

BEYOND THE FACT-VALUE DICHOTOMY

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Two years ago I was a guest at a dinner party at which the hostess made a remark that stuck in my mind. It was just after the taking of the American Embassy in Iran, and we were all rather upset and worried about the fate of the hostages. After a while, my hostess said—this is not yet the remark I have in mind — something to the effect that she envied, or almost envied, the consolation that their intense faith in Islam must give the Iranian people, and that *we* are in a disconsolate position because — here it is — “science has taught us that the universe is an uncaring machine”.

Science has taught us that the universe is an uncaring machine. The tragic *Weltauschauung* of Nietzsche prefaced with “*science has taught us*”. Not since Mathew Arnold talked so confidently of “the best that has been thought and known” has anyone been quite so confident; and Arnold did not think that science was all, or even the most important part, of “the best that has been thought and known”.

Those here who know me at all will surmise correctly that I did not let this claim about what “science has taught us” go unargued-against, and a far-ranging discussion ensued. But the remark stayed with me past that almost eighteenth-century dinner conversation.

Some months later I repeated this story to my old friend Rogers Albritton, and Rogers characterized my hostess’ remark as “a religious remark”. He was, of course, quite right: it *was* a religious remark, if religion embraces ones ultimate view of the universe as a whole in its moral aspect; and what my hostess was claiming was that science has delivered

a new, if depressing, revelation.

One popular view of what is wrong with my hostess' remark was beautifully expressed by Ramsey, who closed a celebrated lecture with these words:¹

My picture of the world is drawn in perspective, and not like a model to scale. The foreground is occupied by human beings and the stars are all as small as threepenny bits. I don't really believe in astronomy, except as a complicated description of part of the course of human and possibly animal sensation. I apply my perspective not merely to space but also to time. In time the world will cool and everything will die; but that is a long time off still, and its present value at compound discount is almost nothing. Nor is the present less valuable because the future will be blank. Humanity, which fills the foreground of my picture, I find interesting and on the whole admirable. I find, just now at least, the world a pleasant and exciting place. You may find it depressing; I am sorry for you, and you despise me. But I have reason and you have none; you would only have a reason for despising me if your feeling corresponded to the fact in a way mine didn't. But neither can correspond to the fact. The fact is not in itself good or bad; it is just that it thrills me but depresses you. On the other hand, I pity you with reason, because it is pleasanter to be thrilled than to be depressed, and not merely pleasanter but better for all one's activities.

If one has seen a little more of life than the twenty-two year old Ramsey who delivered this lecture, and if one has faced the beastliness of the world (not just the wars and the mass starvation and the totalitarism — how different our world is from Ramsey's England of 1925! — but the beastliness that sensitive novelists remind us of, and that even

¹ pp. 291-292, Epilogue ("There is Nothing to Discuss"), in Frank Plumpton Ramsey's *Foundations of Mathematics*, edited by R. B. Braithwaite, 1931, New York: Harcourt Brace.

upper middle class life cannot avoid), one *is* more likely to be depressed than “thrilled”. Also, that Ramsey himself died when he was only twenty seven depresses *me*.

But notice — I think it comes out even in the bit of Ramsey’s lecture that I read, and it certainly comes out in the phrase “science has taught us” — notice how sure we are that we are *right*. Our modern revelation may be a depressing revelation, but at least it is a *demythologizing* revelation. If the world is terrible, at least we *know* that our fathers were fools to think otherwise, and that everything they believed and cherished was a lie, or at best superstition.

This certainly flatters our vanity. The traditional view said that the nature of God was a mystery, that His purposes were mysterious, and that His creation — Nature — was largely mysterious. The new view admits that our knowledge is, indeed, not *final*; that in many ways our picture will in the future be changed; that it can everywhere be superseded by new scientific discoveries; but that in broad outlines we *know* what’s what. “The universe is an uncaring machine”, and we are, so to speak, a chance byproduct. Values are just *feelings*. As Ramsey put it elsewhere in the same lecture, “. . . most of us would agree that the objectivity of good was a thing we had settled and dismissed with the existence of God. Theology and Absolute Ethics are two famous subjects which we have realized to have no real objects.”

I think this consolation to our vanity cannot be overestimated. Narcissism is often a more powerful force in human life than self-preservation or the desire for a productive, loving, fulfilling life, as psychologists have come to realize: I think that, if someone could *show* that Ramsey’s view is wrong, that objective values are *not* mythology, that the “uncaring machine” may be all there is to the worlds of physics and chemistry and biology, but that the worlds of physics and chemistry and biology are not the only worlds we inhabit, we would welcome this, *provided* the new view gave us the same intellectual confidence, the same idea that we have a superior method, the same sense of being on top of

the facts, that the scientific view gives us. If the new view were to threaten our intellectual pride, if it were to say that there is much with respect to which we are unlikely to have more than our fathers had — our fallible capacity for plausible reasoning, with all its uncertainty, all its tendency to be too easily seduced by emotion and corrupted by power or selfish interest — then, I suspect, many of us would reject it as “unscientific”, “vague”, lacking in “criteria for deciding”, and so on. In fact, I suspect many of us will stick with the scientific view even if it, at any rate, can be *shown* to be inconsistent or incoherent. In short, we shall prefer to go on being depressed to losing our status as sophisticated persons.

Such a new view is what I try to sketch and defend in the book I have just published.² I only sketch it, because it is intrinsic to the view itself that there isn't much more one *can* do than sketch it. A *textbook* entitled “Informal Non-Scientific Knowledge” would be a little bit ridiculous. But I feel sure that it is, in its main outline, more on the right track than the depressing view that has been regarded as the best that is thought and known by the leaders of modern opinion since the latter part of the nineteenth century. What I am doing today is, then, a short sketch of something that is itself a sketch.

Professor Quine has pointed out that the idea that science proceeds by anything like a formal syntactic method is a myth. When theory conflicts with what is taken to be fact, we sometimes give up the theory and sometimes give up the “fact”; when theory conflicts with theory, the decision cannot be always made on the basis of the known observational facts (Einstein's theory of gravitation was accepted and Whitehead's alternative theory was rejected fifty years before anyone thought of an experiment to decide between the two). Sometimes the decision must be based on such desiderata as simplicity (Einstein's theory seemed a “simpler” way to move from Special Relativity to an account of gravi-

² *Reason, Truth and History* 1981; Cambridge: Cambridge University Press.

tation than Whitehead's), sometimes on conservatism (momentum was redefined by Einstein so that the Law of the Conservation of Momentum could be conserved in elastic collisions); and "simplicity" and "conservatism" themselves are words for complex phenomena which vary from situation to situation. When apparent observational data conflict with the demands of theory, or when simplicity and conservatism tug in opposite directions, trade-offs must be made, and there is no formal rule or method for making such trade-offs. The decisions we make are, "where rational, pragmatic", as Quine put it.

Part of my case is that *coherence* and *simplicity* and the like are themselves *values*.

To suppose that "coherent" and "simple" are themselves just emotive words — words which express a "pro attitude" towards a theory, but which do not ascribe any definite properties to the theory — would be to regard *justification* as an entirely subjective matter. On the other hand, to suppose that "coherent" and "simple" name *neutral* properties — properties towards which people may have a "pro attitude", but that there is no objective rightness in doing so — runs into difficulties at once. Like the paradigm value terms (e.g. "courageous", "kind", "honest", or "good"), "coherent" and "simple" are used as terms of praise. Indeed, they are *action guiding* terms: to describe a theory as "coherent, simple, explanatory" is, in the right setting, to say that acceptance of the theory is *justified*; and to say that acceptance of a statement is (completely) justified is to say that one ought to accept the statement or theory. If *action guiding* predicates are "ontologically queer", as John Mackie urged, then they are nonetheless indispensable in epistemology. Moreover, every argument that has ever been offered for noncognitivism in ethics applies immediately and *without the slightest change* to these epistemological predicates: there are disagreements between cultures (and within one culture) over what is or is not coherent or simple (or "justified" or

“plausible”, etc.). These controversies are no more settleable than are controversies over the nature of justice. Our views on the nature of coherence and simplicity are historically conditioned just as our views on the nature of justice or goodness are. There is no neutral conception of rationality to which one can appeal when the nature of rationality is itself what is at issue.

Richard Rorty³ might suggest that “justified relative to the standards of culture A” is one property and “justified relative to the standards of culture B” is a different property. But, if we say that it is a *fact* that acceptance of a given statement or theory is “justified relative to the standards of culture A”, then we are treating “being the standard of a culture” and “according with the standard of a culture” as something *objective*, something itself *not* relative to the standards of this-or-that culture. Or we had better be: for otherwise, we fall at once into the self-refuting relativism of Protagoras. Like Protagoras, we abandon all distinction between *being* right and *thinking one is right*. Even the notion of a culture crumbles (does every person have his own “idioculture”, just as every person has his or her own idiolect? Hoy many “cultures” are there in any one country in the world today?)

The fact is that the notions of “being a standard of a culture” and “being in accord with the standards of a culture” are as difficult notions (epistemically speaking) as we possess. To treat these sorts of facts as the ground floor to which all talk of objectivity and relativity is to be reduced is a strange disease (a sort of scientism which comes from the social sciences as opposed to the sort of scientism which comes from physics). As I put it in *Reason, Truth and History*, without the cognitive values of coherence, simplicity, and instrumental efficacy we have no world and no facts, not even facts about what is so *relative to* what. And these cog-

³ See Rorty's *Philosophy and the Mirror of Nature*, 1979; Princeton: Princeton University Press.

nitive values, I claim, are simply a part of our holistic conception of human flourishing. Bereft of the old realist idea of truth as “correspondence” and of the positivist idea of justification as fixed by public “criteria” we are left with the necessity of seeing our search for better conceptions of rationality as an intentional activity which, like every activity that rises above the mere following of inclination or obsession, is guided by our idea of the good.

Can coherence and simplicity be restricted to contexts in which we are choosing between *predictive* theories however? Logical Positivism maintained that nothing can have cognitive significance unless it contributes, however indirectly, to predicting the sensory stimulations that are our ultimate epistemological starting point (in empiricist philosophy). I say that *that* statement itself does not contribute, even indirectly, to improving our capacity to predict anything. Not even when conjoined to boundary conditions, or to scientific laws, or to appropriate mathematics, or to all of these at once, does Positivist philosophy or any other philosophy imply an observation sentence. In short, Positivism is self-refuting. Moreover, I see the idea that the only purpose or function of reason itself is prediction (or prediction plus “simplicity”) as a prejudice; a prejudice whose unreasonableness is exposed by the very fact that *arguing for it* presupposes intellectual interests unrelated to prediction as such.

That Relativism and Positivism — the two most influential philosophies of science of our generation — are *both* self-refuting is argued in one of the chapters of the book (the one titled “Two Conceptions of Rationality”), by the way.

If the coherence and simplicity are values, and if we cannot deny without falling into total self-refuting subjectivism that *they* are objective (notwithstanding their “softness”, the lack of well defined “criteria”, etc.) then the classic arguments against the objectivity of ethical values is *totally* undercut. For that argument turned on precisely the “softness” of ethical values — the lack of a non-controversial “method”,

etc. — and on the alleged “queerness” of the very notion of an *action guiding fact*. But *all* values are in this boat; if *those* arguments show that ethical values are totally subjective, then cognitive values are totally subjective as well.

Where are we then? On the one hand, the idea that science (in the sense of exact science) exhausts rationality is seen to be a self-stultifying error. The very activity of arguing about the nature of rationality presupposes a conception of rationality wider than that of laboratory testability. If there is no fact of the matter about what cannot be tested by deriving *predictions*, then there is no fact of the matter about any philosophical statement, including *that* one.

On the other hand, any conception of rationality broad enough to embrace philosophy — not to mention linguistics, mentalistic psychology, history, clinical psychology, etc. — must embrace much that is vague, ill defined, no more capable of being “scientized” than was the knowledge of our forefathers. The horror of what cannot be “methodized” is nothing but method fetishism; it is time we got over it. Getting over it would reduce the intellectual *hubris* that I talked about at the beginning of this talk. We might even recover our sense of *mystery*, who knows?

I am fond of arguing that popular philosophical views are incoherent or worse. In the book I also try to show that the two most influential theories of truth: the empiricist theory (it’s all a matter of getting the “sense data” right — note that Ramsey endorsed that one in the bit I read you) and the correspondence theory (there is some special “correspondence” between words and objects, and *that* is what explains the existence of reference and truth) are either unexplanatory or unintelligible.

So far, what I have said could be summarized by saying that if “values” seem a bit suspect from a narrowly scientific point of view, they have, at the very least a lot of “companions in the guilt”: justification, coherence, simplicity, reference, truth . . . all exhibit the *same* problems that good-

ness and kindness do, from an epistemological point of view. None of them is reducible to physical notions; none of them is governed by syntactically precise rules. Rather than give up all of them (which would be to abandon the ideas of thinking and talking), and rather than do what we are doing, which is to reject some — the ones which do not fit in with a narrow instrumentalist conception of rationality which itself lacks all intellectual justification — we should recognize that *all* values, including the cognitive ones, derive their authority from our idea of human flourishing and our idea of reason. These two ideas are interconnected: our image of an ideal theoretical intelligence is simply a *part* of our ideal of total human flourishing, and makes no sense wrenched out of the total idea, as Plato and Aristotle saw.

In sum, I don't doubt that the universe of *physics* is, in some respects, a “machine”, and that it is not “caring” (although describing it as “uncaring” is more than a little misleading). But — as Kant saw — what the universe of physics leaves out is the very thing that makes that universe possible for us, or that makes it possible for us to construct that universe from our “sensory stimulations” — the intentional, valuational, referential work of “synthesis”. I claim, in short, that without *values* we would not have a *world*. Instrumentalism, although it denies it, is itself a *value system*, albeit a sick one.

SUMARIO

Este artículo es un esbozo de la perspectiva que el autor expone y defiende en su libro *Reason, Truth and History*, principalmente en contra del punto de vista según el cual el mundo se reduce a lo que enseñan las ciencias naturales, el universo es una máquina indiferente (“uncaring”), el hombre un subproducto del azar y los valores meros sentimientos.

Putnam argumenta que, como es sabido, las decisiones respecto a la aceptabilidad de teorías científicas se toman considerando propiedades como la coherencia y la simplicidad. Pero ellas mismas son valores. Si fuesen meras palabras emotivas, la justificación de la ciencia sería totalmente subjetiva. Por otra parte, no son nombres de propiedades neutrales, ya que son términos que guían la acción (al igual que los términos valorativos morales), de modo que describir una teoría como “coherente, simple y explicativa” equivale a decir que su aceptación está justificada, que debemos aceptarla. Aun cuando estos términos sean “ontológicamente curiosos”, como dice Mackie, son epistemológicamente indispensables. Sin los valores cognitivos de la coherencia, la simplicidad y la eficacia instrumental, no tendríamos ni mundo, ni hechos.

El autor señala que el relativismo y el positivismo se autorrefutan, pues sus afirmaciones centrales no pasan las pruebas que ellos mismos establecen. Los valores cognitivos son, pues, objetivos, pese a su “suavidad” y a la ausencia de criterios de aplicación bien definidos. Con esto los argumentos clásicos en contra de la objetividad de los valores éticos quedan socavados. Todos los valores viajan en el mismo barco.

Los mismos problemas epistemológicos aquejan a las nociones de racionalidad, referencia, verdad, etc. Ninguno es reducible a términos físicos, ni está gobernado por reglas sintéticas precisas.

Para el autor *todos* los valores derivan su autoridad de nuestras ideas de florecimiento humano y de razón, las cuales están conectadas. Tal como lo concibieron Platón y Aristóteles, nuestra imagen de una inteligencia teórica ideal es parte de nuestro ideal de florecimiento humano total.

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