The Significance of Ian Hacking's Work

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The Balzan Prizewinners, The members of the Accademia dei Lincei, Ladies and gentlemen,

It is a pleasure to say a couple of words on my colleague Ian Hacking's research and the Balzan Prize research project. Since maybe many of you are not familiar with Ian Hacking's large body of publications, I will first summarize – complementary to what we have just heard – some of the main axes of research and then say how the project relates to that body of work. But before I start, I want to point out what a wonderful coincidence it was that Ian Hacking was awarded the Balzan Prize yesterday, on UNESCO World Philosophy Day.

As he said himself in the acceptance speech read by his daughter Rachel, Ian Hacking's work is best understood as exploring the foundational issues in both epistemology and the philosophy of mind that are somewhat at odds with how these philosophical disciplines are conducted nowadays, at least in the context of current Anglo-American philosophy. What do I mean by that? Let's have first a look at epistemology, which is still very much conducted as the inquiry into the nature of knowledge, the question "What is knowledge?" – whether knowledge is something analysable, or even something more basic, like justified true belief and the conditions of the possibility of knowledge lurk large in those fields of research. But in contrast with these rather abstract topics, Ian Hacking's central contributions to epistemology have been organized around the structure, role and influence of statistical and probabilistic reasoning and in the philosophy of experimental science. So he has a rather more pragmatic approach to what his colleagues do in epistemology.

So much of his early work – actually his very first book in 1965, *Logic of Statistical Inference* – was devoted to the formal structures of statistical and probabilistic reasoning. But fairly quickly Ian Hacking expanded this approach by beginning to look at the historical roots of probabilistic and statistical reasoning. Taking inspiration from the French historian and philosopher Michel Foucault, he explored the emergence of a new kind of epistemological agent who was able to see the world in probabilistic terms. In his influential recently reissued book *The Emergence of Probability* (Cambridge University Press 1975 originally), Hacking examines the early

days of probability in the seventeenth century, when the Renaissance doctrine of signs and "signatures" mutated as gamblers tried to improve their profits. The new notion of probability was quickly applied to such disparate topics as law, annuities, literature, and the causes of death. This book also inaugurated the modern historical study of probability, a topic that has now become the focus of a large, active research community.

Ian Hacking also further explored this line of research in a later book in 1990, namely, *The Taming of Chance*, in which he investigates – a little more focused on a specific period – what he calls the avalanche of printed numbers at the end of the Napoleonic Wars in the early nineteenth century. And the book – actually all the books of Ian Hacking you will read – shows not only his wide-ranging philosophical knowledge, but also his erudite reading of the literature of the time, as well as works of medicine, sociology, historiography and the like. Actually, coincidentally, *The Taming of Chance* was included in the list of the 100 most important non-fiction books written in the twentieth century, alongside only a little bit more like of a handful of philosophers, like Isaiah Berlin, John Dewey, William James, Thomas Kuhn, E.G. Moore, Karl Popper and John Rawls.

Ian Hacking was also always a very active teacher, not just of graduate students, but also of undergrads, and actually one of his most recent books, *An Introduction to the Probability of Inductive Logic* (Cambridge University Press 2001) a textbook for the teaching of inductive logic and probability for university students, is kind of the fruit of his engagement with undergraduate education at the University of Toronto and other places.

So much about statistical and probabilistic reasoning. Ian Hacking has also been very interested in the philosophy of the experimental sciences. The major book in this area, *Representing and Intervening*, caused quite a stir when it was published the first time in 1993, because Ian Hacking does not just deal with very abstract topics like modelling, realism, problem or so. He actually wrote part of the book when he was at Stanford, talking to his colleagues in the natural science labs. So the book, and maybe in the more important second part, the intervening part, there is an interesting discussion of topics like microscopes, observation and so on.

In the second axis of research, the philosophy of mind, he has a similar approach with respect to epistemology. Again, he is less interested in the traditional problems of the philosophy of mind, namely the problem of consciousness, the mind-body problem, the nature of intentionality. His work in the philosophy of mind focuses on the nature and development of concepts and their implications for humankind. Beginning with his much-cited classic article, "Making Up People" (1986), Hacking has engaged

in a micro-historical study of specific cases where the human sciences helped to create new kinds of people.

The major expression of this method is his *Rewriting the Soul: Multiple Personality and the Sciences of Memory* (Harvard UP, 1995), in which he examines how multiple personality disorders emerged out of a disparate set of diagnoses over the course of two centuries. By embedding the history of psychology in a rich cultural framework, he shows how people came to think of themselves in ways that eventually allowed them to be diagnosed as having multiple personality disorder. And he developed or continued this approach also in more recent books like, for example, *Mad Travellers: Reflections on the Reality of Transient Mental Illnesses* (University of Virginia Press, 1998), in which he looks at a particular epidemic at the beginning of the 20th century. So these two works on the philosophy of mind broadly construed put Hacking at the centre of widespread discussions in the social sciences and humanities about the very idea of a "social construction."

This is just to mention the research activities relevant to the areas for which he was awarded the Balzan Prize yesterday. If you were to press me to give a short account of Hacking's general approach to philosophy, I think it is best understood against the background of the distinction between theoretical philosophy, i.e., the part of philosophy concerned with the structure of reality and the nature of thought, and practical philosophy concerned with questions about value and how to live. Hacking's work and approach bridges this divide, investigating the ways in which the concepts through which we classify ourselves and other beings in the world shape our lives and interactions. The key idea is here that we as human beings are not just passively reacting to the world in which we live, but actively intervene in it and shape it. We create not just values, but also facts.

It also goes without saying that by bridging this divide, Hacking thinks that there is less general opposition between the natural sciences on the one hand, and the humanities and the arts on the other, than people normally assume. Although these different forms of engagements in the world obviously rely on different styles of reasoning, they have a very common root, which brings me to the second part, namely the Balzan Prize Project, *Styles of Reasoning*.

Now, one way to look at our interactions with the world is by asking questions; and here I quote from a recent article by Ian Hacking, "How did a species like ours on an earth like this develop a few quite general strategies for finding out about and altering its world?" In pursuit of this strategy, Hacking explores in fascinating detail how, as the new styles of reason emerged historically, and as our conceptions of reality changed, the world we know itself took on new forms. Before his current illness, Ian

Hacking was working on the final touches of a manuscript for a book entitled *Styles of Scientific Thinking: Truthfulness and Reason*. The immediate background of this book comes from lectures that he gave during the spring term in 2008, when he was the Peggy Downes Baskin Professor of Interdisciplinary Studies at the University of California at Santa Cruz. But actually, his interest in styles of reasoning goes back further. As he writes himself, he first got interested in this topic in 1978 in Italy when he heard the historian of science Alistair Crombie lecture in Pisa about the subject. In the early Nineties, Alistair Crombie later published a three-volume companion about that topic, mostly about the age of Galileo.

So you may wonder, "What are these styles of reasoning?" of which we have already heard a couple of times. Hacking, with Crombie, acknowledges six major styles of reasoning, at least in the sciences. These include statistical reasoning, reasoning by analogy, deployment of experiments, ordering by comparing and taxonomy, historical derivation by genetic development, and the like. These are examples of existing styles of reasoning, but Hacking also acknowledges that there are styles of reasoning that have gone out of fashion and thus out of existence, for instance, reasoning by means of similitude, which he thinks is characteristic of medieval and Renaissance medicine.

Two things are important to note about styles of reasoning. First, styles of reasoning are not the same as logic, as Hacking writes himself in his characteristic, pithy manner, "Styles of reasoning create the possibility for truth and falsehood; logic merely preserves it." And second, with styles of reasoning come a great many other things, most importantly, the objects of inquiry and the evidence or the things which count as evidence in an inquiry. So insofar as styles of reasoning, a means by which we acquire knowledge about us and the world, Hacking's project can be seen as a historical investigation of Immanuel Kant's classic topic, namely, the conditions of possibility for knowledge.

Now, let me come to the practical side – what will happen in Toronto for this research project on styles of reasoning. The research project will allow young and emerging scholars to continue to explore styles of reasoning in the wide range of topics dealt with by Professor Hacking himself, namely medicine, psychiatry, sociology, philosophy of mind, epistemology, the philosophy of science, philosophical psychology, inference and the like. Toronto has one of the biggest graduate programmes in philosophy in the English-speaking world. We have about eighty graduate students; we also have an institute for the history and philosophy of science and technology, to which Ian is co-opted. So the idea is that most of the funds will go to graduate students who work for one or more years while they're writing their dissertations, not necessarily on the Balzan Prize project itself, but to allow them some time to work on a

research project along these lines under the supervision of Professor Cheryl Misak, who will figure as the deputy supervisor of this project.

The exchange with European universities, which he has maintained all his active period, is very dear to Ian. Thus, one of the reasons he insists that some of the funds will also go towards visiting graduate students from European universities is so that they can spend a couple of months every year in Toronto. The results of this project will be prepared in a conference in Toronto at the end of the funding period.

Thank you for your attention.