Between theory and history: on the identity of Hicks's economics

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Hicks's economic theorizing

John Hicks was one of the most influential economists of the twentieth century. His contributions have shaped the core theories of rational choice and human welfare, value and money, capital and growth. At the same time, Hicks's contributions often address contentious issues, and sometimes suggest unconventional and controversial points of view. In John Hicks, we see economic theorizing at its most fundamental, almost formative, stage. In his writings, economic theorizing strives to achieve, and succeeds in maintaining, a balance between the requirements of analysis and the explicit recognition of the relevance of history and institutions. In short, Hicks's contribution to economics belongs *both* to the so-called 'mainstream' and to its critique.

This characteristic feature of Hicks's work derives from a seemingly simple, but in fact highly sophisticated, approach to the construction of economic theory. Hicks takes theories to be the product of a particular 'concentration of attention' (Hicks, 1976a: 209). Theories are focusing devices that may be effective in bringing to view certain causal patterns, while leaving other (possible) causal patterns aside. This makes theories essential to economic analysis (as some concentration of attention is a necessary condition for the identification of a causal relationship). The same approach makes *multiple* theories possible, however. Indeed, the possibility of distinct theoretical frameworks is a most natural consequence of changes in the concentration of attention (see Scazzieri, 1993b). Moreover, such changes are often necessary to preserve the relevance of theories vis-à-vis historical or institutional changes.[1] In Hicks's view,

[1] The view of economic theories as frames suggesting certain patterns of causality, while leaving other patterns aside, is reinforced by Hicks's belief that 'many of the terms that are used by economists are derived from business practice' and that 'a good part of what is called economic theory is best regarded as a criticism of those concepts, finding out what adjustments have to be made to the business concepts in order that we may use them as instruments of more general thought' (Hicks, 1986a: 99).

particular (almost context-dependent) theories are at the same time essential and dispensable tools of investigation. In one of his late writings (*Causality in Economics*; 1979a), Hicks maintains that economics 'if it is on the edge of the sciences…is also on the edge of history' (1979a: 4). His approach to economic theorizing as a scholarly pursuit is accordingly multifaceted. Hicks did not belong to any specific 'school' of economic thought. He would have certainly subscribed to the well-known sentence by Johann Wolfgang Goethe: 'Every school of thought is like a man who has talked to himself for a hundred years and is pleased with his mind, no matter how stupid it may be' (Goethe, 1976 [1821]: 39).

Hicks was especially skilled in identifying similarities and points of convergence among distinct theoretical frameworks. His interest in the Walras–Pareto formulation of economic equilibrium and in Alfred Marshall's analysis of markets was combined with a deep knowledge of Austrian and Swedish capital theory, and of John Maynard Keynes's macroeconomics. Hicks's view of the subject matter of economic theory is at the root of his highly distinctive approach to the relationship between pure economics and institutional economics. In his contribution, economic theorizing *includes* the consideration of the conditions that make specific theoretical frameworks outdated. In this connection, Hicks maintained that recognition of the *limits* of economic theory might be an important source of theoretical innovation. In this sense, we may say that Hicks was a standard-bearer of the idea that there cannot be a unique theory at the center of economic discourse.

The intellectual agenda of John Hicks shows a remarkable mix of continuity and change (see also Baumol, 1972). This is partly due to the tolerant disposition that was characteristic of Hicks as a theorist. The varied course of economic history may require changes in the theorist's concentration of attention. Hicks, however, always preferred 'to combine elements from different theoretical systems rather than deduce his conclusions from a set of consistent hypotheses' (McKenzie and Zamagni, 1991: xxix). It is interesting that this approach has a precise counterpart in Hicks's attitude to the identification of causal relations in history. In this case, as noted by Peter Bauer, Hicks uses a combination of two distinct methods: 'First, inferences from statistical uniformities of some aspects of his historical events, and, second, examination of the implications of particular phenomena to deduce how one situation leads predictably to another' (Bauer, 1971: 175–6). Hicks's analysis of the 'rise of the market' in his *Theory of Economic History* is a case in point, for he suggests that one should identify a critical phenomenon, or watershed, in history and then look into 'what logically follows from it' (1969a: 7–8). Economic theory is necessary to this analytical exploration of history, but, according to Hicks,

the relevance of particular theories is likely to change as we move from one set of historical circumstances to another. Similarly, attention to historical record is necessary, but this does not imply that the theorist should be unduly restrained by statistical uniformities. As a matter of fact, Hicks requires only that the analysis of the logical implications of historical events should not clash 'with the largest and most obvious facts' (1969a: 8). In short, he is acutely aware of the importance of hierarchical structures both among theoretical concepts and among facts. The success of any attempt to identify 'intelligible reasons for which one [economic state of society] should give way to another' (1969a: 6; as quoted in Baumol, 1990: 1712) ultimately depends upon the analyst's ability to identify meaningful associations between theoretical concepts and facts – that is, associations appropriate to the specific context under consideration.

This approach is highly characteristic of Hicks, and paves the way to Hicks's propensity to go back to past concepts in order to highlight new and sometimes radical changes in economic institutions and patterns of behavior. Hicks is well known for his willingness to recognize that views (or theoretical frameworks) that he had previously endorsed ought to be discarded due to the need to switch to different concentrations of attention. At the same time, there is in Hicks a surprising continuity underlying an intellectual output of more than sixty years. This is especially clear if one looks at the linkage between decisions and time, and at the related issue of the stage structure of the production process. These features emerge as a critical element in the analysis of the 'repercussions which *must* take time to work themselves out – which are delayed, not by slowness of communication or imperfect knowledge, but by the technical duration of productive processes' (Hicks, 1974a [1939]: 283). The same themes are taken up again in Hicks's discussion of the methods of economic dynamics (1956a, 1985a), in his analysis of the traverse from one steady state to another (1973a), and in his discussion of the causal structure of decision-making (1979a).

One important theme running through Hicks's contributions is the idea that, at any given time, the space of possible outcomes open to individual choice is bounded by physical or historical constraints (often arising from past choices), and that such constraints causally link events along temporal sequences. Such complementarities over time are central to Hicks's understanding of money, capital accumulation, and economic dynamics. In Hicks's conceptual framework, human choice is free and historical inevitability is rejected. This means that choice is seen as the ultimate determinant of actions, even if the actual outcome of any given choice reflects a 'structure' of possible events that is, to a large extent, independent of human deliberation (see Scazzieri, 1993a, 1993b). Choice, in Hicks's

terms, presupposes a difficult balancing act between the pursuit of a particular objective and the representation of a specific set of intertemporal constraints. In this way, historical inevitability is questioned on two different grounds. First, human goals and decisions reflect not only the state of the world when the decision is taken, but also the unfolding set of constraints met by any given decision in the course of its realization. Second, constraints are associated with loopholes that make human decisions central to the actual course of events. That is why, according to Hicks, the widespread practice of reducing time to a mere dimension of space cannot be accepted as wholly satisfactory in economics.

Hicks's intellectual output shows a surprising continuity in what he came to recognize as the distinctive features of his identity as an economist. The causal structure associated with decision-making and with the implementation of decisions has been central to his theoretical work. In this connection, the relationship between time and economic decisions provides the background to contributions ranging from value and welfare theory to the theory of capital, from monetary economics to the methods and theories of economic dynamics (see Hamouda, 1993).

John Hicks was primarily a theoretical economist, but he never turned his interest in abstract concepts into one-sided attachment to any particular scheme of theory. He was, as Robin Matthews has noted, 'a conceptualiser' (Matthews, 2004: 32; see also Matthews, 1989). Indeed, he was 'more a toolmaker than a tool-user' (Matthews, 2004: 32). He never allowed any particular point of view to conceal the *variety* of possible theoretical frameworks, however. In spite of having 'in his own mind a consistent system of thought' (*ibid.*), he was ready to accept the provisional and contingent character of specific economic theories. At the same time, he was convinced that theoretical schemes are essential to the understanding of economic reality. Hicks acknowledged the need for theoretical pluralism. He was not an eclectic economist, however. He adopted a pragmatic view of theorizing (Hicks, 1985b, 1988). This led him to think that theories are context-dependent and that the switch from one situation to another may sometimes require the introduction of a different theoretical framework.

Hicks's view of economic theories as 'blinkers' that induce a selective concentration of attention (1975a, 1976a) made him look at theories as local devices. The switch from one context to another could make a previously accepted theory (and causal structure) no longer useful under the different conditions.

This explains the persistence of fundamental theoretical schemes in the midst of changing circumstances (and academic paradigms). This is possibly the reason why 'the relationships of Hicks to modern economic

orthodoxy are ambiguous and complex… An architect of such an orthodoxy, Hicks distances himself from it more and more as his career proceeds' (Benetti *et al.*, 2001: 8; see also Dostaler, 2001: 21–2). It is this peculiar way of doing economics that makes Hicks's work so influential with so many authors of different schools and methodological approaches.[2]

Choice, time, causal structures

One important premise of Hicks's theoretical framework is the distinction between the structure of reality and the purpose-oriented arrangement of human actions. There are reasons to believe that, at an early stage of his development as an economist, Hicks came across the distinction between an 'order of being' and an 'order of doing,' as discussed by Maffeo Pantaleoni (Pantaleoni, 1925). As a matter of fact, Pantaleoni (in a passage carefully read and annotated by Hicks) had written:

> Ancient logicians distinguished between a *causa fiendi* and a *causa essendi*, then between an *ordo fiendi* and an *ordo essendi*. In modern language, we have reserved the term *cause* to phenomena related to one another by a necessary order of occurrence in *time*, and the term *joint occurrence of conditions* to phenomena of *necessary and contemporaneous co-ordination*. A causal process is not a reversible one. On the contrary, a system of co-ordinated conditions may be looked upon starting from any one of its points; it has no order; it shows simultaneity. Now, economic phenomena show sometimes the former, sometimes the latter property. In any practical case, it will be easy not to get lost. (Pantaleoni, 1925: 71–2)

Pantaleoni's dissection of causality concepts continues with the discussion of alternative classes of phenomena:

> There are…amongst phenomena associated with an *ordo fiendi*, that is, phenomena associated with a causal connection, many in which we cannot overlook the *reaction* that the effect generates upon the conditions from which it was born, reaction such that a new *effect* has the above reaction as one of its causes. The following may be a scheme of such an order of phenomena: let all circumstances A, B, C be such that effect α can be produced; once α has been produced, the circumstances that *now* will produce a new effect β will *not only* be A, B, C – as beforehand – but A, B, C, *plus* what is due to a modifying or additional factor, that is we shall have to consider $A, B, C, + d$ as concurrent causes of β. And this process will continue… To sum up, we shall have three classes of phenomena: (i) phenomena that present us only with an *ordo essendi*, in which it is out of place to speak of cause–effect relationships; (ii) phenomena that present us with an *ordo fiendi* of

[2] Hicks is almost unique among contemporary economists in the recognition received across the full spectrum of academic economics. See, for example, the three collective volumes edited respectively by Wolfe (1968), Hagemann and Hamouda (1994), and Puttaswamaiah (2001).

the simple kind, in which the relationship of cause to effect is not difficult to disentangle; (iii) phenomena that also present an *ordo fiendi*, but in which it is necessary to account for the reaction that the effect produces upon its generating causes, thereby modifying such causes in their subsequent operational phase. (Pantaleoni, 1925: 72)

Hicks carefully read the chapter of Pantaleoni's *Erotemi di economia* in which the above argument is to be found, and noted the importance of the distinction between 'an order of being and an order of doing – the latter, in economics being complicated by interdependence' (Hicks, manuscript notes, presumably 1920s).[3] The distinction between order of being and order of doing is a distinctive feature of Hicks's approach to economic decisions in their relationship with economic causality. Indeed, it may be argued that, according to Hicks, such a distinction is precisely the critical element explaining why economics is at the edge of history and science. This epistemic structure leads to an interesting implication as to the history of economic theory. For, as Hicks acknowledged, '[e]conomics is more like art or philosophy than science, in the use that it can make of its own history' (1976a: 207).[4]

Hicks went back to an explicit discussion of this issue in the lectures he delivered in Oxford in Trinity term 1979 and published in *Causality in Economics* shortly afterwards (1979a). There he discussed 'old causality' (causal relations based upon responsibility) and 'new causality' (the Humean view of causal relations in terms of generalizations and 'laws') (see Hicks, 1979a: 1–11). In particular, Hicks noted that, in spite of the explicit commitment of economics to new causality (at least since Adam Smith), 'the relationship of economics to the New Causality is nevertheless rather special' (1979a: 9). The reason is that 'economics is concerned with actions, with human actions and decisions, so there is a

[3] Manuscript notes, in Hicks's handwriting, inserted in his personal copy of Pantaleoni's *Erotemi*. John Hicks presented his copy of Pantaleoni's *Erotemi* to one of the editors of this volume (Roberto Scazzieri) in December 1987.

[4] Hicks elaborated this point on many different occasions. In particular, in his 'Capital Controversies' essay (1977d: 149–50), he writes:

> Economics is a social science, and a particular kind of social science, in that it is concerned with the rational actions, the calculated actions, of human beings, and with their consequences. This has the result that those whom we study can hear what we say. We may speak to each other in our private languages, but private conversations are no more than goods in process: while we speak only to each other we have not finished our job. The ideas of economics, the powerful ideas of economics, come from the market-place, the 'real world', and to the 'real world' they go back. […] In the course of the dialogue ideas acquire associations; they cease to be free ideas, which can be defined at choice… We cannot escape associations, but we can try to understand them, so as to be masters of them. That is what, in my view, the history of economics is for. We need to know the history of our concepts in order to know what it is that we are handling.

way in which it comes nearer to the Old Causality than the natural sciences do' (*ibid.*). Hicks is noting the close relationship of this issue with 'the struggle between free will and determinism' (*ibid.*). In a brilliant twist of his argument, however, he also maintains that 'in economics we find a solution' due to the 'relativity of time' that the analysis of economic decisions brings to light.[5] In Hicks's view, the relativity of time in economics is simply due to the fact that a 'double vision' is needed. Economic decisions at dates other than the present are taken when decision makers 'have different pasts behind them and futures before them' relative to the pasts and futures they have in the current period (1979a: 10). Hicks's concept of a double vision is related to his distinction between two different types of causality. Causality as interdependence (or causality as joint occurrence) makes identification of responsibility difficult (see above). On the other hand, causality as sequential determination may conceal the possible joint determination of outcomes (as any given outcome may follow from a plurality of causes). In other words, old and new causality are often intertwined to such an extent that to privilege one type of causality over the other may obscure the causal processes at work in any particular situation.

The double vision advocated by Hicks could be seen as a partial solution to the above problem. This is because human beings take decisions starting with a specific set of pasts and futures (see, for instance, Hicks, 1979a: 10). As a result, different positions in time are likely to be associated with different decisions and different patterns of sequential causality. Identification of sequential causality is often too demanding in terms of the amount and quality of the information required, however. For example, we may lack adequate knowledge of the causal loops that can turn intermediate effects into reinforcing or mitigating influences relative to the original cause. The dual vision allows the economist to switch from the pasts and futures from the agents' point of view to the pasts and futures from the point of view of the causal process under investigation. The *ex ante* approach to causality deals with decisions not yet made. This makes *ex ante* causality closer to the identification of the joint occurrence of conditions than to the reconstruction of a historical sequence of events (see Hicks, 1962a). As a result, *ex ante* causality may be useful when adequate historical information is missing, so that we are bound to the fiction of the joint (or simultaneous) occurrence of causes and effects (Hicks's contemporaneous causality). *Ex post* causality presupposes detailed historical knowledge, and is less concerned with the existence

[5] Hicks acknowledges that this is 'a much more elementary sense of relativity…than Einstein's' (1979a: 10).

of a 'virtual' causal space (Hicks's sequential causality). Hicks's double vision implies the analyst's ability to switch from the understanding (*Verstehen*) of human decisions *in time* to the description and explanation of causal linkages as they unfold *through time*.[6] In Hicks's view, economic thinking is on the edge of science and history precisely as a consequence of such an interplay between two different views of causality (see also Zamagni, 1991: 264).

In short, there are a plurality of ways in which time can be conceptualized in economics, and each one answers peculiar cognitive questions. It follows that there will be a multitude of different methods, each one able 'to cast some light upon some aspect of the phenomena' (Hicks, 1965: v). This implies that *the* dynamic method does not exist. Indeed, there are two wide varieties of dynamics: 'expectational' and mechanical. In the former, expectations play a fundamental role in explaining the economic process – i.e. in dealing with the specific role of history in economic affairs. This is not so in mechanical dynamics models, where change consists only of 'locomotion' – that is, is an analogue of a simple change of place. It is within such a cognitive frame that one can understand the specific meaning of Hicks's traverse analysis. By drawing attention to deviations between the actual position of the economic system and its corresponding long-period (steady-state) position, the study of traverse provides a case for the *counterfactual* approach to sequential causality – the cause being a change in technology occurring at a certain point of time (the 'impulse'), the effect being the entire difference between the traverse path and the path the economy would have followed in the absence of such a disturbance.[7] In this connection, it may be interesting to note what Keynes wrote in the passage of the *Treatise on Money* where he first mentions causal processes: 'The real task…is to treat the problem dynamically, analysing the different elements involved, in such a manner as to exhibit the causal process by which the price level is determined, and the method of

[6] The classical distinction between human deeds (*res gestae*) and the corresponding narrative (*historia rerum gestarum*) is relevant in this context.

[7] It is interesting that traverse analysis is especially useful in explaining patterns of change that have to take time to unfold themselves. This is clearly shown by the relationship between Hicks's *Theory of Economic History* (1969a) and his *Capital and Time* (1973a). The former discusses in an informal way the idea that economic processes may be analyzed by examining the logical implications of discontinuous change (for example, the switch to a different method of production, or to a different institutional set-up). The latter introduces a theoretical framework for the investigation of this type of shock. As it emerged in Hicks's work after *Capital and Time*, the distinctive feature of traverse analysis is not the investigation of possible convergence to a new steady state, but 'the concept of an impulse, a shock which can be traced through a sequence of consequences flowing from the potential of a major new invention' (Helm, 1984: 19).

transition from one position of equilibrium to another' (Keynes, 1971 [1930]: 120). Keynes's argument runs in terms of deviations of actual magnitudes from long-period counterparts – a conceptual exercise very close to Hicks's sequential causality.

Irreversibility and freedom of choice

Isaiah Berlin's distinction between negative and positive freedom is well known (Berlin, 1958).[8] Hicks's analytical contributions may be considered an attempt to solve Berlin's duality by taking advantage of the special epistemological status of economics (see above). According to Hicks, human beings are to a large extent free from *binding* constraints if we consider them as rational economic agents. Here Hicks is close to the standard view that, under given conditions, economic choice may be defined as a deliberation about how to use available means when a variety of different alternatives are feasible. Nevertheless, Hicks's attitude to freedom of choice entails not just the recognition of the (negative) freedom associated with the ability to make use of available resources according to the agent's best judgment. It also entails recognition that the (positive) freedom associated with the actual options that any given agent may be able to choose is bounded by past choices and by their outcomes. In particular, past choices do not only influence the agent's choice set at any given time; they also influence the causal processes associated with any given choice at different time periods. Actions a_t and a_{t+1} (selected from choice set **A** and such that $a_t = a_{t+1}$) are likely to produce different outcomes ($e_t \neq e_{t+1}$) as long as actions a_t and a_{t+1} have a different past. This time asymmetry – which lies at the bottom of both path-dependent phenomena and lock-in effects[9] – is central to Hicks's view of economic action, and is at the root of his interest not only in the pure logic of choice but also in the particular conditions making any given choice causally different depending on its particular timing.

[8] Berlin maintains that there are two central senses of freedom or liberty (1958: 6–7):

> The first…, which I shall call the 'negative' sense, is involved in the answer to the question 'What is the area within which the subject – a person or group of persons – is or should be left to do or be what he wants to do or be, without interference by other persons?'. The second, which I shall call the 'positive' sense, is involved in the answer to the question 'What, or who, is the source of control or interference, that can determine someone to do, or be, one thing rather than another?'. The two questions are clearly different, even though the answers to them may overlap.

[9] This is because, once a state of affairs has been achieved, it is difficult to escape from it.

An early recognition of the time-dependent character of economic choices *as causes* may be found in the treatment of complementarity over time in Hicks's *Value and Capital*: 'Initial equipment will consist, to a large extent, of goods at the intermediate stage of production; work has already been done on them with the object of converting them in the end into a certain kind of product; if this process is at all far advanced, the degree to which its ultimate object can be changed will be limited' (1974a [1939]: 211). Agents may be equally rational and subject to similar (or altogether identical) resource constraints. Nonetheless, the outcomes associated with their choices may be radically different as long as any given choice has a *different past* and is thus inserted in a different set of causal connections over time. This time dependence of economic causality has an interesting implication as to the irreversibility of economic actions. This is because choices may be reversible as long as the same individual (or group) is subject to broadly similar boundary conditions. The principle of substitution works on that basis. In Hicks's words, 'If the price of a particular factor *A* rises, and is expected to remain constant at the higher level, the total planned input of that factor must be reduced' (*ibid.*).

All the same, 'there are reasons…for supposing that the effect on the inputs planned for the more remote future will be greater than the effect on current input and input of the near future' (*ibid.*). This qualification suggests that the reversibility of economic actions is limited, and is consistent with Hicks's 'pragmatic attitude' to the principle of substitution (see Paul Samuelson's contribution in this volume). The near future is more closely influenced by the immediate past, and in particular by the 'specific character of the initial equipment' (Hicks, *ibid.*). Limited reversibility points to the causal determinacy of economic choices under conditions of freedom of choice. This means that, according to Hicks, choices are neither inevitable nor completely reversible. History (not only economic history) is shaped by human freedom to choose; but the causal influence of any given choice is specific to its timing and to the causal processes initiated in its past. To conclude, agents may choose the same alternatives, and yet the outcome of their choice may be radically different from one agent to the next depending upon their past choices and complementarities over time. This point of view is a unifying thread of much of John Hicks's theoretical work, from the dynamic explorations in parts III and IV of *Value and Capital* to the traverse analysis of *Capital and Time*. In this way, Hicks's dynamic theory 'emerged as a recognisable theory of a process' (Hahn, 1990: 541), which has roots in the Swedish tradition (see, in particular, Lindahl, 1933, 1939) and stimulated modern developments in the analysis of sequence