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978-0-521-55699-6 - Accounting and Science: Natural Inquiry and Commercial Reason

Edited by Michael Power

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In recent years policymakers and scientists have become increasingly interested in the economics of science, and in particular in the relationship between accounting and science. This book, originally published as a special issue of the journal *Science in Context*, explores the intersections between the sociology and history of science and the sociology of accounting. Embodying a truly interdisciplinary spirit the book draws attention to the constitutive role that practices of economic calculation in general, and of accounting in particular, play for the conduct of science and for the forms of economic life within which science is embedded. The contributors explore a number of issues, including the role of accounting as a distinctive form of administrative objectivity; conceptual exchanges between science and business administration; actuarial practices and their claims to scientificity; conceptions of the factory as a form of laboratory; accounting for research and development expenditure; the emerging role of patents in the physical sciences; and models of scientific accountability. One recurrent theme throughout the book is the manner in which forms of accounting practice construct possibilities for thought and action.

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Accounting and science

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Foreword: The flat-earththers of social theory

Bruno Latour

Flat-earththers have a bad reputation; they are supposed to be just a bunch of cranks who really deny that the earth is spherical. And yet there is a stream of sociology which is made of flat-earththers, all the same. For these people, society is essentially, ontologically flat. They share, if you wish, a geographical intuition (that's the only charitable interpretation I can have of their world view). When they travel by train along the countryside, they are amazed at the distance that separates each farm, each road, each village, this tyranny of distance which is so costly to overcome that you need to walk over to go from one point to the next, or to drive a car, or to fetch a phone, or to send an invoice in order to reach someone else. It is as if there were no third dimension for them, no society, no big animal, as if those places, those people, those interactions were not under any other sky but *the sky*.

I have told you they are flat-earththers and deny the obvious! Even when their commuter trains slowly reach the big cities, the geographical intuition still gets hold of their mind. In Capitol Hills, Elysées Palaces, Wall Street skyscrapers, they see nothing but flatness, as if there were no three dimensions even there, but only flat slices of interactions piled onto one another. In what we call institutions, they see only buildings, doors, desks, forms, pens, in-trays, out-trays, organigrams, charts, and never, never an institution, as everyone else does. It is as if they were blind. Everyone else, when thinking of society, feels the weight of a pyramid or of a sphere made up of other spheres. Size increases with height and weight so that one feels overpowered by the span of a structure so much larger, so much wider, so much older than the puny interactions taking place in it. For everyone else, society is vertical. But not for the flat-earththers who live in the realm of sociology like those 2-D creatures described in *Flatland*.¹ Bugs, that's what they are, bugging sociologists who had so much trouble, over a century, to make political scientists, philosophers and psychologists accept the essential transcendence of society and

¹ Edwin A. Abbott, *Flatland: a romance of many dimensions* (originally published in London, 1884) with illustrations by the author (New York: Dover Publications, 1992).

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its *sui generis* origin. And here they are, those cranks, denying the existence of a society, of a social context, undoing the work of their predecessors, unknitting what had been knitted stitch after stitch, statistic after statistic, form after form, file after file, in-tray after out-tray, cash-register after cash-register. They are much worse than those interactionists who had for years insisted on the importance of local, face-to-face interactions among people repairing on the spot the fragile fabric of social linkages. These at least respected the social context; they simply filled in the details with dialogs, utterances and lively exchanges; they were just fine-tuning the small discrepancies of social order, without ever claiming that society was as flat as those pragmatic interactions themselves. Never did they claim that these face-to-face adjustments could form, by mere addition, the overarching structure of society itself. Interactionism was just a branch of sociology, excellent for street corners, shop talks, jazz orchestras, and pop and mom stores, but beyond, beneath and above, the real society stood. It was made of another stuff – more sturdy, more real, more elevated – and other sociologists, equally more sturdy, more important and more elevated, were fortunately in charge of studying it.

But look at those flat-earthers! They do not have the modesty of interactionists. They claim to account for big things as well as for small talks, for agencies as well as for structures. Yes, it is the market they want to explain, and the state and nation and Classes and Society itself while they are at it. They have no shame, no restraint! You talk to them about a company managerial structure – terms that everyone understands easily (I mean the 3-D people) – and those 2-D analysts will ask you about the office space in which one manager sits, then the bookkeeping procedure she uses, then the chart on which she has labelled the names of her collaborators, then the chain of command which allows her to call meetings, then the pie chart which she has received from marketing and that describes consumer response to her latest campaign. Do these statistics measure the demand for the product? Does the organization chart reveal the corporate structure? Not a bit, and that is what is so terrible with them. Those instruments do not measure anything, they make the things they measure! They are “performative” – that’s their buzz word. Consumers? Made up by statistical networks of questionnaires and pollsters. Capital? Made up by double-entry bookkeepings and piles of forms and paper slips. The bottom line is not a metaphor, it is really, literally, sillily, the bottom line. You ask about the strength of market forces? They will describe to you the British statistical bureaux or the INSEE office in the outskirts of Paris. It is as if economies were a mere consequence of the science of economics! Incredible, they confuse the scientific disciplines and what these disciplines the study of. They behave like the

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proverbial Chinese moron and when asked to look at the moon they focus with glee on her finger tips! I told you they are blind to what everyone else sees clearly. And they do not stop at that. You ask them, “But what about Britain, and France and Germany? Don’t they exist for good even if their economies don’t? Are they not real agencies expressed by customs, cultures and mores?” They don’t waver, those cranks. They will tell you that another network, another scientific discipline, is “performing” nation boundaries and that without the work of geographers and historians and land surveyors and civil engineers and border patrols, no one could even think about the borders of Britain, France or Germany, and could not inspect them with their eyes. Agency becomes a consequence of narration.

And if you wish to go further and shift from social to natural sciences and start talking about the geology of Britain, the hydrography of France, or the meteorology of Germany, they will answer by showing you geologists drawing maps of Britain; you will learn everything about instrument networks along French rivers; and instead of the weather above Munich, they will list the satellites and weather stations and computers that “make up” the meteorological charts and draw the polar fronts on your evening newspaper. To performative disciplines they will add more performative disciplines, like tortoises on the top of other tortoises, all the way down (except there is no down). Every normally verticalized person is able to go from form to content, from pie chart to what is charted, from statistics to the market forces, from bookkeeping to profit, from words to the reference of the words, from story-telling to agency, but no, not them; they are like so many blind termites, unable to see beyond the forms, the numbers, the charts, the stories, the inscriptions (another of their buzz words) that collectively, they argue, create all those representations by a certain kind of speedy circulation.

If you object that everyone else sees what they fail to see, it does not bother them in the least, and they will retort, “Who is everyone else? How many of them are there? How strongly have they been connected? How long did it take to knit their consensus? How costly is it to maintain it from one year to the next?” And they will busy themselves trying to answer those absurd questions! They take everything literally, like kids really, unable to grasp the figurative meaning of all these words the grown-ups use. When we talk loosely about what the market wants, Germany wishes, classes insist on, or how much goods are worth, they will launch into another inquiry, as blind and obsessive and mad as the previous one to find a realistic meaning to these expressions. This time they will explore the “metrology” and “standardization” of those instruments (those are some of their other big words). If economies exist, it is

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because, they argue, economics has spread, as have accounting and management and insurance and all those despicable cameral sciences. And by this they do not even mean what everyone else means by “spreading,” as if every decent manager had finally come to realize the usefulness and efficiency of those convenient instruments. No, they deny the very independent existence of “usefulness,” and “efficiency,” and “rationality,” and “convenience” and keep asking which real, local, practical instruments are measuring those values, and on which reading device (by which they literally mean the hand of a clock or the head of the computer printer). When you mention what “everyone has in mind,” they don’t think of ideas, but only of meters, textbooks, teacher–pupil relations, curricula, reviews, and yes also, cash-registers, ticket-counters, software packages, paper slips, until they have obtained a standardized interaction which accounts for the dissemination of a body of practice. Ah! practice, they worship practice. According to them, the very notion of profit does not escape the networks of accounting more than the volt could escape the metrological chain of electricity, or social structure the networks of the sociological discipline.

These rascals not only claim to remake social structure from top to bottom (except of course there is no up and down in their limited horizon), but they also include sociologists, that is us, the dismal profession, inside their “reflexive” inquiry (as they like to say with what is to me a very misplaced undertone of pride). Fancy that! 2-Ds teaching dimensions to 3-Ds; the blind teaching colors. Yes, they confess that “society” comes from sociology, in the same way as the calculation of bottom lines comes from accounting, or chromosomes from the feeding of drosophiles in the network of turn-of-the century geneticists. Since society is flat and interactions are all there is, every time a synoptic vision exists, a bird’s-eye view, a gaze from Mars, a synthesis of any sort, it means that a local panopticon has been built. And for their blind eyes, sociologists are those panopticon builders who, through questionnaires, newspaper clippings, theories, quotations, American Sociological Association meetings, advisory boards, textbooks and social workers, end up locally building a scenario of what society is, of what it is made up, and how it is going to change. Sociology is as fiercely localized and as dependent on instruments as meteorology or chemistry.

It is quite discouraging, I must say, to have to fight that sort of reasoning in 1996. There is no way to make them realize that sociology describes society, and does not perform it. We are not limited to our networks and to their extension through metrology. We are not – how should I say? – mere chemists, or biologists. We sociologists see through our instruments and reach toward social structure, social evolution,

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market forces as they really are. We are not simply adding our instruments and concepts and interpretations to those of the actors who should remain for ever in their place as so many informants. But there is no way to discuss with flat-earthers; everyone knows that. When we make large gestures with both hands to describe the society in which everything is included, the big picture that ignoramuses should always be reminded of, they believe we are drawing in the air something like a pumpkin! Really childish, I tell you. I can't decide what is worse: their disbelief in the methods of science or their doubt over the existence of society. It is as if for them the two were related like Siamese sisters. They behave like that bizarre breed of physicists who are unable to decide if they are dealing with a wave or a particle. For them all the data are simultaneously descriptions of an outside world and inscriptions circulating as fast as possible inside networks of heavily equipped professionals. Simultaneously. They can't make up their minds.

Oh yes, I almost forgot, there is worse: they cannot say a word about our most important issue, the debate between actor and social structure, the freedom of individual agents versus the necessary determination of social forces! That debate leaves their minds absolutely blank. Poor things, we should not be too cruel with them; they lack a dimension. They are no more able to visualize the problem than a flatlander could a cylinder, or a circle for that matter. For them there is simply no social structure, but, strangely enough, that does not leave them just with individuals either. No, I told you they were a bit dense, they simply ignore the dichotomy, and thus all the work we had to do over the decades in overcoming it. In their flat-society sociology, they have none of these niceties to embellish their interiors. It is as if there were only triangles, apexes, so that any individual interaction leads to many others but without ever jumping through the mediation of the social order. Networks they call them; and when there is a gathering of these nets, a synthesis, it is still another very local and particular interaction. In their world, nothing is bigger or smaller than anything else, but simply more tightly or more loosely connected. Threads and lines everywhere, no surfaces, no volumes, that is the deprived and barren landscape of their flat earth.

You would think that they would at least confess that something is missing from their picture, that they would have a sort of remorse, a nostalgia for the vertical dimension they have lost. Not at all. They are perfectly satisfied. Even what puzzles us most, the transportation in one local situation of the weight and necessity of social power, is, they claim, no problem at all. We have not invented the language we speak, the nation in which we are born, the customs we obey, the duties we fulfill,

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the institutions in which we fulfill a role; every local interaction, every act of individual freedom, every internal representation is partially determined by these obvious forces coming from elsewhere, and this is the intuition that really made our discipline, created our own profession. That they don't deny. They accept all of it and share the same intuition as if they really wanted to remain members of our club and to call themselves sociologists in spite of their obvious deficiency. But their actors are not individuals equipped with an inside and an outside, with degrees of freedom and with minds over which a society would consist of a different matter altogether. No, they are traversed by actions of which they are not the origin but simply the mediators. So are they cultural dopes, puppets manipulated by social forces, mere expressions of what goes through them? No, since these forces and these *sui generis* entities simply do not exist for them. They have to invent a completely implausible theory of action, with no actor; only actions and actants! The result is pitiful. It is not even a structure with positions to be occupied by replaceable entities.

They have events everywhere. Historical events at all points. Radical historicism. And to transport forces from one event to the next, what do they rely on? Objects, those very objects we had so much trouble in chasing away to avoid the dictatorship of science and technology, to carve our own professional space. They are thick with objects in charge of transporting at a distance the action of other times and places. And do not believe that they are able to distinguish at least the material part of these objects from their symbolic or social dimensions. Alas not. The word "symbolic" means nothing more to them than the debate of the actor versus the structure. Objects have no symbolic dimension but they are not material either. They believe that objects are social partners like you and me. You see that the mathematical recreation of *Flatland* is nothing compared to the bizarre world of flat sociologists. That's how they hope to fill in the specifications of social order, to foot the bill of power and force and hierarchy and domination and exploitation. Local interactions, plus objects and instruments, plus number of connections, plus accounting procedures! That's all there is in their *Meccano*! Were it not so sad it would be laughable. They dissipate our most cherished treasures, our rich explanatory causes, and replace them with an endless list of consequences! And they are happy with it. Although they are as flat as a square, they feel so superior to us that they call us pre-relativist, non-reflexive, neo-positivist sociologists! They want to make sociology, they argue, thoroughly empirical, but this obsessive blindness makes them positivist to an incredible degree. No, no we should not let them have their way. We have abandoned too many vertical dimensions, already, lost too many transcendences. This flat sociology is too impoverished to

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serve as a substitute for sociology. Let us level the flat-earthers.

I told you that writers of forewords are old-fashioned; you should never have asked me to write a foreword.

Bruno Latour