Edythe S. Miller (1994). "Foster, J. Fagg." *The Elgar Companion to Institutional and Evolutionary Economics*. Edward Elgar, vol. I, 1994:256-62.

J. Fagg Foster was born in 1907, and died on 15 July 1985 at his home in Englewood, Colorado, USA. In his three decades at the University of Denver (1946-76), he communicated to successive generations of students his institutional interpretation of political economy. Foster's comparative , historical approach to the study of economics imbued countless students with enthusiasm for, while making them at ease in, the world of ideas. His contribution is not to the literature of institutionalism—indeed, his published work comprises but one slim issue of the *Journal of Economic Issues*—but to its oral tradition.

Foster received the PhD from the University of Texas at Austin where Clarence Ayres was a major influence. Almost immediately thereafter, he accepted a faculty position at the University of Denver, where he was to remain for his entire teaching career. Some indication of the catholicity of Foster's interests and his intellectual scope is given by the range of subjects taught during his 30-year tenure. In addition to the standard Principles of Economics (taught in a distinctly non-standard fashion) courses regularly or periodically offered included the following: History of Economic Thought, Business Cycle Theory, Neoclassical Economic Thought, Comparative Economic Systems, Contemporary Economic Theory, Seminar on Keynesian Economics, Economics of Transportation, American Contributions to Economic Thought and Value and its Determinants. The range of subject-matter is an indication, not only of his intellectual breadth, but also of his impressive mastery of detail.

Along with depth and breadth of learning, Foster brought to the teaching of economics a distinctive perspective that was consistently applied over the diverse subject areas. Thus, for example, in Foster's view, institutional economics is the expression of the American experience (Foster, 1981, p. 865) and institutional thought the 'American contribution' to economics. Foster attributes the development of institutionalism in the USA not simply to special insight or force of singular personality, but to the American historical experience itself. He views the American frontier experience almost as an exemplification of the Veblenian thesis of the advantage of borrower nations. The dominant feature of US history, in his view, was the existence and settlement of a frontier beyond established order. The pandemic problem was that of wresting from the harsh environment the means of life. The conquest of neighbouring lands and peoples was not an option.

The new territory was settled by dissidents. The exigencies of life made it essential that all participate on more or less equal terms in the workaday tasks of 'getting a living'. The margin for error was meagre, calling for the acquisition of new skills and the assimilation of homely procedures based upon ability to contribute to survival and sustenance. It is Foster's sense of things that frontiersmen and women developed their own patterns of mores and folkways. 'Practical' knowledge was admired, inherited behavioural patterns rejected, invidious differentiation forsworn. The patina of use and wont with which particular work practices were imbued in established civilizations was inapplicable. Much of the ceremonial baggage was left behind, or jettisoned after arrival in the new territory (Foster, 1981, p. 864; see also Veblen, 1966, pp. 88-9; Ayres, 1944, pp. 133ff).

Extant conditions encouraged proceeding by way of trial and error, of experiment and innovation. They also fostered a 'can do' spirit and a positive view of the potential of public policy to influence the course of events. In Foster's view, the frontier experience nurtured a sceptical attitude towards institutional continuity, and a receptive one about the ability of institutional adjustment to improve economic performance.

Foster's teaching systematize, clarify, refine and extend the thinking of Thorstein Veblen, John Dewey and Clarence Ayres. Conducted with grace and wit, and with a vivid sense of the importance and sheer fun of the play of ideas, his lectures contributed in a substantial sense to the energizing and perpetuation of the institutional school of thought. He early apprehended importance and validity of Keynesian economics, and its relevance for and compatibility with institutional thought. Foster sees a correspondence between the institutional and Keynesian analysis at many levels: in philosophic foundation, in type of questions addressed, in specification of the causal dynamics in the economic process (Foster, 1981, p.949).

Foster differentiates between the institutional and Keynesian systems, on one hand, and neoclassical economics, on the other, in terms of respective perspective about the actual working of the economic world. In neither the institutional nor the Keynesian framework is the economy perceived as tending towards an optimal equilibrium state of rest. There is, in each, the perception of the existence of economic problems that are not amenable to automatic solution and that require the application of discretionary public policy tools. There is, in each, recognition of the problem-solving and inter-disciplinary nature of economics. Each appreciates the role and centrality to the economic process of uncertainty and behavioural complexities. There is understanding, in each, of the non-determinacy, of the essential open-endedness, of the economic process. (Foster, 1981, p. 955).

Foster apprehends Keynesian economics as an application of institutional theory; more specifically, as an application to economic problems of instrumental value theory. He points out that institutions are not posited in Keynesian economics as given data: the three independent variables whose relationships govern income and employment levels are themselves controlled by the institutional structure; that is, by accepted beliefs and practices. As a consequence;, they are subject to public policy control. Analysis of their determination need take the form of a theory of institutional adjustment. (Foster, 1981, pp. 866, 946, 955).

In Foster's view, neoclassical analysis looks to the adjustment only of the institution of price. Keynesian theory, in contrast, is a more generalized theory of institutional adjustment. Keynes's perception of unemployment as a norm of modern-day economies, rather than a temporary aberration in a system of natural harmony, is compatible with institutional sensibilities; his recognition of the potential, for example, of the socialization of investment or the euthanasia of the rentier to achieve public policy objectives is testimony to his understanding that institutional structures are not 'natural' and continuing factors in economic life.

The Keynesian distinction between speculation and enterprise is similar to that of Veblen between pecuniary and industrial employment, between making money and making goods (see Dillard, 1980, pp 259-62, 267-9). Keynes also perceives, in the unequal distribution of income, as does institutional theory generally, the strong potential for deficiencies in effective demand and economic instability. This is in contrast to the view of income inequality in orthodox economics as favourable to capital formation and economic growth. At bottom, Foster recognizes Keynesian economics as an affirmation of the institutional thesis that 'whatever is technically feasible is financially possible' (Foster, 1981, p. 966); that is, that a society's economic activity, economic progress itself, is not limited by the 'natural laws' of supply and demand but rather, at any given time, only by a community's evolving technical capacities.

Although different in content, Foster's courses are informed by a unifying vision and evince a thematic continuity, There is emphasis upon the continuing themes of institutional thought: that all human behavour contains, at one and the same time, both instrumental and ceremonial components (the

Veblenian dichotomy) and that economic development is evolutionary and processual (Foster, 1981, pp. 916-19). Thus, for example, Foster's debt theory of capital formation incorporates the Veblenian pecuniary-industrial dichotomy and the concept of evolutionary development. It also draws upon and enriches his insights both about the American frontier experience and the congruity between Keynesian and institutional analysis.

Foster calls into question the saving-centered theory of capital formation that is foundational to orthodox economics. Standard theory views saving as an act of abstention from consumption, and credits it with financing investment. Causality runs from prior saving to current investment; saving is thus posited as the dynamic factor in the relationship (Foster, 1981, pp. 952-3; see also Junker, 1967, pp. 27-30; Ranson, 1983, p. 902; 1987, p. 1269). Foster views this analysis as materially flawed, based upon a static view of aggregate income and containing, in its generalization to the whole from the part, a fundamental fallacy of composition.

Foster often explained the contrasting interpretations of the relationship to his students by the use of a few simple equivalencies. Income equates, in each interpretation, to consumption plus saving, and to consumption plus investment. It follows that saving equals investment. Symbolically, then:

$$Y = C + S, \text{ and}$$
$$Y = C + I. \text{ Therefore}$$
$$S = I$$

Even absent the ambiguities introduced by neoclassical economics into the saving-investment relationship, that is, even if those ambiguities are set aside and the equalities accepted unequivocally, the inferences drawn by neoclassicism vary substantially from those of Foster. Thus, for standard theory, the underlying meaning of the equalities is that decreases in consumption result in increases in saving. These, in turn, result in increases in investment and, thereby, in income. As a corollary, standard theory perceives an economic benefit to the economy from income inequality, because it is viewed as the basis for saving.

In contrast, Foster points out that in the aggregate there can be no hoarding. The income of a nation is, viewed from one perspective, the total of receipts from sales, and, from another, the total expenditures for sales. However measured, these must be equal. They constitute an identity; they are two sides of a coin. By definition, sales equal purchases. By definition, receipts equal expenditures. But if aggregate receipts cannot be a greater or lesser sum than aggregate expenditures, and they cannot, then in the aggregate hoarding must be zero (Foster, 1981, p, 952). To assume otherwise is to attempt to force the economy into an individualist mould: in effect, to anthropomorphize the economy. That is, while it is evident that an individual with a given income who decreases expenditures may increase individual saving, this does not hold true at the aggregate level.

Foster points out, moreover, that saving is the passive factor in the income equation; it is a residual, that part of income that is not spent (Foster, 1981, p. 952). Investment and consumption are the dynamics. Causality runs from investment to saving, and not from saving to investment. The equation between saving and investment is constant and simultaneous; the identity is an accounting one (Foster, 1981, p. 950; Junker, 1967, p, 18; Ranson, 1983, p, 906). Correspondingly, the equality of sales and purchases, and of receipts and expenditures, is instantaneous and continuous.

In substance, Foster points out, one must look to the technological process and the state of the arts and not to the pecuniary accountancy of relationships to understand economic development. The US frontier experience, in Foster's view, both demonstrated that reality and was perceived as such by its participants. (Foster, 1981, pp. 863-4). Orthodox ideas about the intergenerational disposition of aggregate income, about the requirement of an accumulation of a saving stock to accommodate investment, are not in accord with the facts (Foster, 1981, p. 967). He points out, and as is also evidenced in the Keynesian analysis, that aggregate income is not increased but decreased by a diminution in aggregate consumption.

To the question of how, in the absence of prior saving, investment is to be financed, Foster responds that financial accommodation occurs through the creation of credit by the only two institutions empowered to do so in modern societies: that is, by the treasuries of central governments and by the banking system. It is not an insufficiency of funds that constitutes the investment bottleneck for a society. The banking system has the capacity to create the requisite funds. Repayment of loans is made possible by the real income generated by technological advance and investment (Foster, 1981, p. 967). The rate at which credit is created is limited only by public policy.

In sum, in Foster's view investment is not constrained by the lack of saving. Natural laws of supply and demand are not controlling. The creation of money to finance investment is a function, directly as it affects supply, and indirectly as it affects demand, of discretionary public policy. In essence, in substituting a debt theory for the standard belt-clinching theory of capital formation, Foster reaffirms a continuing theme of institutional thought: that what is technically feasible is financially possible.

Foster's thought is distinguishable from that of orthodoxy on many grounds, but perhaps none more so than his identification of the locus of value with instrumental efficiency; that is, with the efficient fulfilment of the instrumental function of the social process (Foster, 1981, pp. 943-7; see also Tool, 1979, pp.300-3306). In his view, institutions fulfil both ceremonial and instrumental functions. At one and the same time, they differentiate invidiously among persons and groups and they fulfil basic human needs. It is with the fulfilment quantitatively and qualitatively, of those fundamental, continuing human needs—the need, for example, for nourishment, for shelter, for participation, and so forth—that Foster identifies instrumental efficiency, or the locus of value. (Foster, 1981, p, 908).

Technological advance effects concomitant change both in the instrumental and the ceremonial aspects of behaviour. It changes the means available to satisfy instrumental needs. Available means are more appropriate or less appropriate, adequate or inadequate to the tasks at hand, and are subject to evaluation through trial and error. Relative success is assessed in terms of consequences. No final ends are envisioned, however. Ends become means to further ends. The means-end process is a continuum. Technological change is developmental. It gives rise, however, to modifications in ceremonial behaviour also: in patterns of control, for example, and of deference.

In Foster's view, the solution to social problems requires the adjustment of institutions in the light of the character of the problem, and in response to technological development and the general expansion of knowledge. He contrasts this view to the view of orthodoxy that takes institutional patterns as fixed, that is, as given data, and that, at the same time, posits the maintenance or achievement of these institutional patterns as the criterion in terms of which the success of an economic system is assessed; that is, as the final end of the system. For orthodox thought, then the criterion of judgment is the institutional structure itself and its systemic purity. It is Foster's contention, to the contrary, that all economies are mixed (Foster, 1981, pp. 975-80). He dismisses the preoccupation of the mainstream with the 'normal' or 'natural', viewed at the same time as the status quo (or, in any event, the reality that would prevail absent corrupting intermediaries) and as an ideal pattern to which all things tend.

Foster's emphasis upon institutional adjustment and instrumental efficiency are important contributions to institutional thought. The study of economics is perceived as appropriately directed towards improvement in social functioning. Social and economic institutions are apprehended as patterns of and guides to thought and conduct that shape human behaviour even as they are subject to change by human purpose. Rejecting methodological individualism, he apprehends individuals as interdependent and interrelated members of a social whole, a collectivity that serves both to limit and to provide foundation and support for human action.

Human freedom, then, is viewed from a perspective that varies fundamentally from that of orthodox economics. The focus shifts from orthodoxy's preoccupation with 'freedom from'—the belief that the collective is a force for oppression only—to a concept of 'freedom to—a perception that individual action may be facilitated, and the scope of individual discretion increased, by conscious social organization. Individuals are perceived as architects, for good or ill, of their future.

Foster was a member of the Wardman Group, an outpost of institutional thought that assembled at meetings of the American Economics Association. The Wardman Group evolved into and constituted the nucleus of the Association for Evolutionary Economics (AFEE). Foster was the 1981 recipient of the highest honour bestowed by that Association, the Veblen-Commons award.

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