, an abstract fund, the destiny of which is to migrate thru an endless series of outward forms'.

“industrial equipment”. They are for all ordinary purposes coincident with Mr. Fisher’s terms, “capital value” and “capital”. This is one of the Veblen passages Robinson cites as having made her point.

In a famous example that recurs in his publications of 1895, 1899 and 1907, Clark describes the free flow of true (financial) capital through a sequence of different, transitory capital goods: ‘A whaling ship cannot be made to spin cotton; but capital has, in fact, transferred itself from the whale fishery of New England to cotton spinning. Ships were allowed to decay, and mills were built in place of them’ (Clark, 1895, p 265). In this flow, ‘capital is perfectly mobile. . . . There is, indeed, no limit to the ultimate power of capital, by changing its forms of embodiment, thus to change its place in the group-system of industry’ (Clark, 1899, p 118). With unlimited power to change forms, Clark views the fund of true capital, once created, as a permanent, ‘abiding entity’.

Veblen’s critique of Clark’s ‘transfer of capital’ from whaling ships to cotton mills contains the second passage Robinson cites:

To speak of a transfer of ‘capital’ which does not involve a transfer of ‘capital-goods’ is a contradiction of the main position, that ‘capital’ is made up of ‘capital-goods.’ The continuum in which the ‘abiding entity’ of capital resides is a continuity of ownership, not a physical fact. The continuity . . . is of an immaterial nature, a matter of legal rights, of contract, of purchase and sale (Veblen, 1908C, p 163).

In comparing the theoretical importance of true/pecuniary capital versus capital goods, Clark and Veblen both de-emphasise capital goods. But in place of Clark’s abiding entity of true financial capital, Veblen emphasises immaterial, social aspects of capital—institutional property rights and the accumulated industrial expertise of the community.

Industrial capital . . . is substantially a capitalisation of technological expedients. . . . The substantial core of all capital is immaterial wealth, and . . . material objects . . . are, by comparison, a transient and adventitious matter. But if such a view were accepted . . . Mr. Clark’s scheme of the ‘natural’ distribution of incomes between capital and labor would [dissolve]. It would be extremely difficult to determine what share of the . . . joint product of capital and labor should, under a rule of ‘natural’ equity, go to the capitalist as an equitable return for his monopolisation of a given portion of the intangible assets of the community at large. The returns actually accruing to him under competitive conditions would be a measure of the differential advantage held by him by virtue of his having become legally seized of the material contrivances by which the technological achievements of the community are put into effect (Veblen, 1908C, pp 166–67).

For Veblen, the meaning of capital is connected to social differences between capitalists and wage earners. Income distribution is determined by institutionalised power relations, not by the marginal productivity of either financial or physical capital.

3.2 *Adequacy of equilibrium analysis?*

Clark’s emphasis on static equilibrium states is rooted in his belief that any changes are ultimately drawn towards the static equilibrium outcome.¹⁴ He goes so far as to

¹⁴ ‘The sea, when gales are blowing and tides are rising and falling, is anything but a static object, and yet it keeps a general level in spite of storms and tides, and the surface of it as a whole is surprisingly near to the ideal mathematical surface that would be presented if all disturbances were to cease. In like manner there are certain influences that are disturbing the economic equilibrium just as storms and tidal waves disturb the equilibrium of the sea. We cannot actually stop these influences any more than we can stay the winds and the lunar attraction; but we can create an imaginary static state for scientific purposes, just as a physicist by a

argue that a society with *more* change will be *closer* to the static model rather than diverging further from it. Dynamics for Clark, Veblen notes correctly, are largely about working out imperfections and temporary instabilities on the path to an unchanging equilibrium outcome. The end result is determined by natural law and is path-independent—history will not matter.¹⁵ Clark's (1899, p 442) insistence on the primacy of equilibrium analysis is reflected in his last sentences of *The Distribution of Wealth*: 'Yet, whatever movements the dynamic division of economic science may discover and explain, static laws will never cease to be dominant. All real knowledge of the laws of movement depends upon an adequate knowledge of the laws of rest'.

Veblen (1908C, p 159), of course, does not approve because 'Economics of the line represented at its best by Mr. Clark has never entered th[e] field of cumulative change' and 'does not approach . . . questions of genesis, growth, variation, process (in short, questions of a dynamic import)'.

Although Clark never responds in print to any of these criticisms by Veblen, Dorfman ([1934] 1966, p 284) reports that 'Shortly after this review appeared, Clark met Veblen and said that the article had called attention to at least a few corrections he ought to make. When Clark left, Veblen turned to a student and declared that Clark was a gentleman'.

4. Veblen *contra* Fisher

Veblen (1908D, 1909B) devotes two separate reviews to Fisher's *The Nature of Capital and Income* (1906) and *The Rate of Interest* (1907). A month after the first review appears, Fisher turns down an offer to respond because 'I do not like to turn out hurried work and partly because I would like first to have a little correspondence with Veblen to be sure that I am not as unjust to him as he seems to be to me'.¹⁶ If any correspondence occurs, it has not survived in the Veblen or Fisher archives. Fisher (1909) finally responds after Veblen's second review.¹⁷ Fisher again responds to Veblen's criticisms when he revises *The Rate of Interest* as *The Theory of Interest* (1930, pp 487–91), published a year after Veblen's death.

A quick synopsis of Fisher's interest theory will help situate the Veblen/Fisher controversy. Fisher (1907, p vii) defines the rate of interest as 'an index of the preference

process of calculation can create a hypothetical static condition of the sea and discover the level from which the heights and depths should be measured. No more than the economist can he actually bring the subject he is dealing with to a motionless condition. The economic ocean will defy any modern Canute who may try to stop its movements; but it is necessary to know what shape and level it would take if this were done' (Clark, 1907, pp 130–31).

¹⁵ Veblen (1908C, pp 194–95) portrays Clark's view as 'governed by the preconception that there is one right and beautiful definitive scheme of economic life, "to which the whole creation tends." Whenever . . . current phenomena . . . diverge from this definitive "natural" scheme or from the straight and narrow path that leads to its consummation, there is a grievance to be remedied by putting the wheels back into the rut. The future, such as it ought to be,—the only normally possible, natural future scheme of life,—is known by the light of this preconception; and men have an indefeasible right to the installation and maintenance of those specific economic relations, expedients, institutions, which this "natural" scheme comprises, and to no others'.

¹⁶ Letter of I. Fisher to E. R. A. Seligman, 11 April 1908. Joseph Dorfman Collection, Butler Library, Columbia University. Cited in Tilman (1996, p 44).

¹⁷ This was one of Fisher's responses to many others' (Fetter, Commons, Loria, Flux) reviews of his work; Dimand (1998) provides a useful elaboration of that context.

... for a dollar of present over a dollar of future income'. He considers the concept of *income-services* as his main advance over Böhm-Bawerk's *agio* theory. Present capital-wealth (a stock of physical objects) produces future income-services (a flow of real consumption services). Income-services are priced in the future periods they occur to yield future income-value, which is then discounted at the rate of interest to yield present capital-value.¹⁸ The rate of interest used to discount future income-services is determined by (1) subjective *impatience* and (2) objective, technical conditions determining *investment opportunity*.

Veblen's reviews are full of backhanded compliments, praising Fisher's work as the best the marginal-utility school has to offer, but suffering from all of the flaws of that approach. 'Mr. Fisher's work is of the best—thoughtful, painstaking, sagacious, exhaustive, lucid, and tenaciously logical. What it lacks is the breath of life' (Veblen, 1908D, p 112).¹⁹ Fisher, on the other hand, rightly finds that Veblen's 'criticisms are almost all generalities on methodology and concepts, and for the most part they disregard the special conclusions which differentiate my books from others on his *index expurgatorius*' (Fisher, 1909, p 513). Their methodological sparring is over the primacy of historically specific versus abstract theoretical dimensions of capital, as well as over the criteria for an adequate theoretical analysis of relations between variables.

4.1 History and theory in the meaning and measurement of capital

Veblen (1908D, p 114) claims that capital, income and interest are pecuniary concepts, defined by historically specific institutional contexts, changing 'in response to the changes ... in the pecuniary situation and in the methods of conducting pecuniary affairs'. Fisher's failing, according to Veblen, is in using hedonistic theoretical concepts instead of pecuniary historical concepts.

Veblen (1908D, pp 120–21) notes Fisher's distinction between capital-wealth (productive goods) and capital-value (pecuniary capital). Capital-wealth is an 'authentic hedonistic concept' providing income-services in the form of utilities to be consumed. Veblen credits Fisher for the concept of capital-value and substituting 'a pecuniary for a hedonistic construction of the phenomena of capitalization'. But Fisher can't win when Veblen then criticises him for being inconsistent in his hedonistic classification! Fisher's income-services are psychic income and 'can not be reduced to' the pecuniary concept of money income, Veblen claims.

Interest, for Veblen, 'is eminently a pecuniary phenomenon, and its rate is a question of business adjustments' (1909B, p 298). He claims that a consistent rate of interest is a phenomenon specific to historical developments of a money economy and credit transactions.

Interest can emerge only [with] the mature development of the institution of property. The whole matter lies within the range of a definite institutional situation which is to be found only

¹⁸ 'The statement that "capital produces income" is true only in the physical sense; it is not true in the value sense. . . . *Capital-value does not produce income value*. On the contrary, income-value produces capital-value. It is not because the orchard is worth \$20,000 that the annual crop will be worth \$1000, but it is because the annual crop is worth \$1000 that the orchard will be worth \$20,000. The \$20,000 is the discounted value of the expected income of \$1000 per annum; and in the process of discounting, a rate of interest of 5 per cent is implied' (Fisher, 1907, p 13).

¹⁹ Fisher's *Rate of Interest* 'lies within the accustomed lines of that marginal-utility school of economics for which its author has so often and so convincingly spoken. It is true to the canons of the school, even to the point of making the usual error of logic in the usual place' (Veblen, 1909B, p 296).

during a relatively brief phase of civilization. . . . interest is a business proposition and is to be explained only in terms of business, not in terms of livelihood, as Mr. Fisher aims to do (Veblen, 1909B, pp 299–300).

Veblen disparages Fisher's concepts of capital and income as taxonomic rather than emerging from observation of actual business practice. He similarly dismisses Fisher's 1906 book as 'a work of taxonomy, of definition and classification' (Veblen, 1908D, p 112). Fisher (1909, p 507) can 'agree heartily with Professor Veblen's opinions' that taxonomy is not adequate, and quotes from the book in question (Fisher, 1906, p 7): 'Not classification, but analysis solves scientific problems'. Veblen and Fisher actually agree on the primacy of theoretical analysis over description. But they disagree about what constitutes an adequate theoretical explanation.

4.2 Adequacy of equilibrium analysis?

For Fisher, classifications of concrete things are relatively unimportant, but analysis is about abstract '*relations* between things'. Regardless of Veblen's complaints about definitions and classifications, 'The important point is the relation between a stock of wealth . . . and the flow of its services' (Fisher, 1909, p 508). No matter what is included or excluded from the classification of capital, the important analytic questions for Fisher concern the *relations* between the categories of capital and income.

Fisher provides a classic theorist's counter-argument to Veblen's call for historical descriptions of actual business practice rather than underlying theoretical concepts, disparaging Veblen's approach as *anti-theoretical*. Fisher (1930, p 487) defends his own work as 'pure economic theory'—which empirical and historical evidence can supplement—intended 'to isolate the fundamental or basic forces which are operative'. He points out that he is *not* attempting a comprehensive account of all influences on the rate of interest.

Fisher (1909, p 506) attacks Veblen's statement that 'no definition which goes beyond or behind the pecuniary concepts can be a serviceable definition of income for modern use', arguing that 'My own statement would be that no definition which does *not* go beyond or behind the pecuniary concept (or concepts) can be a serviceable definition for modern use . . . in economic analysis'. To take Veblen's path of 'fixing attention on the money surface of things and neglecting the psychological forces beneath' will lead economists to 'revert to the superficial mercantilism with which economics began'.²⁰

As for institutional determination, Fisher views institutions as the *outcome* of the same fundamental psychological forces of individual utility.²¹ Fisher unequivocally rejects Veblen's call to restrict analysis to historically specific institutional contexts and reaffirms his belief in underlying, universal theoretical principles.

Impatience and opportunity are working themselves out in the activities of business institutions, and men cannot avoid the dominance of these impulses and situations. . . . Interest, therefore, cannot be restricted to an explicit or contractual phenomenon but must be inherent in all transactions and human activities which involve the present and the future (Fisher, 1930, p 490).

²⁰ This interchange reminds me of the inscription of Kelvin's dictum on a University of Chicago building: 'where you cannot measure your knowledge is meagre and unsatisfactory'. Others, referring to the importance of abstract concepts in the social sciences and humanities, would argue that 'where you *can* measure your knowledge in meagre and unsatisfactory'. See Emmett (1998).

²¹ 'Institutions and conventions, like business, have been created by men . . . in order to add to the gratifications they obtain from living. . . . These man-made, man-operated institutions are merely tools devised by man to create for him gratifications more readily and more abundantly' (Fisher, 1930, p 490).

Veblen and Fisher both seek theoretical explanations of economic life as the outcome of underlying processes. Both agree that mere classification is unimportant and that relations or processes are fundamental. But they disagree about what constitutes an adequate theoretical explanation. For Fisher, equilibrium is the outcome of a process driven by the universally valid psychological forces of utility-maximising individuals. For Veblen, abstract categories (like capital and income, labour and wages) that are grounded in a taxonomic, hedonistic conception of equilibrium are flawed, even if abstract relations between categories are stressed rather than the categories themselves. Hence Veblen rejects Fisher's theoretical relations and process because they connect concepts of a static equilibrium framework rather than connecting historically specific concepts to a causal, genetic process. Veblen does not reply to Fisher's first response (1909), and Fisher's second response (1930) comes after Veblen's death. So there is no interchange between them about what Veblen's alternative causal, genetic process would look like.

5. Shared lineages on the meaning and measurement of capital

So what did Robinson mean in saying that Veblen had made her point in 1908 better than she did?

In the first Veblen quote Robinson admires, Veblen distinguishes 'pecuniary capital' from 'industrial equipment'. Veblen identifies capital as both a homogeneous fund of financial value and a heterogeneous collection of equipment used in production, a distinction Robinson highlighted in her 1953–54 article. She asked if the 'capital' in the production function is financial capital or physical capital equipment, and if it is equipment, is it measured by cost of production or discounted future earnings? In equilibrium all measurements are equivalent, but in history, 'When an unexpected event occurs, the three ways of evaluating the stock of goods part company and no amount of juggling with units will bring them together again' (Robinson, 1953–54, p 84).²²

In the Cambridge controversies, problems measuring the aggregate stock of heterogeneous capital equipment took the form of reswitching and capital reversing. These problems, and the failed neoclassical attempts to overcome them, came to a momentous head in the 1966 symposium on 'Paradoxes in Capital Theory' in the *Quarterly Journal of Economics* (Samuelson, 1966).²³ Comparable measurement-of-capital problems also arose in all previous controversies.²⁴

²² The measurement of capital equipment, either by the cost of production (which takes time) or by the present value of the future output stream it will produce presumes a rate of interest. Because the measured quantity of capital is a determinant of the rate of interest in Samuelson's (1962) neoclassical parables, this interdependence causes (real and price) Wicksell effects, which appear in the guise of reswitching and capital reversing. This interdependence prompted Sraffa's (1962, p 479) famous question, 'What is the good of a quantity of capital . . . which, since it depends on the rate of interest, cannot be used for its traditional purpose . . . to determine the rate of interest?'

²³ Pasinetti (2003, pp 227–28) notes that 'Attempts were made to minimize the shattering effects of reswitching and capital reversing on neoclassical models, by focusing on an intertemporal general equilibrium scheme, where reswitching and capital reversing can be hidden or confused with many other difficulties and causes of instability of the solutions. Yet, even among the general equilibrium theorists, one fact remains undisputed as a result of the 1966 *QJE* symposium, namely that the relationship between capital—whatever the way in which it is measured or aggregated (Fisher, 1971)—and its "factor price" is in general a non-monotonic relation. This characteristic is contrary to the assumptions underlying neoclassical capital theory, including the recent models on endogenous growth'.

²⁴ Velupillai (1975) was the first to notice implicit reswitching in Fisher's work. For other controversies, see Cohen (2003, 2006, 2008).

The second Veblen (1908C, pp 166–67) quote Robinson cites approvingly emphasises the ‘overlooked’ importance for the meaning of capital of legal ownership and the institutional rules of the game. Veblen stresses the social dimension determining the returns to capital—the power-based appropriation of the fruits of the ‘intangible assets’ and technological achievements ‘of the community at large’.

The prominence of this social dimension of capital is unique to the Veblen/Clark/Fisher and Cambridge controversies. Robinson refers to this Veblen quote in notes prepared for a talk on ‘History and Equilibrium’.²⁵ In the published version, Robinson ([1974] 1980, p 48, 53) advocates a vision of ‘an historical process of accumulation in a capitalist economy and its relation to the distribution of the product of industry between the classes of society’. This historical process must be described ‘in terms of the structure and behaviour of the [actual] economy’, in contrast to the neoclassical emphasis on ‘what purported to be universal laws, based on human nature—greed, impatience and so forth’. Robinson ([1974] 1980, p 58) criticises the neoclassicals for ‘The lack of a comprehensible treatment of historical time, and failure to specify the rules of the game in the type of economy under discussion’.²⁶

Harcourt (1972, p 2) sees ‘capitalist institutions—private property, an entrepreneurial class, a wage-earning class—as giving rise to conflicts between the classes. . . . The distribution between classes of the net product . . . cannot be understood independently of the institutional nature of capitalism’. He locates the meaning of capital in the property owned by the capitalist class, ownership of which confers on capitalists the legal right and economic authority to take a share of the surplus created by the production process (Harcourt and Laing, 1971, p 10).

6. Alternative visions of economics

These similarities amongst Veblen, Robinson and Harcourt stem from a shared vision of economic life, a vision differing fundamentally from their neoclassical opponents in controversies. Schumpeter (1954, p 41) defines vision as ‘a preanalytic cognitive act that supplies the raw material for the analytic effort’. He later elaborates (see also Dobb, 1973, ch. 1):

In every scientific venture, the thing that comes first is Vision. . . . Before embarking upon analytic work . . . we must first single out the set of phenomena we wish to investigate, and acquire

²⁵ Robinson (1920–86, JVR/iii/14.3/1): ‘a simple—one might say a simple-minded—version in terms of “factors of production”, land, labour and capital, was put out by J.B. Clark. This was criticised, in 1908, in a penetrating review by Thorstein Veblen, who pointed out that the whole argument turns on a verbal confusion between “capital goods” in the sense of physical equipment and material needed for production and the technical methods of production for which they are needed. J.B. Clark treats the bow and arrows of the primitive hunter as his *capital* and implies that if he loses them he will starve. Veblen points out that the knowledge of how to make bows and arrows out of ingredient found in the forest and training in tracking and shooting belong to the tribe. For an individual, to lose his equipment is merely a passing inconvenience which can soon be made good. Veblen was brushed aside. The professional economists trotted along after J.B. Clark’.

²⁶ Harcourt (2001B, pp 326–27) describes his methodological approach as ‘horses for courses.’ ‘If doctrinal debate is the issue . . . it is right and proper to operate at a high level of abstraction, to use simple, *very* unrealistic models which are appropriately closed, for capturing the essence of the problem but which exclude all other ‘matters of the real world’ as irrelevant for the purpose in hand.’ For empirical work, it is fair to use models where ‘the limitations are set out, the meaning of the findings is coherent, the usefulness of them then turns on whether or not it is believed that the underlying simple theoretical model captures the essence of the processes at work which have thrown up the statistical observations.’ Notice the emphasis on *processes* for connecting theories to data.

'intuitively' a preliminary notion of how they hang together, . . . of what appear from our standpoint to be their fundamental properties (Schumpeter, 1954, pp 561–62).

The neoclassical vision, originating with Jevons, Walras and (to some extent) Marshall, and integrating capital in a familiar form in Clark and Fisher, envisions the lifetime utility-maximising consumption decisions of individuals as the driving force of all economic activity, with the allocation of given, scarce resources as a universal economic problem. Production is an indirect form of exchange for the purpose of satisfying the goal of consumption. As Fisher argued, even capitalist institutions are intermediaries in the utility-maximising consumption process, arising from individuals' free choices.

For capital accumulation, subjective rates of time preference, marginal productivity and the money rate of interest as the price of capital services that clears the market for money loans are fundamental. The rate of interest is the outcome of an intertemporal optimisation process, balancing subjective time preference and the objective marginal productivity of investment (more precisely, the technical rates at which present consumption may be transformed into future consumption).²⁷

The alternative Veblen/Robinson/Harcourt vision begins with the physiocrats and classical political economy, with a lineage strongest in Marx, Veblen, Schumpeter, Keynes, Kalecki, Kaldor, Sraffa, Robinson and Harcourt. In this vision, the profit-making decisions of capitalist firms are the driving force of economic activity,²⁸ with the allocation of surplus output to ensure reproduction and growth as a historically specific problem of capitalism (Walsh and Gram, 1980). Consumption is an indirect form of exchange for the purpose of satisfying the goal of production—the production of commodities by means of commodities. Individuals' dependency on the market for their livelihoods conditions their choices, and social class—their position within the social division of labour—becomes a primary unit of analysis.

The potential rate of profits on capital arises from differing power and social relationships in production, and the realisation of profits is brought about by effective demand associated with saving and spending behaviours of the different classes and the 'animal spirits' of capitalists. The rate of profits is thus an outcome of a historically specific accumulation process.

These alternative visions have fundamental implications for constructing theories and assessing the adequacy of equilibrium analysis, and for the role ideology plays in theoretical analysis.

6.1 *Visions and the adequacy of equilibrium analysis*

The differences in vision are striking. The neoclassical vision, of utility-maximising individuals' free choices driving economic exchange, emphasises universal laws based

²⁷ From a vision perspective, Fisher's intertemporal extension to capital of the utility maximisation process—where the future (value of the stream of produced output) determines the present (value of capital)—has proven more fundamental than Clark's marginal productivity theory, which is simply a concept now applied within that intertemporal process. Bharadwaj (1989, p. 233, emphasis in original) points out that 'Fisher shifted all economic accounting to the future. . . . *In terms of the arena of supply-and-demand relations, this view extended their operation freely into the future.* In fact, it was a complete reversal of the classical causation, as Fisher himself put it. What needed to be anticipated here was to envisage the entire stream of future incomes and equilibrium as being established *through the substitution principle operating intertemporally*'.

²⁸ Veblen (1904, p 7) begins *The Theory of Business Enterprise* with the sentence 'The material framework of modern civilization is the industrial system, and the directing force which animates this framework is business enterprise'.

on human nature. The alternative vision, of profit-seeking capitalist firms driving economic growth in the context of interdependent social classes, emphasises historically contingent outcomes from interactions of individual agency and institutional structure. In translating each vision into a theory, important methodological differences arise as well as differing criteria for evaluating what is an adequate theoretical explanation. In the spirit of simplification and Robinson, I characterise these methodological differences as equilibrium versus history.²⁹

Christopher Bliss's (1975, p 27) distinction between two conceptions of equilibrium helps sharpen the meaning of equilibrium-based theoretical analysis. One uncontroversial conception is of equilibrium as 'no more than an analytical stepping stone, as a necessary simplification to render possible some progress in an otherwise hopelessly difficult analytical endeavor'—even Robinson accepts this as part of her approach to theory (Cohen, 1993C). In the clash of 'equilibrium versus history', the contested conception of equilibrium is as an actual outcome 'which would be expected to be realized, because the dynamic forces which operate . . . bring the economy to an equilibrium'. This is Fisher's conception, when he describes the purpose of economic theory 'to isolate the fundamental. . . forces which are operative' in the actual economy.

6.1.1 Neoclassical theory

The neoclassical vision is transformed into equilibrium outcomes when the dynamic forces of utility-maximising individuals, profit-maximising firms and competitive conditions are combined with a given set of preferences and resource endowments. Given the initial conditions, equilibrium outcomes are regular and predictable. Economic regularities stem from the operation of universal natural laws—'the law of demand', 'the law of supply', 'the law of diminishing returns'. Just as gravity pulls objects down a hill, individual demands pull services from resources, which are rearranged (intertemporally) through competitive production and distribution channels to meet their final resting places in individual consumption. The equilibrium outcomes represent a balance of the forces of self-interest and competition, where no agent can do any better and resources are allocated efficiently. With unchanged initial conditions, dynamic forces will bring the economy back to equilibrium from any perturbation. Equilibrium outcomes are centres of gravitation—stable, path-independent outcomes of a disequilibrium process. As Clark emphasised, 'influences that draw society forever towards its natural form are always fundamental'.

Because natural laws always operate, we expect to see equilibrium outcomes not only in theory but also in the world, *ceteris paribus*. Predictions of equilibrium models can be tested against empirical data. Data and history are simply venues for testing the predicted outcomes of universal laws. If the predictions match the data, the phenomenon has been 'explained'. An adequate explanation must end with an equilibrium and trace back that outcome back to the utility-maximising decisions of individuals. Explanation and prediction are virtually identical—the only difference is whether the model is applied to the data *ex post* or *ex ante*.

6.1.2 Veblen/Robinson/Harcourt theory

Veblen seeks a 'cumulative causal sequence' to transform his vision into an evolutionary scientific theory. This is an endogenous process. At any moment, the existing

²⁹ What follows is overt oversimplification, given space constraints and the restricted purposes of the article.

institutional structure conditions individuals' decisions. Over time, those decisions can transform the structure, with 'both the agent and his environment being at any point the outcome of the last process'. His goal is to specify the causal mechanisms that generate the ever-changing outcomes, not the outcomes themselves, which are historically contingent and therefore not easily predictable. Despite unpredictable outcomes and the lack of regularities produced by universal natural laws, the economy has regularities that are subject to theoretical and quantitative analysis. Veblen's student, Wesley Clair Mitchell, argued that the regularities were in the institutions, not in natural laws.³⁰

Veblen's theoretical goal parallels that of Darwinian evolutionary theory. The explanatory power of Darwin's theory stems from specifying a causal mechanism (combining Mendelian genetics, genetic mutations, environmental variation and the production of more offspring than can survive) that can explain evolutionary adaptation *ex post*. *Ex ante* predictions are not possible because so many of the environmental factors influencing actual outcomes are irregular and unpredictable.³¹ What Darwin provided was 'a detailed and coherent theory of the dynamics of [the] historical process' (Lewontin, 1983, p 21).

In making a case for theoretical causal mechanisms, Schumpeter also addresses the differences between *ex ante* and *ex post* explanations. He divides economic reactions to change into *adaptive responses* and *creative responses*. Adaptive responses describe maximising behaviour within given constraints, 'in the way that traditional theory describes' (Schumpeter, 1947, p 150). They do not change the predicted outcome of an equilibrium model or of a comparative statics exercise. They are simply the means for arriving at a predicted equilibrium outcome. Adaptive responses are regular, predictable and path independent. Veblen (1908C, pp 194–95) describes them as 'putting the wheels back into the rut'.

Creative responses, usually by competitive entrepreneurs in pursuit of profits, are 'outside of the range of existing practice'. They overcome constraints or change the rules of the game. Examples include new products, new technologies or opening up new sources of supply. A creative response 'can always be understood *ex post*, but can practically never be understood *ex ante*; . . . it cannot be predicted by applying ordinary rules of inference from pre-existing facts'. For that reason, the analytical 'necessity arises of going into the details of its *modus operandi*, into the mechanisms through which it acts' (Schumpeter, 1947, p 150). A creative response also creates path dependence,

³⁰ Malcolm Rutherford (2003, p 365) describes how Mitchell 'explicitly connected quantitative work and the institutional approach, arguing that it is institutions that create the regularities in the behavior of the mass of people that quantitative work analyses'.

³¹ Scriven (1959, p 478) provides a classic exposition of this position: 'it is quite clear that we cannot predict which organisms will survive except in so far as we can predict the environmental changes. But we are very poorly equipped to do this with much precision since variations in the sun's output and even interstellar influences have substantial effects, quite apart from the local irregularities of geology and climate. However, these difficulties of prediction do not mean that the idea of fitness as a factor in survival loses all its explanatory power. It is not only true but obvious that animals which happen to be able to swim are better fitted for surviving a sudden and unprecedented inundation of their arid habitat, and in some such cases it is just this factor which explains their survival. Naturally we could have said in advance that if a flood occurred, they would be likely to survive; let us call this a hypothetical probability prediction. But hypothetical predictions do not have any value for actual prediction except in so far as the conditions mentioned in the hypothesis are predictable or experimentally producible: hence there will be cases where we can explain why certain animals and plants survived even when we could not have predicted that they would. And it is a feature of the irregular subjects that, unlike classical atomic physics, the irregularity-producing factors lie outside their range of observation and are not predictable by reference to any factors within this range'.

changing ‘social and economic situations for good . . . it creates situations from which there is no bridge to those situations that might have emerged in its absence. This is why creative response is an essential element in the historical process; no deterministic [equilibrium] credo avails against this’ (Schumpeter, 1947, p 150).

These methodologies of cumulative causal sequences and the interaction of agency and structure have been developed by a much broader range of authors and schools beyond those in the Veblen/Robinson/Harcourt vision—to name just a few, George Shackle (1949), Edith Penrose (1959), G. B. Richardson (1960), Brian Loasby (1976) and Richard Nelson and Sidney Winter (1982) on the theory of the firm; Tony Lawson (1997, 2003) on critical realism; and Geoffrey Hodgson (2001, 2004) and Ulrich Witt (2003) on evolutionary economics. A discussion of their contributions, however closely related, would take us far beyond the boundaries of this article.

7. Visions and ideology

Each vision also contains an implicit judgement of the economic system.

The neoclassical vision suggests voluntary exchange and a harmony of interests amongst equal individuals. Tjalling Koopmans (1957, p 59) points out that a necessary assumption for proving the existence of a competitive equilibrium in the Arrow-Debreu model is that ‘each consumer can, if necessary, survive on the basis of the resources he holds and the direct use of his own labour, without engaging in exchange, and still have something to spare of some type of labour which is sure to meet with a positive price in any equilibrium’. In other words, the individual is ‘free to choose’ whether to participate in the social division of labour. The entire system of economic relations arises from the free choices of individuals. When the system works well, the equilibrium outcome has desirable welfare properties, with little need for government policy.

In the alternative vision, power and inequality are inherent properties of the economic system. Although individuals can make many choices (e.g., between different commodities, between spending and saving), individuals are *not* free to choose whether to participate in the system of economic relations because they depend on the market for their livelihoods. This dependency—a need to provide some service or product that the market values—is a determinate of economic activity. When individuals’ economic roles and needs are determined by institutionalised social (including cultural) relations, the individual is not the basic unit of analysis. Social class is a theoretical category describing particular, unequal relations to the means of production and the resulting economic, social and institutional forces exerted on individuals. Profit-seeking capitalist firms drive this system forwards, often with cyclical or unequal outcomes, so that political change or government policy are necessary to achieve desirable outcomes, however defined.

These implicit judgements³² are consistent with Schumpeter’s (1954, p 42) point that ideology is deeply imbedded in Vision.

³² According to Robinson ([1955] 1980, p 4): ‘Economic theory, in its scientific aspect, is concerned with showing how a particular set of rules of the game operates, but in doing so it cannot help but make them appear in a favourable or an unfavourable light to the people who are playing the game’. In his introductory overview of the Cambridge controversies, Harcourt (1972, p 3) says, ‘Despite many explicit denials to the contrary by its proponents, the neoclassical approach both tends to highlight technical factors and to suggest harmony, if not justice, amongst the various groups in capitalist society’.

Analytical work begins with material provided by our vision of things, and this vision is ideological almost by definition. It embodies the picture of things as we see them, and wherever there is any possible motive for wishing to see them in a given rather than another light, the way in which we see things can hardly be distinguished from the way in which we wish to see them.

The fact that economics is concerned with real-world problems also provides a motive for seeing things in the way we wish to see them. Ideology and vision are intertwined for Veblen, as described by Rick Tilman (2007, p x):

Veblen did not believe that conventional economics was free of class bias or value neutral. Instead, it was biased toward an individualistic ethos rooted in subjective preference that defines value simply as exchange value measured only by price. To Veblen, wealth is collectively generated, a result of a social process. The received economics of his day thus failed to locate the power and income inequality in the existing institutional fabric and thus sanctioned great inequalities of power and privilege.

Robinson echoes this intertwining:³³

Discussion of an actual problem cannot avoid the question of what should be done about it; questions of policy involve politics (*laissez-faire* is just as much a policy as any other). Politics involves ideology; there is no such thing as a ‘purely economic’ problem that can be settled by purely economic logic; political interests and political prejudice are involved in every discussion of actual questions . . . —and ideology is apt to seep into logic. (Robinson [1977], pp 1980, 1–2)

Harcourt (1972, p 2) explicitly links the theoretical Cambridge capital controversies to ‘ideological and political differences concerning the functioning of the capitalist system’. In describing his own work, he points out:

the fundamental differences made to policies advocated depending upon what particular view of the world is taken. That is to say, whether markets and entire systems are regarded as strongly equilibrating mechanisms, on the one hand, or as exhibiting cumulative causation processes (associated with Allyn Young, Myrdal and Kaldor), virtuous or vile, on the other (Harcourt, 2001A, p 15).

7.1 *Ideology and politics*

For any economist explicitly acknowledging connections between ideology and vision, there are consequences for how her work is received. Robinson has long acknowledged her ideological point of view in her writing,³⁴ and Harcourt (2001A, p 10) describes the effect of his political experience in the 1960s on his economic analysis: ‘my personality intruded more into my writing, and, as I no longer accepted that ideology and analysis could be separated, I made the former explicit in my teaching and writings, especially by the end of the 1960s’.

³³ Robinson ([1955] 1980, pp 3–4) describes the intertwining of ideology and vision in Marx, Marshall and Keynes because of policy concerns: ‘Marx is making propaganda against the system. Marshall is defending it and Keynes is criticizing in order to improve it. Economic doctrines always come to us as propaganda. This is bound up with the very nature of the subject and to pretend that it is not so in the name of ‘pure science’ is a very unscientific refusal to accept the facts. The element of propaganda is inherent in the subject because it is concerned with policy. It would be of no interest if it were not. If you want a subject that is worth pursuing for its intrinsic appeal without any view to consequences you would not be attending a lecture on economics. You would be, say, doing pure mathematics or studying the behaviour of birds.’

³⁴ ‘I have always aimed to make my own prejudices sufficiently obvious to allow a reader, while studying the argument, to discount them as he thinks fit, though, of course, this generally leads a reader of opposite prejudices to reject the argument in advance’ (Robinson, 1980, v. 2, p iv).

On the positive side, I believe that there has been and will continue to be enduring interest in the works of Veblen, Robinson and Harcourt precisely because each combines personal conviction, passion for justice, policy relevance and penetrating analysis. Readers, citizens and even politicians respond to the combination of conviction and analysis. A 2010 *New York Times* article (Lilla, 2010) explored why reasoned arguments based on facts were not carrying the day in US politics. It concluded that ‘the art of politics must be the art of engaging the passions, first by exciting them, then by moderating and directing them to a worthy end, one that reason may reveal but cannot achieve’. Political and policy relevance comes from the intertwining of ideology, vision and analysis.

The negative side of acknowledging connections between ideology and vision is the disdainful dismissal from economists who believe fervently in the positive/normative distinction and see ideology as a dirty word. Veblen, Robinson and Harcourt are amongst those who rejected that split and, as a consequence, received professional grief for their positions. By raising issues of ideology, they have been accused of *being ideological*—meant as an epithet—by those continuing to believe in the possibility of value-free or ideologically neutral work.

This negative reaction is explainable. First, at the level of model-building, as opposed to vision, ideology is almost invisible. Ideology does not affect the logic of a proof or the derivation of a theorem. It is imbedded at a deeper level in our choices of models, of assumptions and of topics deemed worthy of our investigation.³⁵ For an economist working strictly within a vision and acknowledging no others, the ideological connotation is almost unintelligible. Robinson (1962, p 41) said it well: ‘No one, of course, is conscious of his own ideology, any more than he can smell his own breath’. Although the ideology of critics is more obvious (especially when announced) than the ideology of defenders of the status quo, all economic analysis is based on a vision that, as Schumpeter states, ‘is ideological almost by definition’.

Those who see ideology as tainting any economic analysis that flows from a vision often jump to the conclusion that an objective evaluation of the analysis must be impossible, leaving only opinions that depend on ideology. Robinson ([1955] 1980, p 6, 12) tried to explicitly address these concerns:

We must admit that every economic doctrine that is not trivial formalism contains political judgments. But it is the greatest possible folly to choose the doctrines that we want to accept by their political content. It is folly to reject a piece of analysis because we do not agree with the political judgment of the economist who puts it forward. . . .

To learn from the economists regarded as scientists it is necessary to separate what is valid in their description of the system from the propaganda that they make, overtly or unconsciously,

³⁵ Harcourt (1972, p 13) made this point: ‘Nor do I mean that ideologies necessarily affect either logic or theorems. Rather they affect the topics discussed, the manner of discussion, the assumptions chosen, the factors included or left out or inadequately stressed in arguments, comments and models, and the attributes shown, sympathetic or hostile, to past and contemporary economists’ works and views’. Dobb (1973, p 7) presents an eloquent case for this interpretation of vision. A key passage reads: ‘the model-builder is . . . laying emphasis upon certain factors and relationships and excluding others or casting them into the shadows; and in doing so he can be judged to be distorting or illuminating reality, and thus affording an unsound or a sound basis for interpretation and prediction. . . . This is not to say, of course, that any such distortion or partiality is part of the conscious intention of the model-builder, who may indeed have chosen its shape for purely formal reasons. . . . But in the degree that he is influenced by its economic implications—in the degree, that is, to which he is trying to be an economist—its shape and projection will be influenced by his vision of the economic process, and by whatever socio-historical conditions shape and limit his mental picture of social reality’.

each for his own ideology. The best way to separate out scientific ideas from ideology is to stand the ideology on its head and see how the ideas look the other way up. If they disintegrate with the ideology, they have no validity on their own. If they still make sense as a description of reality, then there is something to be learned from them, whether we like the ideology or not.

8. A summing up

The Veblen/Clark/Fisher and the Cambridge controversies were unique amongst twentieth-century capital controversies because of shared clashes of fundamentally different visions of economic life, as well as differences regarding the historical contextualisation of the meaning of capital and the role of social institutions. The adequacy of equilibrium analysis and ideology also play more complex roles compared to other controversies conducted within a largely shared vision.

The neoclassical vision in both controversies sees the lifetime utility-maximising consumption decisions of individuals as the driving force of all economic activity, with the allocation of given, scarce resources as a universal economic problem. The individual is the basic unit of analysis, and history serves largely to supply empirical data for applying and testing models. Capital has financial and physical dimensions. The rate of interest is the outcome of an intertemporal optimisation process, balancing subjective time preference and the objective marginal productivity of investment. Outcomes are explained in terms of an equilibrium of combined individual optimising choices, and changes over time are representing through comparisons of equilibrium positions. Path independence means that history does not matter. The neoclassical vision suggests a harmony of interests amongst equal individuals because all choices are voluntary, including choices to participate in the social division of labour. If the system works, the outcome has desirable welfare properties with little need for government policy.

The vision shared by Veblen, Robinson and Harcourt sees the profit-making decisions of capitalist firms as the driving force of economic activity, with the allocation of surplus output to ensure reproduction and growth as a historically specific problem of capitalism. The accumulating firm is the basic business unit of analysis. Because individuals depend on the market, social class and institutions become fundamental forces shaping individual actions. The social dimension of capital is of paramount importance. The potential rate of profits on capital arises from differing power and social relationships in production, and the realisation of profits is brought about by effective demand associated with saving and spending behaviours of the different classes and the 'animal spirits' of capitalists. The rate of profits is thus an outcome of the accumulation process. Historically specific theories use processes of cumulative causation to explain the mutually determining interaction over time between individual agency and institutional structure, but historical contingency limits prediction. Power and inequality are inherent properties of the economic system yielding undesirable outcomes, so that political change or government policy are necessary to achieve more desirable outcomes.

Although these visions are only rough approximations, their differences are substantial and help account for the lack of definitive resolution of these capital controversies (Cohen, 1984; Cohen and Harcourt, 2003). The differences also highlight three unresolved issues that are important for the future of economics and the future of capitalism.

The first is the tension between history and theory. Fisher characterised Veblen's emphasis on historically specific categories as anti-theoretical. Fisher's equilibrium-based

models were constructed, in his view, ‘to isolate the fundamental . . . forces which are operative’. What does a historically specific explanation based on a set of general, theoretical principles look like? A similar tension arose in the Cambridge controversies around Robinson’s battle cry of ‘history versus equilibrium’. Her historical focus led to charges of theoretical nihilism, not only from her neoclassical opponents but also from fellow Cantabrigians like the late Pierangelo Garegnani, who saw her as abandoning the long-period method of classical political economy.³⁶ There is much work to be done in resolving this tension.

The second issue is advancing explanations that combine agency and structure. How do we combine an analysis of the regularities produced by institutions with the creative responses of agents that transform structure? It is easier to construct models based on individual choice alone, or models where individuals play a passive role, fully determined by social class or institutions. But the combination, to achieve the cumulative causal sequence of Veblen’s ideal, is far more difficult, and there is much work to be done.³⁷

The final issue is the connection between vision and ideology. That connection is central to the enduring effect of works of Veblen, Robinson and Harcourt. The logical consistency behind an analytical structure based on a coherent vision is essential for gaining accurate insights into the functioning of an economic system. The passion that comes from concerns for just outcomes is essential for setting goals for analysis and mobilising political action to achieve those goals. The right combination that intertwines vision, reasoned analysis and ideological passion is, however, hard to pin down. Robinson’s ([1955] 1980, p 12) advice on separating scientific ideas from ideology—‘to stand the ideology on its head and see how the ideas look the other way up’—feels elusive. How does ‘standing ideology on its head’ translate into objective evaluation of economic models? The answers are not obvious, at least to me. But finding the right combination is important if economists are to function effectively as economists, as policy advisers, as public intellectuals and as politically active citizens. Objective and dispassionate analysis combined with ideological passion can serve as a force for advancing economics and for political action to influence the future of capitalism.

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³⁶ Robinson’s ‘methodological stance. . . if strictly applied, would severely limit the possibilities of economic theory, and hinder the necessary work of theoretical reconstruction. It would prevent the use and development of the firm basis for such work provided by the approach to distribution and accumulation of the classical economists’ (Garegnani, 1989, p 360). For an early attempt to rebut the charge of theoretical nihilism, see Cohen (1993C).

³⁷ In evaluating Veblen’s programme based on the principle of cumulative causation, Rutherford (1998, p 476) concludes: ‘The promise of Veblen’s programme was not fulfilled and the challenge of building a genuinely evolutionary economics remains. The fate of Veblen’s efforts might remind those attempting similar things now of the complexity of social evolutionary processes, the care with which analogies from other sciences need to be applied, and the still outstanding need for an adequate framework for the analysis of institutional change’. See also Rutherford (1984). Modern practitioners of evolutionary economics and others have taken up the challenge.

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