Daniel Garber, Leibniz, and Early Modern Philosophy

by Robert Merrihew Adams

Bob Sleigh introduced me to Dan Garber at the Institute for Advanced Study in Princeton. I believe it was in the summer of 1983, when Dan was wrapping up a year of teaching in the Princeton University philosophy department and Bob was ending a research year at the Institute, and I was beginning a fall term sabbatical in Princeton. I think Bob had us to lunch at the Institute; but if so, the lunch has been eclipsed in my memory by the exuberance of Dan's enthusiasm for early modern philosophy.

He was still a comparative newcomer to the field. His 1975 Harvard Ph.D. dissertation, and almost all his lectures to scholarly gatherings during the next four years, were in contemporary analytical philosophy, particularly epistemology and philosophy of science. When articles by him began to appear in print, however, in 1979 and thereafter, they were almost all historical, and mainly about the 17th century. His seminal hundred-page essay, "Leibniz and the Foundations of Physics: the Middle Years," appeared in print in 1985, and he had been working on the topic, and giving lectures under that title, since the Fall of 1982.[1]

Dan's background in philosophy of science was far from irrelevant to his new projects. As he perceived, the history of philosophy and the history of science in the 17th century cannot be neatly separated from each other, because the innovations of early modern philosophy are in large part driven by the scientific "revolution" of that period. That is one of the dimensions in which (as Dan has said) he was feeling his way toward an interestingly innovative approach to the history of modern philosophy.[2]

I think it is fair to say that in the anglophone world in the early 1980s the history of modern philosophy was still in the process of *becoming* a recognized academic specialty. The study of ancient Greek and Roman philosophy had been a recognized specialty for centuries. Departmentally, it belonged equally to philosophy and classics. One would not have been qualified to teach it if one did not read both Greek and Latin, and in classics departments it was integrated with the study of other, related aspects of ancient culture. But there were only beginning to be comparable expectations of scholarship for teaching the history of modern philosophy.

We have come quite a long way, by now, in the development of a culture for the study of the history of modern philosophy that is international and not

monolingual, and that is in communication with the study of other aspects of the history of modernity, especially including the history of science. And no one has contributed more to that development than Dan Garber. His energy, as well as his perceptiveness, in making connections intellectually among aspects of 17th century philosophy, and personally among the people who study it now, has been prodigious.

He has taken initiatives, and invested a great deal of time and energy, in developing collaborative research projects, typically international and often interdisciplinary. In the mid-1980s he entered into two of the largest and most significant. One is the *Cambridge History of Seventeenth Century Philosophy*, which Dan coedited in trans-Atlantic collaboration with Michael Ayers. The planning and production of its two volumes, totaling over 1,600 uncommonly large pages, took over a decade, and lots of work by the editors. Its coverage is very comprehensive, including 17th century work in logic, mathematics, and physics as well as epistemology and metaphysics. It also covers moral philosophy, which is still not included in the more general study of the history of modern philosophy as often as it should be.

The second project is the Yale Leibniz — a series of careful, original language editions of works by Leibniz, with facing English translations, and extensive introductions and footnotes (in English), providing scholarly interpretation and commentary in introductions and notes. It began with a proposal from the Yale University Press to Bob Sleigh. He and Dan took the proposal to the German editors of the Academy Edition of Leibniz's works, and worked out an arrangement agreeable to both Yale and the Academy editors for use of the relevant materials. The series has maintained very high standards and is an enormous aid to scholarship. Eight volumes have appeared thus far. Among them are three that present the main materials of Leibniz's three most discussed philosophical correspondences: those with Arnauld, De Volder, and Des Bosses. Another volume documents Leibniz's controversy with the chemist and physician Georg Ernst Stahl about philosophical issues in medicine — a salutary reminder that medical issues could easily be philosophical issues in the Early Modern period.

Dan's efforts in fostering communication among scholars and students studying Early Modern philosophy in different countries and languages have been very impressive — and demanding, involving a great deal of international travel, and writing and speaking on many topics. In 2014, just for example, he lectured ten times, in various contexts, in North America, and thirteen times in Europe and Australia. Or there was 2011, when after gigs on three American campuses, he

traveled to Italy in March to give a lecture in French on Spinoza and Leibniz on Body, followed in May by travel to give keynote addresses to conferences in the UK and Romania, followed by speaking at conferences in June at Shandong University in China and then a different one in North America. September brought three public seminars at the University of Campinas in Brazil, followed by lectures at three American university campuses. Then back to Europe in November, to lecture in French in Paris on Descartes and in Lyon on Spinoza, in English in Oxford on Bacon, and in English again on "Leibniz in English" at a workshop on the Leibniz edition in Hannover — all in time for him to get home to finish the year and the month of December at an author-meets-critics session on his book, *Leibniz: Body, Substance, Monad*," at the Eastern Division APA. I start to get tired just thinking about such a schedule. But I think Dan eats it up.

In the process he has also built up more permanent relationships — with institutions in France, at Paris and Lyon; in Italy, at Lecce; in Germany, at Hannover and the Humboldt University in Berlin; and in Romania, and at the University of Campinas in Brazil — and probably others that I am less aware of. In some of these relationships he has been able to arrange visits back and forth for early modern philosophy workshops involving travel for graduate students as well as faculty types. The quality of scholarship and the effective clarity of international communication in those that I have attended have been very impressive.

The expansiveness and inclusiveness of Dan's conception of the history of philosophy, and his application of that conception to the early modern period, are on display in his published work. Throughout his career he has written and lectured on a very wide range of topics and authors. In the first decade or so, the largest share of his attention went to Descartes. In addition to many important papers it produced a monumental book of almost 400 pages on *Descartes' Metaphysical Physics* (University of Chicago Press, 1992), arguing, among other things, as the title suggests, that Descartes' physics was in important ways more metaphysical than mathematical.

In what Dan has published in the 21st century, however, there is at least as much about Leibniz as about any other historic philosopher. One of his many papers about Leibniz, a chapter on Leibniz on physics and philosophy in *The Cambridge Companion to Leibniz* (Cambridge University Press, 1995), might count as a monograph, at 83 pages. As I said of it in my review of the *Companion* in the *Philosophical Review* (April 1996), "So far as I am aware, [this chapter] is the best comprehensive treatment of Leibniz's work in physical science; by itself it might

well be worth the price of the volume."

And there is also *Leibniz: Body, Substance, Monad* (Oxford University Press, 2009), at 428 pages Dan's largest sole-authored book thus far. In it he presents a meticulously detailed, chronologically ordered account, and interpretation, of the statements we have from Leibniz about body, substance, and monads. In the process he responds to objections that I and others had raised about his 1985 paper on Leibniz's treatment of the foundations of physics in his "middle years" — amending his earlier views in some respects and defending them in other respects. I have commented on the 2009 book in this *Review* (Vol. 20: 2010, pp. 51-71), agreeing with Dan on most points, with reservations or disagreement on other, mainly rather subtle points. And Dan has responded in the same issue of the *Review* (pp. 73-79). His work, and reflections on it, have driven a lot of the research on Leibniz, including much of mine, in the last third of a century.

Dan's views about the historiography of science and philosophy, and the early modern period, are developed in many of his papers, including importantly several of those reprinted under the title of *Descartes Embodied* (Cambridge University Press, 2001). There he contrasts his own approach with one that values the history of philosophy primarily as an occasion for reasoning in which we may discover philosophical truth. Dan agrees that there can be value in such work; but he is more interested in a more deeply historical project, in which one seeks to discover what philosophers and scientists believed in the past, and why they believed it. For such a project of "historical reconstruction," as he notes, "the falsity of a premise ... universally accepted [in the period under study] is not a relevant part of the story."[3] And he argues that such a project is important, though in a different way, for our contemporary study of philosophy, in acquainting us with the thinking of superbly intelligent people who belonged to a culture that saw the world rather differently from the ways in which we do now. As he has put it,

> "Historical investigation conceived in this alternative way gives us a kind of perspective on the beliefs we have and the assumptions we make. It helps us sort the good from the bad, the arbitrary from the well grounded, insofar as it challenges us to reflect on why we believe what we do. While it may not help lead us directly to new arguments and new philosophical truths, it leads us directly to something just as valuable: *philosophical questions*."[4]

Dan concludes *Descartes Embodied* with a striking and extremely illuminating pair of studies of innovative and very influential, but sharply contrasting, early modern epistemological views and practices. "Descartes' philosophy," as Dan sees

it, "begins with a rejection of the past" — and that not merely in the first *Meditation*, but first of all in his life, in his termination of his formal education. "Descartes," as Dan observes, "lived in a learned intellectual culture, one that emphasized the importance of tradition and authority." Both Aristotelian Scholasticism and Renaissance Humanism engaged extensively in reasoned argument, but they depended heavily on the authority of ancient and medieval texts. "To be educated ... in the early seventeenth century was to know the wisdom of the past, to understand the different intellectual traditions."[5] Descartes rejected that aspect of the culture in which he had been educated, holding rather (as Dan puts it) that "true education ... must involve not the transfer of information, doctrine, or dogma, but simply the cultivation of the intellect."[6] And the process central to this cultivation, is not formal logical argument, which Descartes thought was likelier to be used in unhelpful than in helpful ways. It was rather what he called "intuition," to be exercised in solitude, and is the method on display in his *Meditations*.

Dan finds a sharp contrast to Descartes' cognitive individualism in tracing what he calls "the development of a social conception of experimental facthood or, better, the explicit recognition of the social character of experimental facts."[7] Intentionally planned experiments had played in important part in the development of early modern science from the dawn of the 17th century and somewhat before. But a major step forward occurred in England in the early years of the Royal Academy in the 1660s. The members laid down policies as to what must be done for a fact to be deemed to have been established experimentally. Dan emphasizes three of them. The experiment must be repeated a number of times, with the same result, by different members of the Academy. They must also keep a record of exactly what happened in the experiment, what instruments were used, and so forth. And perhaps of greatest interest to Dan, the "facts must be established through the consensus of the community [the members of the Academy] as a whole."[8]

A more recent example of the fruitfulness of Dan's frequent engagement with how early modern philosophers lived their lives and did their work, and not just what they said is an eye-opening paper on "Thinking in the Age of the Learned Journal: Leibniz's Modular Philosophy."[9] He brings to our attention the fact that in the last 42 years of Leibniz's life he published in learned journals the mind-boggling total of almost 200 articles, plus 56 reviews that he authored anonymously. Some of the articles were famous, such as those presenting his calculus of infinitesimals, and arguing that the measure of the force involved in the motion of bodies is mv^2; many others, of course were less memorable. By contrast, as Dan notes, the only

sizable book that Leibniz actually got published, except in law, history or politics, was the *Essais de Théodicée* — and even it might be "regarded as a collection of shorter pieces, themselves not unlike journal articles."[10]

Why would that be? Dan points out that there is other evidence of Leibniz preferring to enlist others to work out the details of his major projects. In mathematics what Leibniz published of his new calculus in 1684 was "only a very brief article" in the *Acta eruditorum*, "which gave only some of the basic rules of the ... calculus," leaving it to the Bernouilli brothers and the Marquis de L'Hospital to develop and publish the details.[11] On this point, Dan quotes a 1717 elegy of Leibniz by Fontenelle, who said,

> "He didn't publish any body of mathematical works, but only a quantity of detached pieces, of which he could have made books if he had wanted ... He said that he liked to see the plants for which he had furnished the seeds growing in other people's gardens. These seeds are often more important than the plants themselves ..."[12]

Even as regards the theory of monads, and his denial that a material atom is possible, Leibniz sought similar help, as Dan points out, citing a letter September 1696 to Michelangelo Fardella, in which Leibniz said,

> "I hope that this doctrine can be embellished [*illustrari*] and great illumination added to a variety of my philosophical ideas by you, just as the mathematics or analysis I discovered was wonderfully advanced by the Marquis deL'Hospital and the brothers Bernouilli ..."[13]

It may also be worth noting that in writing that letter to Fardella, Leibniz urged him to go to Florence to meet the Baron von Bodenhausen and get briefed by him on Leibniz's *Dynamics*.[14] During his Italian travels Leibniz had written, and come fairly close to completing, his book on dynamics, and before leaving Italy in 1689 he recruited the Baron to help him get it published. The Baron subsequently, in a letter to Leibniz, referred possessively to "our *Dynamics*, of which I am making a fair copy." The fair copy exists, in the library at Hannover, but it's not clear that the Baron did anything else to get the *Dynamics* published; and it never was.[15] And Fardella declined Leibniz's invitation, and a book-length *Monadology* was never written either, let alone published. Of course that's not to say that Leibniz wasn't responsible, in the end, for what he did and did not publish.

Would it be reasonable to conjecture that Leibniz's attitude toward intellectual work was more like the Royal Society's than like Descartes' ? I confess that I have not usually thought of Leibniz that way. He was in some ways a loner. But as I

think about the question now, and the many roles Leibniz played to which Dan calls attention, I have to say there is quite a lot of evidence that he regarded the quest for knowledge and insight as a social, and not a purely individual, project. There are, to be sure, topics on which no eyes but his saw his best work until many decades after his death. His work on alethic and modal logic is an obvious example of that. But in his work in physics it appears that he was more than happy to receive help; and in metaphysics a very large part of his most interesting work was created in the form of letters to interlocutors, or as documents to be sent to them. And perhaps his participation in a nascent culture of learned journals is also evidence of a communal orientation.

One of the most impressive indications of such an orientation is Leibniz's investment of time and energy in the creation and fostering of scientific and learned Academies — particularly the one in Berlin — and the hours and hours he must have spent (indeed, in retrospect, wasted) writing out lists of candidates for recognition as agreed facts. There may or may not be much use for such lists, but certainly not without communally recognized and accepted ways of deciding what belongs on the lists.

Another area of communal thinking, and a particular interest of mine, on which Leibniz invested enormous amounts of time and energy during almost his whole adult life is that of religion. He worked hard at trying to identify paths for meetings of minds between Protestants and Catholics, between Lutheran and Reformed Protestants, and between Christians and Confucians.

He was not ultimately successful in any of the negotiations that he had a part in — sometimes in part because of misperceptions or mistakes on his part, but mainly because of the intractability of the controversies. There were of course some propositions under discussion that he would not accept; but most often he was trying to find formulations that the various parties could agree on, although they might understand them in somewhat different ways. Presumably Leibniz did not think that dishonest, because he believed that the competing beliefs were not logically demonstrable, and were therefore to some extent in the territory of practical reason, so that the right thing to say was what it was practically wisest to say.[16]

In these ways Leibniz conceived of himself as a do-gooder on a very large scale. And that was part of why Leibniz was very very busy almost all the time. He was not, after all, a professional philosopher. He was a professional lawyer and counselor to princes. In that capacity he was a servant — albeit a high ranking

servant — of someone who made extensive demands on his time and energy. And as an intellectual he seemed famously to be interested in everything. Dan quotes Fontenelle as saying in his eulogy of Leibniz that "In a way like the ancients who had the skill to drive up to eight horses harnessed abreast, he drove all the sciences abreast," and notes that Fontenelle discussed Leibniz's achievements as "a historian, a physicist, a mathematician, a metaphysician, and a theologian," and even a poet.[17] He wrote a prodigious number of letters, some of them long and intellectually complex, in most of those capacities. He was busy.

Perhaps that's why the *Theodicy*, which he published, and the *New Essays*, which I assume he would have published if Locke had lived longer, are not well constructed as wholes. And in the *New Essays* Leibniz takes Locke as his discussion partner for the whole book, and borrows the main outlines of its structure from Locke's *Essay*. I assume that though Leibniz managed to go through Locke's work, and Bayle's, with careful, relevant, and interesting comments, he could not find the time and energy to plan his own structure for discussing the subject matter, and then decide which authors to discuss on which points, and look into their works in turn. But then he presumably was not thinking of them as definitive statements of his own philosophy.

I don't expect to give up expressing views about where Leibniz's metaphysical views are true, or approximately so, and where they are not. Perhaps he would be pleased to see plants for which he furnished the seed growing in my intellectual garden. But I'm grateful to Dan Garber for helping us to see not only Descartes, but also and at least as emphatically Leibniz, as "embodied" — or perhaps embedded — in early modern communities and cultures in ways that formed them as people from whom we can learn because they are different from us.

Notes

[1] For such bibliographical facts, in this paragraph and hereafter, I rely on Garber's January, 2018 CV, which can be found online.
[2] See Garber, "Robert C, Sleigh, Jr. and Leibniz," in *The Leibniz Review*, Vol. 25, p.2.
[3] Garber, *Descartes Embodied*, p. 19.
[4] Garber, *Descartes Embodied*, p. 23.
[5] Garber, *Descartes Embodied*, pp. 280-81.
[6] Garber, *Descartes Embodied*, p. 283.
[7] Garber, *Descartes Embodied*, p. 325f.

[8] Garber, *Descartes Embodied*, pp. 318-23; p. 319 quoted.
[9] Garber, "Thinking in the Age of the Learned Journal," *Vorträge des X. internationalen Leibniz-Kongresses* , vol. 6 (Olms Verlag, 2017), pp. 195-204.
[10] Ibid., p. 199.
[11] Ibid., p. 203.
[12] Ibid., p. 203, quoting Fontenelle, *Eloges des académiciens avec l'histoire de l'Académie* ... (The Hague, 1740) tome I, p. 448f.
[13] Ibid. p. 203, quoting A. II.iii.193.
[14] A.II.iii.194.
[15] Maria Rosa Antognazza, *Leibniz: An Intellectual Biography* (Cambridge University Press, 2009), pp. 306-07 and 318*n*160.
[16] Cf. R.M. Adams, *Leibniz: Determinist, Theist, Idealist* (Oxford University Press, 1994), p. 198f.
[17] Garber, *Leibniz: Body, Substance, Monad*, p. xv.