GROWTH, DISTRIBUTION, AND EFFECTIVE DEMAND

Alternatives to Economic Orthodoxy

ESSAYS IN HONOR OF EDWARD J. NELL

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Cumulative Causation à la Lowe: Radical Endogeneity, Methodology, and Human Intervention

Mathew Forstater

Students at the New School in the 1980s and early 1990s had the privilege of working with some bright lights of political economy in the prime of their research programs. Robert Heilbroner’s worldly philosophy; David Gordon’s social structures of accumulation; Pierangelo Garegnani’s and John Eatwell’s synthesis of Sraffa and Keynes; Anwar Shaikh’s dynamic analysis of the classical economists and Marx; and Edward Nell’s Transformational Growth—each articulating a paradigm that was the result of years of intellectual work. Each had a distinct style in research and in the classroom. It is hard to compete with Gordon, Eatwell, or Shaikh in the seminar room, or to match the deductive powers of Garegnani.

With Edward Nell it was not a matter of moving from point A to point B in a crisply articulate manner. Neither was it a case of unpacking a tightly woven paradigm. Studying with Nell was more a matter of being on the lookout for flashes of creative genius—making unpredictable connections, tying together unfamiliar pieces, reaching counterintuitive conclusions. Nell was clearly the most nondogmatic of the bunch—nothing was sacred except asking the tough questions. One imagined that Joan Robinson was the heterodox elder that Nell most resembled. When Ian Steedman delivered a seminar at the New School, Nell asked about money and uncertainty and the difficulties the long-period method faces in dealing with deeper structural transformations. When Paul Davidson came, Nell asked about value and production and problems with the Marshallian remnants in Keynes. He was dissatisfied with both of the extreme positions in the Trieste debates, and so naturally neither side was very happy with his interventions. Sraffa’s work was necessary, but not enough in itself; same with Keynes. Marx is crucial, but so are French circuit theory and Schumpeter and institutional economics. And Nell’s ex-
pertise wasn’t limited to economics. He has published in philosophy, is extremely well-read in history, and there are few with whom one can have a more insightful discussion about recent political and cultural developments.

After Heilbroner, who had been at the New School as a student or professor since the mid-1940s, Nell had the longest tenure in the department, having arrived in the mid-1960s, when Heilbroner was chair and Adolph Lowe was still a major presence in the Graduate Faculty. Lowe arrived in 1940, although he was affiliated with the University in Exile (later renamed the Graduate Faculty of Political and Social Science) since its inception. Several of the original faculty had been close colleagues and collaborators of Lowe in Germany in the interwar period, and Lowe quickly became the *spiritus rector* of the Graduate Faculty. In the mid-1940s, Heilbroner signed up for Lowe’s graduate seminar on the classical economists and was inspired to write *The Worldly Philosophers*. By the early 1960s, with three best-selling books under his belt, Heilbroner declined chairs at Berkeley and elsewhere (as well as the presidency of the New School!) to accept a professorship in the Economics Department. He was soon appointed department chair, and Nell was among his first hires.

Like many of the younger faculty, Nell spent a lot of time in conversation with Lowe, and eventually played an important role in the writing and publication of *The Path of Economic Growth* (Lowe 1976), for which he wrote the appendix (Nell 1976). Nell wrote several pieces related to Lowe’s work over the years, including articles for Festschriften and memorial volumes, an encyclopedia entry, and other books and journal symposia dedicated to Lowe (see Nell 1983a, 1983b, 1984a, 1984b, 1987, 1994, 1998a; Halevi et al. 1992). Though Lowe is not cited frequently in Nell’s *General Theory of Transformational Growth* (1998b)—one might even say that he is *underrated*—anyone familiar with Lowe’s work can see the tremendous influence. In Lowe’s political economics, economic “laws” are historically relative, since capitalism is a dynamic and evolving system passing through identifiable stages, each with its own basic tendencies and characteristics—reflecting beyond the economic sphere into all aspects of political and social life. This could easily be a description of Transformational Growth: growth is qualitative, disproportional, and disruptive, resulting in changes in the very “data” of the system itself, with methodological implications as well.

Like Lowe, Nell sees much of classical and neoclassical economics as relatively more applicable to an earlier stage of capitalism (of family firms and family farms), with Keynes’s work relatively more applicable to a later stage (mass production). Lowe and Nell both agree that the post-World War II era marks another stage of capitalism, though they differ somewhat in their analysis of that stage. While Lowe sees the modern system as disorderly, Nell sees instability but not disorder (Nell 1994). This difference has important methodological implications for Nell, because he interprets Lowe as arguing that it is disorder which necessitates the use of the instrumental method. In Lowe, however, disorder is a sufficient, but not a necessary, condition for appropriate use of the instrumental method (Forstater 1994). Lowe argued that the instrumental method is applicable to any behavioral and structural conditions (Forstater 1998, 1999). Because he did view the contemporary system as disorderly, that controversial position often attracted most of the attention of critics. But another part of the problem is that Nell does not recognize or accept Lowe’s definition of “disorder.” For Lowe any system that does not lead to satisfactory macro outcomes is disorderly, and clearly, under this definition, Nell would agree that modern capitalism fits the bill. But because Nell treats disorder as lack of behavioral regularities, he argues against Lowe’s position. Despite these differences, Nell adopts Lowe’s historical approach to theory. Of course, this tradition goes back at least as far as Adam Smith, who took the position that the labor theory of value held for an early stage of society, when there is little capital formation, but that changes in economic structure rendered the theory inapplicable and required an alternative explanation of relative prices.

Perhaps the notion in economics that the Lowe–Nell vision most resembles is cumulative causation, now recognized as one of the fundamental concepts in Post-Keynesian, institutional, and evolutionary political economy. Early proponents of the principle were Veblen (1898) and Allyn Young (1928), with later elaborations by Myrdal (1944) and Kaldor (1978). Another early, and unrecognized, exponent of the concept was Adolph Lowe himself (1935). In addition, it is not clear that the other writers directly influenced Lowe. Like Young and Kaldor, Lowe found inspiration for the notion in Adam Smith, but for Lowe it was rather the work of the classical political economists and Marx generally that exhibited the basic vision of cumulative processes, or what Lowe called variously the “dynamic chain of reciprocal causation,” the “strange process of self-generation,” or “mutual causation” (1935). Identifying and interpreting Lowe’s early and original contribution to the theory of cumulative causation is indeed an appropriate way to celebrate the contributions of Edward J. Nell.

There are several features of Lowe’s version of cumulative causation that are worth noting. First, Lowe not only speaks of cumulative processes within an “economic sphere,” but also puts forward a vision of a radical endogeneity in which nothing in the social and natural world is immune to social-historical transformation. Second, for Lowe the systemic transformations that result from cumulative processes not only require new economic theories to describe the basic tendencies of a given historical system, but may also require new methodologies to go about investigating them. The “object of inquiry” is changing, and some methodological approaches may be suitable for some systems but not for others. Third, for Lowe the cumulative processes of the last hundred years or so have resulted in an important transformation in the scope for human intervention into the cumulative processes themselves, with important implications for policy, and even ethics.

Early on, Lowe had become dissatisfied with static equilibrium models of neoclassical economics, but he was also less than satisfied with work labeled “economic dynamics.” Lowe lamented the fact that in most of this work, “the time-honored distinction between dependent and independent variables—that is,
between an economic process and the underlying metaeconomic forces that drive it on and change it—is generally maintained" (Lowe 1954: 108). He did find an exception in some “dynamic process analysis” that went further in endogenizing some of the structural variables in their theories of growth, but found these attempts to be “but a dim reflection” of what is found in the old classical economists and Marx (Lowe 1954: 108). It is in this regard that Lowe highlighted as a key difference between the classical and early neoclassical approaches

the entire possible range of deductive reasoning. Let us be quite clear about the disputed region. It concerns the whole natural, social, and technical environment of the economic system . . . and . . . the changes in these elements through time. . . . [For the classical economists and Marx] the explanation of the order and changes of these data formed part of the theoretical work of economists. (Lowe 1954: 109; emphasis added)

For Lowe, then, the classical economists applied their method over a much wider range than the neoclassical authors, to include the social-historical context of economic processes. Thus, for Lowe an evolutionary approach would aim to once again “extend the range [of analysis] . . . to the sphere of the natural and social data of the market process, and thus to facilitate an estimate of the direction and limits of possible dynamic changes of the system as a whole” (1935: 67). In this view, the classical approach considers areas thought to be outside the scope of economics in the neoclassical view—areas falling broadly under the heading of the social-historical context of economic processes—as legitimate targets of analysis. These areas are also therefore, to be included in a revived evolutionary approach to analyzing the contemporary political economy.

Lowe was a lifelong opponent of the idea that there exist any universal economic laws (Lowe 1935, 1977). For him economic theory is context dependent and historically conditioned. Because, as described above, the “explanation of the order part of the theoretical work” of the classical approach, Lowe believed that not only materialist approach: “Even in its loose classical form the idea of a mutual relationship between the economic and social process has some savour of a materialist interpretation of history” (Lowe 1935: 104; see also Lowe 1954). Furthermore, a revived evolutionary approach to the analysis of modern industrial economic and social systems:

Having at once realized the decisive influence technique of production exerts on modern economic dynamics, we immediately see historical materialism in a new light. It may be doubted whether it can be used as an open sesame for the whole history of mankind. But applied to the analysis of the industrial system it proves an informative working principle. It points to the strange process of self-generation in modern economic evolution which determines the institutional and psychological data of any constellation in the market by the previous results of the preceding constellation. (Lowe 1935: 111)

Lowe identified the deductive method as the method of both the classical and the neoclassical approaches (though, as seen above, in the classical approach, the range of deductive reasoning was much wider). But Lowe also came to the conclusion that not only economic theory, but also economic method, is historically contingent. Thus, while Lowe was a critic of the deductive method, especially later in his life, he believed that the conditions for the appropriate application of deductive reasoning were in fact in place during the period of classical economics. But with the historical structural-technological transformations of capitalism and associated feedback effects resulting in environmental, institutional, behavioral, and socio-psychological changes, these conditions no longer held under modern industrial capitalism (Lowe 1977). From around the mid-1950s, Lowe believed that what he called instrumental analysis is the appropriate methodology for economic theory and public policy. This position is in part due to the fact that the “laws” or tendencies which once held in the classical era were no longer reliable, and in part due to the tremendous increase in the scope for human intervention into the system’s processes.

For Lowe, “in the industrial system the economic process itself produces and changes its data” (1935: 97). The neoclassical approach of taking the “whole natural, social, and technical environment” as given “cannot be reconciled with the experience that the economic circular flow transforms its social environment” (1935: 105–6).

Any realistic theory of the modern economic system must start from the general premise that it can no longer deal with a constant structure and with homogeneous processes, but that the economic order under consideration is subject to an evolutionary transformation. Therefore, any deductive operation with invariable data is defective from the very outset. Long period analysis cannot dispense with a previous examination of the tendencies of the data themselves, that is to say, the corresponding sociological constellation and its regular changes, and moreover of the mutual relations of the variations on both sides. Above all this dynamic chain of reciprocal causation between the economic process and its social environment calls for a theoretical system of co-ordinates which is on the one hand determinate enough to define the course of individual movements, and on the other hand elastic enough to reproduce the system as a whole. We need not expressly decide henceforth to insert sociological elements into our economic deductions—there was never any substantial statement which was not based on such premises. But we are to render manifest and open to continuous examination and revision those implications which formerly remained latent, and whose modifications were usually neglected. (1935: 138–39)
For Lowe, data can be treated as given only for short-period analysis: "If long period movements and final constellations are to be examined, the autonomous tendencies of the several data and their contact with the process under consideration are to be investigated in coincidence and in constant confrontation with the special deduction" (1935: 136).

It is the fundamental theorem of realistic theory that under the particular social conditions of the industrial system, data and process are involved in a regular and continuous interaction which makes any concrete constellation, and therefore the system as a whole, essentially unstable and liable to transformation. For this reason in any long period analysis concerning the industrial system, on principle the data are to be handled as "dependent variables." (1935: 146–47)

Lowe's language makes it clear that he is proposing an evolutionary approach which recognizes the principle of circular and cumulative causation. His emphasis on cumulative processes not just within the economic sphere, but throughout the entire social system (including even the natural environment), makes his version of cumulative causation perhaps the most all-encompassing and pervasive of the various conceptions. While others have emphasized knowledge problems emanating from issues regarding the limits of human perception and human language, Lowe emphasizes the knowledge problems resulting from endogenous changes in the object of inquiry.

Lowe became increasingly convinced that a key difference between the systems described by the classical economists and the contemporary political and social economy is the degree of openness to human intervention. The world of the classics was one in which "social processes were the outcome of impersonal forces or 'laws' which might be observed or interpreted, but which could not be altered. . . . That which once 'happened,' can now more and more be made to happen, or prevented from happening" (Lowe 1971: 565–68).

In the face of this tremendous enlargement of capabilities, there is no possibility of turning away. Even doing nothing, or outlawing the further advance of our capabilities, would be as much an act of intervention as exploiting our newfound capabilities to the utmost. (1971: 568)

Lowe's "reciprocal causation" and "mutual causation" constitute a clear exposition of the principle of circular and cumulative processes. Lowe points to some of the most important implications of recognizing the principle of cumulative causation. The economy creates, destroys, and otherwise transforms its "data," and so nothing is "given" or remains stable in the historical analysis of evolutionary economic systems. Nothing is "exogenous," except perhaps in the shortest of short runs. Cumulative processes result in systemic transformations that result in old systemic tendencies dying away and new ones emerging. The change in the object of inquiry implies not only a change in theory but a change in method as well. Moreover, for Lowe historical cumulative processes have resulted in a remarkable change in the degree to which human intervention is possible. Such a change not only has theoretical and methodological implications, but demands reflection on the role of the social scientist, as well as the scope and the ethical nature of public policy.

Note
1. Some of Nell's students have contributed to recent developments of the notion of cumulative causation; see, e.g., Argyrous (1996), and Argyrous and Sethi (1996).

References
The Epistemological Status of Economic Propositions

Gary Mongiovi

"[E]conomic theories are to be judged partly by whether they are backed by a suitable scientific method which is itself backed by a sound theory of knowledge." — Hollis and Nell 1975: 13

Introduction

This chapter revisits a six-decades-old polemic on economic method among the economists Frank Knight, Terence Hutchison, and Adolphe Lowe, and the philosopher Felix Kaufmann. The debate merits reexamination because it raised important, and still unsettled, issues about the meaning of economic propositions. The relevance of these issues, far from being diminished by the passage of time, is underscored by "the crisis of vision" of modern economic theory, which is at root a crisis of method.

Kaufmann and Lowe were members of the Graduate Faculty of Political and Social Science at the New School for Social Research. The Graduate Faculty was founded by Alvin Johnson in 1933 to assist European scholars who faced persecution under the fascist regimes of Germany and Italy. Johnson realized sooner than anyone else that the dislocation of hundreds, and eventually thousands, of Europe’s finest scholars presented a unique opportunity to enrich the American intellectual landscape. Within a few years of its inauguration, the Graduate Faculty, or the University in Exile, as it was known in its early days, had earned a reputation as a center of first-rate innovative work in the social sciences.

Because the Graduate Faculty was composed almost entirely of émigrés, the