

## Untidy or Untractable? G.B. Richardson's view of economics

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Differences between economics, on the one hand, and organization and management studies, on the other, turn in part around ideas of perfection. While both sides may happily discuss such fuzzy notions as community, networks, knowledge, practice, organizations, and capabilities, economists tend to hold such entities are the result of market imperfections. In perfect conditions, these fade into the more fundamental notions of commodity, market, information, price, entrepreneur, and production function. It isn't hard to find sociologists willing to accept that in the final analysis (whatever that may be) the economists' position is ultimately right. It is rarer to find economists willing to argue like an unreconstructed sociologist that some of the fuzzy notions may be irreducible and, even, some of the economic notions incoherent. For which reason G.B. Richardson deserves more attention than he has received from either sociologists or economists.

It would be hard for him to receive less. Trained as a mathematician, Richardson studied under the Oxford Keynesian John Hicks and went on to be a fellow at St John's College. He published only a small body of work which is occasionally cited but rarely discussed. Yet this work provides valuable insights into the complexities of industrial organization and the nature of the firm. Invoking Ronald Coase's famous article in that last phrase may seem absurd. Coase's fifty years in economics and ever-growing influence was crowned by the Nobel Prize. Richardson, by contrast, had so little influence that in 1974 he resigned his fellowship and became chief executive of Oxford University Press. In the nineties, his first book was republished and he was encouraged to write again by a group of economists, some of whom seem to have been eager to domesticate his work for the field. Others appear more aware of how much his work resists economic domestication.

Even Coase--having embarrassed neoclassical assumptions with the simple question, if markets were so efficient, why are there firms?--took some time to be absorbed by the profession. Yet Coase himself noted that his answer--that there were firms because there were transaction costs--was both “realistic” and “tractable” (Coase, 1937, p 386). "Realistic" is inherently an empirical claim, and Coase's theory drew unavoidable empirical support from the sheer weight of firms in the economy. Furthermore, coming to prominence in the 1970s, it found implicit analytical support in Alfred Chandler's studies of vertical organization and the “visible hand”. (Chandler himself, however, was insufficiently familiar with Coase when he wrote *The Visible Hand* (1977) that he refers to the economist as “Richard”.) Coase's elegant argument could find support, of course, in markets as well as in hierarchies. It was symbolic, then, if not significant that he won his Nobel in 1991 as the information economy, by reducing transaction costs, seemed to be transforming bloated hierarchies into naked entrepreneurs in what some enterprising commentators called “the law of diminishing firms”.

Coase's claim that his theory was “tractable” is a methodological one. It emphasizes from the first page of his 1937 essay that his argument could be fit well within the standard economic household. Neatly defining the boundaries of the firm around the binary "make or buy" decision, the theory made modeling, the central method of the field, manageable.

Richardson, by contrast, confessed that his system was “untidy” and resistant to easy modeling. Such a claim not only challenges domestication, but also in the eyes of some of the profession is no less than “nihilistic” (Casson, 1997, p. 212). Empirically, Richardson's work was not unrealistic--he could point to a good deal of evidence (much of it hurriedly swept under rugs by Coaseans and Chandlerians)--but it was perhaps unfortunate, or at least ill timed. For as noted, it returned to circulation in the 1990s, just as people were not only peddling "the law of diminishing firms", but also conjuring ideas of ever-more-perfect information and competition and grand visions of frictionless markets. In such times, the co-operation that Richardson

pointed to was seen as at best anachronistic and at worst uncompetitive. The Berkeley library copy of Richardson's first book, *Information and Investment* (1960), is revealing. Not only does the book sit uneasily between Ricardo and Samuelson, but its loan-stamp history shows regular, if infrequent, readers up to 1993 and then a hiatus during which it must have sat undisturbed on the shelf until 2001, when regular but infrequent borrowing begins again.

By the latter date, the grander visions were fading. Despite talk of young and restless entrepreneurs, it became increasingly clear that even the technology sector--as Woody Powell, AnnaLee Saxenian, and others had been pointing out for some time--was made up of complex network relations and that these, as Jean-François Hennart had noted, had no clear place in transaction-cost models. (Williamson dealt with their methodological unsightliness primarily by suggesting that they were empirically transitional.)

Richardson's 1972 essay, "The Organisation of Industry", begins, "I was once in the habit of telling pupils that firms might be envisaged as islands of planned coordination in a sea of market relations". The phrase is perhaps not as innocent as it looks. Coase uses the same image in "The Nature of the Firm", and though Richardson is unfailingly polite when he discusses Coase in the final footnote of his paper, his argument is theoretically antagonistic. Where Coase tries to describe dikes of transaction costs that divide the sea from the land, Richardson seeks show that there are more things in heaven and earth than described in this philosophy. In particular, there is the "dense network of co-operation and affiliation by which firms are inter-related". Without accounting for these, the transaction cost argument was no more than a "harmless first approximation".

With tact, elegance (like Coase, Richardson eschews equations; unlike Coase he was trained as a mathematician), but also rigour, Richardson goes on to argue that three things have to be accounted for: direction (a term he borrows from Coase but later rejects); market transactions (a phrase that neatly avoids reifying markets); and, running between the two extremes and embracing innumerable (and hence not easily

modeled) configurations, co-operation. Further, Richardson's vision is not predicated upon an ideal of autonomous, and inherently substitutable entrepreneurs. It begins, instead, with real economic agents with distinctive capabilities. He acknowledges that "the notion of capability is no doubt somewhat vague", adding slyly, "but no more so than liquidity".

Richardson develops the notion of capabilities from Edith Penrose, thus aligning his work with evolutionary (and subsequent path-dependent) views of the firm. He is particularly interested in the complementary capabilities that go to make a supply chain and which firms must depend on but may not control when they make market decisions. This notion has been since made famous by Teece's discussions of "complementary assets", but here again we see the difference between tractable but thin concepts and untidy but rich ones. *Assets* is a recognizably economic term that suggests capital and commodities. *Capabilities* captures more awkward notions such as the practice, serendipity, learning, and experience that go into making capabilities. Indeed, Richardson talks elsewhere of the "economics of experience (1960, p. 60).

Firms, Richardson argues, will tend to integrate when they need complementary capabilities that are similar enough to submit to common management capabilities. They will instead cooperate when they need complementary capabilities that are dissimilar and require distinct management skills. Unlike firms and markets, there is no ideal type on which to base co-operation: it can take many forms along a continuum from almost hierarchy to almost market. (The argument thus helps raise interesting questions about the location of power in supply chains.) "This co-ordination," Richardson concludes, "cannot be left entirely to direction within firms because the activities are dissimilar, and cannot be left to market forces in that it requires not the balancing of the aggregate supply of something with the aggregate demand for it but rather the matching, both qualitative and quantitative, of individual enterprise plans" (1972, p. 892). Such arrangements, though subject to the entropy of all organization, are not, *pace* Williamson, merely transitory, nor, as we shall see, are they incidental to real or "realistic" economic theory. Richardson concludes his 1972

article--his last before taking up his position at the Oxford University Press--with the diffident conclusion that "Theories of industrial organisation, it seems to me, should not try to do too much" and that we should apply his "triple distinction" of direction, market transaction, and co-ordination, with discretion." For all his modesty, Richardson nonetheless manages to raise topics about firm capabilities, collaboration, networks, and degrees of co-operation and control within supply chains that make many a contemporary discussion look banal.

The account of co-operation Richardson provides is not, however, merely an empirical elaboration of earlier theory. It is, at base, a theoretical challenge to the way economists think (or fail to think) about knowledge. "The Organisation of Industry" is extracted from a more complex argument that Richardson set out in *Information and Investment*. There it is clear that his comments about co-operation do not merely fill an empirical void, but point to a theoretical incoherence. The book proposes that with perfect competition between autonomous, interchangeable agents and with perfect information, entrepreneurs would in fact not know what to do. News of an increase in demand would be available to all and, in perfect conditions, all would be capable of responding. If all were to respond, however, there would be gross overinvestment, no-one would gain, and the market would collapse. Consequently, such entrepreneurs would either fight to destruction or do nothing at all. (Experiments with software-driven agents in the 1990s showed something like this.) The ideally rational decision maker would face a curious version of the tragedy of the commons, wherein no one grazes unless they know that there are constraints--limited awareness, limited capability, limited competitive understanding--on others' grazing.

Thus a state of equilibrium can, in Richardson's view, neither be maintained, achieved, or even approached unless there are entrepreneurs with differing capabilities, with some knowledge of what their allies and their competitors can and might do, and with enough idea of who will and will not compete to make a decision whether or not to compete themselves. Yet these, because they suggest imperfect

information, imperfect competition, and collusion, are banished from the equilibrium model. Thus, Richardson maintains, a perfect market cannot produce the information it needs to function. “The decision to invest depends ... on circumstances deemed absent, by assumption, in the perfect competition model”. To reach equilibrium one of two things needs to be in place, either institutions to stabilize the market and direct information unevenly, or cooperation and consultation among firms in the market, to do the same thing. “By neglecting the whole problem of information, the perfect competition model condemns itself not only to unrealism but to inadequacy even as a hypothetical system”.

Thus the systems of co-operation that he outlines in his 1972 paper are not incidental to markets but--in their ability to filter information, to favour certain capabilities, and so distinguish competitors by their knowledge--fundamental to them. In particular, *Information and Investment* maintains that “ignorance, in its rôle as a restraint on investment ... further[s], in certain circumstances, the successful adaptation of supply to demand”. Markets in essence “increase information by inhibiting competition” or vice versa. Restraints on perfect competition are not simply problems for elimination, but like friction on roads, a sine qua non for traction. Such an argument embraces a sociological concept--one that is anathema to the Whiggish views of neoclassical perfectability--of the *felix culpa*: constraints can simultaneously be resources. If humanity is fallen, it has made economic virtue of its imperfections. If it were perfected, it would lose not only its fallibilities, but also its markets.

At the heart of Richardson's argument is a view of knowledge. Like Hayek, whom he admired, Richardson felt that Smith's division of labour would lead to a division of knowledge, but that economics has done little to account for how this would be coordinated. The field had (and continues) to dodge the question by talking instead of “information”. Citing Gilbert Ryle, Richardson suggests that knowledge, particularly knowledge of technology, is “rarely reducible to information”. It is splendidly ironic that Richardson originally named his first book “The Economics of

Imperfect Knowledge” but (through the intervention of Hicks and OUP), it was reduced to *Information and Investment*. That may, perhaps, have made its argument appear more manageable. Yet Richardson's position presents a far greater challenge to the economics of neoclassical assumptions and elegant models. The information on which markets rely is not independent, but a product of the prevailing institutional structure. Consequently, such institutions and networks will not, indeed cannot, be transformed from their ugly state when kissed by the charming princess of perfect information. Equilibrium, the bedrock of supply and demand neoclassicism, is unattainable through perfect competition and dependent on the sorts of collaboration and differentiated capabilities that Richardson describes. For economics, Richardson suggests, equilibrium is an overworked metaphor borrowed from mechanics, where there is no place for knowledgeable agents. Economics is in this view built, like Freudian psychology, on a watery foundation--one less like a Coasean ocean, however, and more like domestic plumbing, with constrictions, blockages, and meddling interference getting in the way of free flow and autonomous level finding.

For all its untidiness, within Richardson's work there is realism, humour, and an appealing humanism--though it might be unwise to admit the last. Economics, after all, prides itself on its selfish foundations. While de Mandeville's belief that individual vices (the harlot's and the highwayman's among them) further the common good has been muted, it still roams the economic cellarage. Equally, reducing people to decision-making automata, much of the field has little room for human planning and decision-making. Coase, as Richardson (1998) points out, not only eliminates knowledge but also reduces human agency and will. Williamson adds the agency back in, but it is agency riddled with selfish opportunism. Workers are primarily interested in backsliding, thus the manager's role is to give orders to intransigent agents and see they are fulfilled. Richardson's theoretical merits may lie elsewhere, but there is a certain pleasure in reading his account not of voracious self-interest, but of intelligent actors making individual and collective plans and developing long-term relationships directed neither by market nor hierarchy alone. Drawing on his experience as a CEO,

Richardson (1998) acknowledges not only the different capabilities of firms, but also of workers within firms, whose skills need fostering. In light of these, the manager's role in hierarchy is not ordering and patrolling, but "creating, monitoring, and when need be, modifying a system of working relations." "A chief executive," he concludes, "can scarcely do more harm than by spending all his time telling people what to do. Such humanism may appear a weakness before the cold eye of economists, but it can at least summon support from David Hume, a central figure in Adam Smith's network of relations, who argued, "Industry, knowledge, and humanity are linked by an indissoluble chain".

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