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with Tom McLeish, "The Re-Discovery of Contemplation through Science: Boyle Lecture 2021"; Rowan Williams, "The Re-Discovery of Contemplation through Science: A Response to Tom McLeish"; Fraser N. Watts, "Discussion of the Boyle Lecture 2021"; and Tom McLeish, "Response to Boyle Lecture 2021 Panel and Participant Discussion."

THE RE-DISCOVERY OF CONTEMPLATION THROUGH SCIENCE: A RESPONSE TO TOM McLEISH

by Rowan Williams

Abstract. This is a response to Tom McLeish's Boyle Lecture 2021 on the rediscovery of contemplation through science. Several implications are sketched: no single mind can encompass fully what there is to be known; we are likely to be unaware of the full range of what it is that is acting upon us or informing us at any given moment; and the universe that we encounter is a system of interaction and implication in which nothing is simply passive or lifeless.

Keywords: contemplation; information; interaction

Professor McLeish begins by reminding us of the paradox that underlies all claims to exact knowledge: to investigate claims to particular truths or explanations of particular phenomena, we have to decide what to ignore. The question we bring to any process of investigation (and of course this applies to humanities as well as sciences; think of the complexities of historical research) determines what is relevant to an answer, and thus also determines what does not count for the purposes of this particular enquiry. The hoary debates about whether there is a "fundamental" set of propositions describing the world we inhabit rest on a curious philosophical and methodological misunderstanding: if chemistry is what is left when we have stripped various extraneous phenomena from biology, and physics is what is left when we have done the same to chemistry (and, of course, mathematics when we have done the same to physics), the temptation is very strong to see the processes of scientific enquiry as a kind of hierarchy, pressing more and more insistently to the most "basic" level of explanation, so that we can say that various phenomena are "really" no more than the interactions or relations that make them possible. But the

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methodological need to exclude certain levels of complexity for certain very specific purposes (including, as McLeish notes, that distinctive kind of abstraction that is statistical analysis) is precisely this and no more: a methodological need, leading to a carefully devised and sophisticated decision about what has to be ignored in order to construct—and *imagine*, as we are rightly reminded, given that the emerging of a pattern is seldom if ever experienced as an obvious, necessary and risk-free conclusion—a coherent sequence of reasoning in a specified context. The nature of experimentation itself requires—as its language so often insists—means by which something can be "isolated" from extraneous elements, so that a particular strand of coherent patterning can be made visible.

Take this a little further and it should also be clear that when, for example, we describe aspects of the world around us as carrying and transmitting "information"—as in genetic patterning—we have to be alert for similar confusions and temptations. As the superb and imaginative work on genomics has advanced in recent decades, we have become more aware of the complexities here. A genetic sequence becomes recognizable as a sequence when and only when we know that it is activated in a certain context, by certain sorts of contact, with certain results. Like anything we can identify as a "code," the component elements break down into intelligible clusters only as we see their relation to something other. It is a fact that runs right through all that we understand by the communicating of information: if we were to encounter an alien life form that appeared to be intelligent, we should not be able to work out the meaning of its signals, in sound or gesture, without observing it in contact with other such agents. Transmitting information is something in which decoding receptors as well as encoding signalers are involved. Receptors screen out certain aspects of what is received, so that certain clusters of stimuli arrive at the destination that constitutes them as information carriers. One of the oddest bits of scientific myth to take root in the popular mind is the picture of genes as self-contained parcels of determinate, almost "labeled," information simply seeking a landing-base, rather than a complex mass of potentially "informative" stimuli activated only in specific contact with other such clusters of agency and sensitivity.

And if all knowing, all varieties of "being accurately informed," entail screening, selecting, ignoring, then a functioning human intelligence will be aware of the questions and the phenomena that at any given point it is *not* addressing. And to press the point a bit further, the focus we necessarily give to one area of what can be known is not only a matter of learning to scrutinize one area only of a kind of flat map of phenomena, because the *way* we register some sorts of phenomena will be different from how we become aware of others. The signals that provide us with useable data in a laboratory are not like the signals that, for example, might allow us to pick up that a fellow-worker is distressed or distracted or unwell. Screening out the latter may be necessary for concentration on the former; but the latter are no less real, no less information-laden. Beyond a certain point, ignoring this latter kind of signal will have an impact on the adequate registering of the former. And part of what McLeish is pointing us to is the uncomfortable fact that a purely methodological exclusion for certain purposes has become a kind of covert metaphysics, deciding what counts as matter for "real" knowledge, to such a degree that we are losing the capacity to learn how to respond intelligently to the ambient information that is unceasingly coming to us from those phenomena we have elected not to attend to.

Several implications emerge as we think through this. One is the very pragmatic point that no single mind can encompass fully what there is to be known; as we know perfectly well in practice, useable knowledge requires a collaboration between diverse kinds of knowing. But this applies not only within specific investigative enterprises. It has something to do with the way in which a whole social community learns about and responds to its environment, how it builds a *culture*, what is taken seriously as a proper exercise of the understanding. And this, as we know, is a contested matter in our educational philosophy: the ever-increasing functionalization of education privileges a certain kind of problem-solving and colludes with the temptation to translate methodological screening into metaphysical exclusion-and thus also to perpetuate a view of "science" that is shot through with fantasy and impossible expectation. We need to recover a wider sense of intellectual interdependence and epistemic generosity-and this is deeply connected with the quality of our social life itself, the degree to which we are aware of our interwoven gifts and perspectives.

A second implication is that we are likely to be unaware of the full range of what it is that is acting upon us or informing us at any given moment. This is emphatically not an appeal to allow preternatural agencies to slip into scientific investigation by the back door; it is rather a plea for awareness that we are in the process of learning what questions we can and must ask, and also learning what the relevant mode of asking and the relevant kind of knowing is. It is certainly something to do with humility not an undervaluing of our intellectual capacity, which has nothing to do with humility, but a recognition of the scale and the elusiveness of the stimuli at work upon us. Ironically enough, understanding the way nonhuman animals "know" their environment and communicate with and about it should both encourage and chasten our scientific aspirations; and a good deal has been written about the capacities of "premodern" humans in solidly traditional societies to pick up signals to which we have become deaf. This is perhaps where McLeish's important and innovative stress on the contemplative dimension comes most clearly into its own. Contemplation is certainly an attitude of mind that steps back from the pressure

of problem-solving and of creating definitive maps of the environment's working in order to attend without agenda to what is being encountered; Simone Weil's famous pages on this in her essay on "The Right Use of School Studies" (Weil 1959, 66-76) have often been referred to, with their insistence on a kind of radical exposure, even submission, of the intellect to what is before it, so that we are delivered from asking only the questions we are comfortable with. And her configuring of the issue is also a reminder that contemplation is not simply a matter of an attitude of mind; it is a stance in which we consciously lay ourselves open to be acted upon in ways we do not immediately seek to grasp or master; not a *resigning* of intellectual activity, but a necessary preliminary to any intellectual activity worth the name, an intelligent and patient receptivity that allows fresh enquiry and insight to arise when the ego's hyperactive self-referential activity is silenced.

The third implication is the most problematic but also the most fertile. The very idea of a pervasive but indeterminate and regularly elusive system of "information," signals out of which our mental receptors make sustainable and workable patterns, is one that is congruent with the belief that the universe we encounter is a system of interaction or "implication" (to adapt David Bohm's term) in which nothing is simply passive or lifeless (see Williams 2014). And this, in turn, is congruent with the theological idea that the intelligible structures of the universe communicate a fundamental intelligibility and intelligence not to be spoken of as a phenomenon among other phenomena but constituting the necessary condition of a universe like this-the theology of the divine Logos "refracted," so to speak, in the intelligible structures of what we perceive. We have to speak here of "congruence" rather than a conclusive argument since we cannot reduce the intelligibility of things to a single problematic phenomenon looking for an explanation; and the form of the claim involved is an eccentric one from the point of view of routine epistemology. It is saying something like: "If we ignored *nothing*, we should see the interconnection of all things in a single coherent pattern offered to finite intelligence"; and that is exactly what human scientific investigation is, ex hypothesi, quite properly incapable of realizing. But the fostering of a contemplative stance, the appreciation of the always unfinished promise of collaborative knowledge (knowing more by knowing in more varied company) and the recognition of the sheer diversity of modes of knowing will, taken together, help both to "locate" certain theological claims in relation to scientific method and to distinguish the grammar of scientific enquiry from religious acknowledgment.

Professor McLeish has provided us with a singularly forceful program for thinking beyond the sterilities of science-and-religion debates by clarifying the perfectly normal limits of the investigative method and the role of imaginative projections of the possible shapes of coherent pattern. Nothing here of any triumphalist appeal to "mysteries" that science cannot solve, simply an emphasis on how investigation unfolds in time by learning what to exclude from attention for the sake of specific questions. As he says, there are signs of a certain amount of recalibration among some philosophers and practitioners of science; and he is completely right to identify the unimaginative teaching of science as a toxic element in both the disillusion of many students with science and the oscillation between skepticism and messianism about science in the popular mind. Science is itself a culture, or set of cultures, and also (as McLeish's quotation from Ottoline Leyser makes plain) an element in a wider human culture, in which religious faith, as a response to the primary agency on which all happening depends, continues to make a claim for truthful perception no less intelligent and intelligible than others.

References

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