

not possible for each of us to have our wants satisfied while each of us also does what she finds intrinsically motivating only. A gift-exchange society requires also the reciprocity of market interactions. Even a small community or a family cannot function properly on the basis of gifts and intrinsic motivations. Those who contrast moral societies to market interactions forget that market prices are also, in efficient market systems, signals of social scarcity. Markets, in fact, allow demand and supply of socially useful activities to meet in a liberal and non-authoritarian system (as in the patriarchal family or in feudal and illiberal communities).

Neither in the conceptual framework of modern economics nor in Kolm's theory of reciprocity do we find a way of conceiving of a relationship between individuals as *both* a mutually beneficial exchange, in which neither partner makes a sacrifice for the benefit of the other, *and* a genuinely social interaction, carrying moral value by virtue of this social content. If reciprocity is captured by the principle 'treat others as the others treat you', then gift-exchange, although important, cannot be enough for a good society based on reciprocity.

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The Romantic Economist: Imagination in Economics, Richard Bronk. Cambridge University Press, 2009. xviii + 382 pages.

In the summer of 1821 William Whewell wrote to his friend of studies the political economist Richard Jones about a trip he planned to the Lake District, where he would climb the mountains of his youth, in Cumberland and Westmoreland.

You have no idea of the variety of different uses to which I shall turn a mountain – after perhaps sketching it to the bottom I shall climb to the top & measure its height by a barometer, knock off a piece of rock with a geological hammer to see what it is made of, and then evolve some quotation of Wordsworth into the still air above. He has some passages where he has tumbled the names of those hills together till his verses sound like the warning of the sea or like a conjunction which would call the spirits of them from their dens. (Todhunter 1876/2001, 43, letter of 4 August 1821, from Whewell to Jones).

On seeing the front cover of Richard Bronk's intriguing book and reading its first pages, I was reminded of this quotation. The front cover shows Caspar David Friedrich's well known painting 'Wanderer über dem Nebelmeer', visualizing the Sublime in the arts, and a landmark of German Romanticism. The painting is adapted so that we see in the distance not so much the impressive peaks of the original painting, but the skyscrapers of the City of London, thus visualizing the central message of the book, that Romanticism can inform economic science. Whewell is well known for having coined the word scientist, and Bronk might have liked Whewell's smooth passage from his scientific endeavours to the world of poetry – thus witnessing a world where C.P. Snow's famous distinction between the two cultures of science and art was not yet in order.

Not incidentally Bronk prefaces his *Grand Tour* through political economy and the Romantic Movement with a discussion of Snow's thesis. This chapter introduces the themes that run through all of the book; how metaphors structure our world view, how economists settled down on mechanical rather than organic metaphors; how mathematics itself structures and constrains our perception of the world; Bronk even approvingly alludes to Wordsworth's judgement about the 'dehumanizing' effect of mechanics and mathematics which stands in contrast with everyday language; how economists narrowed down their focus on rational, calculative man and lost sight of other aspects of human motivation; and how economists, by focusing on (instrumental) rationality, lost sight of the imaginative part of man. Even though Romanticism is a term that was not used by contemporary actors, it is used by Bronk to denote those authors, in England and Germany, who shared an emphasis on organicism, a resistance to mathematics and emphasis on everyday language, and an emphasis on the other aspects of human motivation that are captured under various headings such as sympathy, empathy, the emotions, and who share an emphasis on the imaginative rather than rational aspect of man. History matters, says Bronk, and so he will follow these themes through history and show their relevance to contemporary economics.

What follows is a book divided into two parts. The first part, entitled (with a nod to Wordsworth) 'The Prelude', consists of three chapters. In its

first chapter (Chapter 2) John Stuart Mill is taken as the protagonist to set up the 'great divide' between economics as a science and the Romantics, between rational economic man and man as an imaginative being. Mill's famous two essays on Bentham and Coleridge and his equally famous autobiography serve to show how he was aware of the growing divide in the social sciences between science and art, and how he – unsuccessfully – tried to bridge it. Bronk mirrors this early Victorian setting with the present state of economics to show that the themes discussed by Mill have not lost their relevance. Just as Mill used the insights of the Romantics, from Wordsworth and Coleridge and others, to show the limits of Bentham's utilitarianism, but hesitated to use them to full advantage, so the insights of the Romantics can still be used to criticize and modify contemporary economics which, Bronk argues, crucially hinges on notions of equilibrium and rational choice.

Chapter 3 provides a short, very short, précis of the history of economics, designed to show how political economy moved away from the thin, promising, bridging line offered by Mill to become a science governed by a mechanical world view, a one-sided emphasis on mathematics, and an equally one-sided emphasis on rational choice, optimization and equilibrium. Bronk paints in broad brushes a history spanning from Adam Smith's *Theory of Moral Sentiments* via Malthus and Ricardo to the marginalist revolution of the 1870s to Keynes, Robbins, Hayek, Friedman, and Shackle. There are some allusions to contemporary economists (and Schumpeter), but also in the remainder of the work, the authors I just named, provide the anchors for his story. Rational choice theory figures as a label but at no point does Bronk give a full discussion of what version of this theory he refers to, neither do we find an extensive discussion of how contemporary work in experimental and behavioural economics modified the choice theory of the 1960s and 70s. Following Mirowski, the message of the chapter is that economists narrowed down their subject to a version of social physics that is largely outdated and uses the wrong mathematics to study the wrong kinds of situations (statics rather than dynamics – I like Bronk's image of comparative statics as stroboscopic) that is populated by dismembered agents – agents only acting on the axioms of rational choice theory.

Chapter 4 investigates the Romantic Movement and its message to contemporary economists. Predictably, this chapter elaborates on all that was still available to the English and German Romantics, but was lost in the course of history. There is of course the strong rejection of any mechanistic vision of society by Wordsworth, Coleridge, Carlyle and others in the British scene, and their favouring of organicist metaphors which they learned to a large extent from German *Naturphilosophie* of the period. In line with this, there is a rejection of the notion of the individual as atomistic in favour of a notion of the individual as

inherently socially embedded. While the third chapter, on the history of economics, emphasized the role of the imagination in putting oneself in the place of another person's motives (or sentiments), imagination now gets the more extended meaning of being a vehicle of social dynamics as articulated in Schumpeter's notion of creative destruction. Schumpeter's notion of 'vision', discussed briefly in a later chapter, is close by; imagination becomes the act through which we articulate new concepts and metaphors to grasp the world around us. Bronk argues that when taken together these themes are sufficiently coherent to label them 'Romantic', even though the Romantics themselves scorned notions of system and coherence as unfit for their focus on details rather than general principles.

It is in this last spirit that Bronk develops his 'Fragments of Unity', in the second part of the book. This part consists of six chapters which zoom in on the merits of the organic metaphor in economics, on the importance of the nation state as a frame for economic analysis, on value pluralism, the link between creativity and imagination in the dynamics of a market economy, the different images of economic man, and the role of the imagination in economic analysis itself.

These subject headings show the wide range of Bronk's endeavours and the high risks he exposes himself to. Inevitably, the merits of the book will be less found in scholarly depth than in the questions it might provoke. I found this a very mixed bag. Let me discuss Chapters 5 and 6 as examples. Chapter 5, on the use of organic metaphors in economics, largely surveys work of economists like Marshall, Keynes, Schumpeter, and Hayek, who (more or less) pushed the organic metaphor, and skims through some of its more recent uses. The organic metaphor's contrast notion of a mechanism is used so broadly that it captures versions of mechanics ranging from Descartes to Newton and the 'determinism of rational choice optimization' (140). I appreciate the importance of complexity theory in the dynamic modelling of markets, but fail to see a necessary link to a notion of an organism, unless one simply identifies 'static' with 'machinelike, and dead' as Bronk quotes Brian Arthur (129) and the opposite (dynamic) with 'organic'. Even if readers felt comfortable with such a wide range of meanings of 'mechanic' and 'organic' (I don't), it is not clear to me how Herder's work in any way alters or substantially informs what has been done and is done nowadays. Language and institutions are important, but I think contemporary economic theorists will need a more detailed argument as to why they should turn to a reading of Herder rather than Lewis.

Chapter 6, Economics and the nation state, turns around a discussion of Hall and Soskice's 'Varieties of Capitalism' and makes for a very good read. But also here, I felt uncomfortable with Bronk's lumping together of List, the German Historical School and Hall and Soskice's

(and others) recent work in international trade as 'Romantic'. Not because I doubt the importance of local or national circumstances and traditions, but because Bronk seems to take it for granted that nineteenth century German economists and British Tories were speaking to the same problem setting as recent economists. Criticism of the unqualified politics of market liberalization after the fall of the Wall and criticism of the Washington Consensus is really something very different than Wordsworth or Coleridge longing for a world forlorn after the French Revolution. Their fear of machines and the crowd stood in stark contrast to the enthusiasm of one of the most imaginative scientists of their days, Charles Babbage, for the scientific and social innovations in the industrial districts of Lancashire and for the mechanical world view more in particular (see his unsolicited Bridgewater treatise and subsequent discussion with Whewell, who was shocked). For that reason it is not so clear to me what the meaning is of claims such as that Hall and Soskice's insights 'almost exactly [mirror] the central insights of Herder and Coleridge' (164). To label both 'Romantic' brushes over the very different problem setting underlying both. If such comparisons make sense at all, I'd be helped with a more detailed discussion of the historical or conceptual development that might bring me from the one to the other. Bronk's failure to provide either of these is partly due, I fear, to his efforts to try his hand at so many different aspects of economics.

A last example. Chapter 9, on *homo economicus* and *other homini*, provides an interesting discussion of the different takes on the concept of the individual in economics and sociology, but to identify Mill's notion of economic man, a man so abstract no political economist believed it was real (according to Mill), with the economic man of contemporary rational choice theory to me simply makes no sense. 'A being who invariably does that by which he may obtain the greatest amount of necessities, conveniences, and luxuries, with the smallest quantity of labour and physical self-denial with which they can be obtained in the existing state of knowledge' (Mill, quoted p. 226) does not map on to the axioms of contemporary rational choice theory and so Bronk's very discussion in this chapter, interesting as it is, becomes suggestive rather than analytical. Instead of repeating the old refrain of lack of empirical testing in Rational Choice theory, it would have been interesting to investigate why the literature that emerged over the past decades on anomalies and paradoxes in choice theory is of such central importance to economics. It would have been interesting to relate such a discussion to the emergence of new methods of observing and testing that are hardly touched upon by Bronk; economics (and psychology) in the lab. The class of *homini* might thus have easily been extended with *homo prospecticus*, *heuristicus* and *myopicus*.

Similar considerations hold for the central term of Bronk's book: the imagination. I considered making a list of the many different ways

in which Bronk uses the term, ranging from Adam Smith's notion of sympathy (empathetic feeling), via John Mill's 'culture of the feelings' he learned as an adolescent from Wordsworth during his mental breakdown, to the capacity to reveal surprising novel insights through formal modelling. If a term is stretched in such a way, it is difficult to pinpoint what is really at stake. On one hand Bronk argues that economics as a science turned into a subject that lacks imagination, on the other economists happen to use their imagination by developing models that show surprising results. Some examples that are widely discussed in economic methodology spring to mind: Samuelson's overlapping generations model, Akerlof's lemons or Schelling's checkerboard model. Bronk alludes (rather than discusses) endogenous growth modelling, but never enters into a detailed discussion of how the imagination 'works' in such a modelling practice. Instead he uses a discussion of Kuhn's notion of paradigms to plea for a 'multi-paradigm view' in which economists eclectically and pragmatically shift paradigms in their explanatory endeavours.

I do not consider this a very powerful notion when compared with much of the best recent literature on modelling and thought experimenting in economics. Bronk does not discuss this literature, nor acknowledges its existence, just as he ignores contemporary literature in history and philosophy of science that gives much more structure to the notion of a paradigm than Kuhn did himself, or than Bronk gives here (for example Peter Galison's discussion of trading zones and pidgin languages is rather more helpful than Bronk's suggestion of a 'multi-paradigm view'). Being so unspecific in his discussion of economists's research practices, it is difficult to assess the merits of his proposals. No philosopher or methodologist of economics will nowadays deny the structuring role of concepts and metaphors in framing observations. One does not need to go back to the Romantics to see the importance of language and the imagination in making sense of the world. I don't see why Coleridge and Herder would help me better than Mary Hesse, Norwood Russell Hanson and many others.

Dichotomies like mathematics, mechanics, rational choice, versus ordinary language, organics, and imagination are at risk of getting the fault lines wrong. Bronk rightly emphasizes that the label Romantic was not of contemporary use and so it is a matter of choice whom to count in and whom to count out. Two persons that would have altered Bronk's picture of the Romantics significantly are Alexander von Humboldt for the German-speaking world and, of course, William Whewell for the British scene. There is little in Humboldt's *Cosmos* that reminds of the mechanical world view of Laplace's *Système du monde*. But measurement, quantification, and mathematization were as much his business as they were of the mechanical philosophers, as can be

witnessed from Daniel Kehlmann's hilarious recent novel *Die Vermessung der Welt* (2005) (and of course from Cannon 1978). Similar can be said for Whewell who was not at all pleased with Charles Babbage's stretching of mechanics to realms he did not think fit for it. But much inspired by Humboldt, Whewell ardently promoted the quantification of political economy through social statistics and pioneered mathematical modelling in his criticism of Ricardo (Cannon 1978; Henderson 1996). Of course Bronk is free to pick his cast of characters, but my example shows how artificial and contrived the dichotomies may be that result from it.

The real problem of the book is that Bronk with such an artificial construct does not manage to genuinely connect the alleged merits of the Romantics to the needs and concerns of contemporary economics. This is mirrored in the cover image, which I interpret differently from Bronk (108). In Caspar David Friedrich's original painting the wanderer takes centre stage, leisurely observing the magnificent view emerging from the haze. On the book cover the wanderer is no longer in the centre of the image and his gaze (which we have to guess anyway) seems less focused. Is he looking at the City of London? I doubt it. What seems like a promising image for the book's content rather becomes an expression of its failure; romanticism and modern economics stand juxtaposed, as worlds apart.

Not that I wouldn't have loved to see the merits of the old Romantics. Bronk writes persuasively and suggestively. But who is he writing for? Given the choice of publisher and his way of referencing, the book is written for an academic audience, but Bronk clearly aims at a broader audience. With such an aim, much of his message simply passes by the very fact that economics has become a technical subject over the past centuries, not just because of its mathematics, but also because of an increasingly specialized conceptual and classificatory apparatus. Even a simple thing as a price index is nowadays a separate branch of research. One can deplore that, but it is too easy to recommend the use of 'ordinary language' in its stead, as if this ordinary language is not itself infected by the theories and ideas of 'defunct economists' – as Keynes warned us in the closing lines of his *General Theory*.

Bronk would have been more successful, perhaps, if he had not taken the lessons of the early Romantics at face value, but had shown why they did not keep, and so how they transformed. He then would have had to show not just how the world changed, but also how in the process the wanderer changed as well. Mill's *homo economicus*, just like the Romantic observer, transformed into other types, a transformation expressed in the closing shot of the German film director Wim Wenders's *Falsche Bewegung*. We see the would-be poet Wilhelm at the top of the Zugspitze, Germany's highest mountain, behind an iron wicket and a wastebasket. With his briefcase and trench coat, little is left of the self-conscious autonomy of

the wanderer suggested in Friedrich's original nor of his sublime view (Buchka 1983: 52–53). Perhaps my reading of Bronk's book is biased by the expectation that I would see something of this transformation instead of reading a book that tried to tie our contemporary world to a world forlorn, one of which already Goethe was aware was unlikely to come back.

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Theory of Decision under Uncertainty, Itzak Gilboa. Cambridge University Press, 2009. xiv + 215 pages.

Hundreds or even thousands of academics working in universities all around the world consider themselves to be decision theorists. However, most decision theorists do not work in departments that contain the word 'decision' or 'choice' in their names. Why is that? Why do so few universities have a 'Department of Decision Theory'? At present, most people working in the field are enrolled as economists, psychologists, philosophers, computer scientists, or statisticians with a special interest in decision making.

No matter what the reason for this might be, modern decision theory is a truly *multidisciplinary* subject. However, it is far from clear that it is also an *interdisciplinary* one. People coming from different disciplines work on roughly the same problems, but they do not seem to communicate or cooperate very much with each other. As a consequence, rather few books and papers are interdisciplinary in the literal meaning of that word. There is simply too little exchange going on across the disciplinary boundaries.

Itzak Gilboa's *Theory of Decision under Uncertainty* is written with the ambition to fill (parts of) this disciplinary gap. Gilboa, who is an