For centuries moral philosophers never really doubted that there could be a science of ethics; developing such a science seemed to them the whole point of doing moral theory. It was quite natural, therefore, for Henry Sidgwick to begin the Methods of Ethics by assuming (without argument) "... that there is something under any given circumstances which it is right or reasonable to do, and that this may be known."¹ For the same reason, G. E. Moore's characterization of Principia Ethica as a "Prolegomenon to any future ethics that can possibly pretend to be scientific" was not at all idiosyncratic.² The scientific pretenses of moral theory appeared to be perfectly justified. With the rise of Logical Positivism, however, came the demise of "moral science." Moral theory quickly lost its status as the premier scientific pursuit; both its pretenses and its content were soon treated as nonsense. Even though today Logical Positivism has relinquished its grip on the philosophy of science, it has retained a strange hold


on moral theory. My aim in this paper is to loosen that hold so as to give moral theory some room to breathe.

Although I am concerned with the history as well as the force of the Logical Positivists’ attacks on “moral science,” my version of history will go back only about 50 years to Schlick, Reichenbach, Carnap, and Ayer. This is an admittedly short history, but it is long enough to give “moral science” serious trouble.

According to the Logical Positivists, moral theory straddles two positions. To the extent that it attempts to answer questions like “What standards of conduct are accepted?” and “What do people value?” moral theory is interesting, important, and empirically legitimate, but only a branch of social science. On the other hand, to the extent moral theory attempts to develop a theory of the Right and the Good, to the extent that it attempts to elaborate the “true” system of ethics, moral theory is not only futile, it is literally nonsense. Moral claims, according to the Positivists, are only expressions of emotions (or attitudes, or imperatives) and so they cannot be either true or false. Any given theory is just one expression of emotion among many, and is not in any legitimate sense “truer” than the others. In the eyes of Logical Positivists, moral theory is either simply a branch of psychology, or else it is nonsense.

A few Positivists, however, still thought that moral theory was scientific. Moritz Schlick, in particular, went to great lengths to defend the legitimacy of moral theory. He maintained that although moral theory is just a branch of psychology, it is a very important branch:

…if we decide that the fundamental question of ethics, “Why does man act morally?” can be answered only by psychology, we see in this no degradation of, nor injury to, [moral] science, but a happy simplification of the world-picture.3

Yet most of the Logical Positivists thought their arguments showed that there really is no such thing as “moral science.” Moral theory had no claim to being a science in its own right.


Moral language, they maintained, was a tool used to manipulate the behavior both of ourselves and of others. We engage in moral discourse, Reichenbach emphasized, because “our fellow men are conditioned to respond to words as instruments of our will.”4 Moral theories could be more or less useful, more or less adequate to our aims, but they could not be true. Thus, most Logical Positivists gave an interpretation of moral theory which paralleled the scientific instrumentalism championed by early Positivists like Mach; most Logical Positivists were “moral instrumentalists.” Of course, moral instrumentalism is not the only view which ties morals to utility. Utilitarians, for instance, reject moral instrumentalism and still hold both that moral theory is useful and that moral theory tells us what is useful. The (cold) heart of moral instrumentalism lies not in its view that moral theory is useful, but in the claim that moral theory is cognitively empty.

Certainly, there are significant disanalogies between moral and scientific instrumentalism. Most important of these is that scientific theorizing continues to have a purpose when it is given an instrumentalist interpretation. True or not, scientific theories are exceedingly useful tools. If they must be counted as nonsense, scientific theories at least have some claim to being important nonsense. Moral theories, in contrast, can make no such claim. As tools for manipulating behavior (or anything else) they are pitifully ineffective. If we must be counted as nonsense, moral theories lose their claim to our attention.

Despite a contempt for normative theory, Logical Positivists did not doubt the legitimacy of making normative claims. In fact, Logical Positivists seemed forced to view their own empiricist principles as fundamentally normative. So although Logical Positivists did try to undermine “moral science,” they emphatically did not want to eliminate normative discourse. As long as moral claims (and normative claims in general) were useful, the Logical Positivists agreed there was no reason not to make them. Like any other tool, moral claims should be used as long as they are effective.

The issue raised by Logical Positivism, then, is not whether we should utter things like “You ought to keep your promises” and

"Killing innocent babies is wrong." The issue is whether utterances of this sort can ever be true. Only if at least some moral claims are true will pursuing "moral science" have a purpose. What is at stake is not the legitimacy of making moral claims but the legitimacy of thinking them true.

"Moral science" is in trouble only if an instrumentalist interpretation is given to all moral discourse. One might admit that claims concerning values are mere expressions of preference, say, and still hold that other moral claims, perhaps those concerning justice, rightness, and virtue, are cognitively significant and (at least sometimes) true. Clearly, this would leave room for "moral science," developing a theory of justice, of right, and of virtue, would both make sense and be important.

The Logical Positivists' moral instrumentalism pivots on the verificationist criterion of meaning. Hempel formulates the criterion in this way:

... a sentence makes a cognitively meaningful assertion, and thus can be said to be either true or false, only if it is either (1) analytic or self-contradictory or (2) capable, at least in principle, of experiential test.

The notion of experiential testability is obviously vague, and much debate has centered on just how it should be understood. But the force of the Positivists' argument against "moral science" shines through the controversy. In whichever way "experiential testability" is spelled out, it seems moral claims fail the test. For this reason, I shall formulate the Positivists' argument leaving the criterion vague. It runs as follows. Moral science is legitimate only if there are true moral sentences whose truth is to be explained by the science. Moral sentences can be true only if they are cognitively meaningful. Sentences, moral sentences included, are cognitively meaningful only if they are verifiable. They are verifiable if and only if they are either analytic or self-contradictory or susceptible to experiential test. Moral sentences satisfy none of these requirements; so they are cognitively meaningless. Since they are meaningless they cannot be true, and so, to quote Ayer, "We find that ethical philosophy consists simply in saying that ethical concepts are pseudo-concepts ... There cannot be such a thing as ethical science." Carnap, Reichenbach, and Ayer each explicitly offered this argument.

The same argument, turned on its head, can also be found in Moritz Schlick's work. In his hands the argument begins with the assumption that moral science is legitimate and concludes that since moral sentences are not analytic they must be experientially testable: "... there remains [he argued] no alternative ... to finding the verification of a proposition concerning value in the occurrence of a definite experience." On the grounds that the meaning of an assertion is its method of verification, Schlick argued that the meaning of value claims must be the same as the meaning of claims reporting feelings of pleasure. Schlick thus avoided moral instrumentalism by embracing a definitional reduction of moral terms to straight-forwardly empirical ones.

Schlick's approach to ethics represented the only alternative to moral instrumentalism available to Logical Positivists. But it was an approach most found wanting; if for no other reason, because it fell victim to Moore's Open Question Argument. Ayer, for example, argued that "... since it is not self-contradictory to say that some pleasant things are not good, or that some bad things are pleasant, it cannot be the case that the sentence 'x is good' is equivalent to 'x is pleasant,' or to 'x is desired.'" The same argument, suitably generalized, was thought to hold against any attempt to reduce ethical sentences to non-ethical ones. According to Ayer: "... in our language, sentences which contain normative ethical symbols are not equivalent to sentences which express psychological propositions, or indeed empirical propositions of any kind."

It is worth commenting on both the peculiarity of Ayer's argument and on the stringency of the requirement it imposes. The test

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Ayer applies appears to presuppose that moral assertions have meaning; sentences fail to have equivalent meanings by having different meanings. What goes wrong with Schlick’s definition is that non-moral sentences fail to capture the full meaning of moral sentences. In Moore’s hands, the Open Question Argument makes some sense; unlike the Positivists, Moore could reasonably maintain that, even after all the naturalistic definitions fail, there is still some meaning left uncaptured. Because of the verificationist criterion, however, Logical Positivists cannot sensibly allow moral assertions an uncapturable meaning. For them, empirically uncapturable meaning is no meaning at all. If ethical claims do have truth values, the Positivists held, the claims must be equivalent to some empirical proposition (or else be analytic). Of course, as most Positivists thought, moral claims might have no truth value—just as exclamatory points have no truth value. Were that so, however, Ayer’s argument would be out of place. Consider just how peculiar it would be to argue that “...since it is not self-contradictory to say that some pleasant things are not!, or some things which are not! are pleasant, it cannot be the case that ‘!’ is equivalent to ‘x is pleasant.’” The verificationists’ approach to determining meaning, one would have thought, is to examine moral utterances to see whether they are subjected to empirical tests; if they are, then their meaning is to be equated with (or at least legitimized by) these tests; if they are not, then they are to be dismissed as meaningless. Moral claims might fail this test, but if they do it is because they are not verifiable and not because their meaning cannot be fully captured by any proposed empirical definition.

The stringency of Ayer’s argument lies in its assumption that meaning depends on definability (without loss) into observational terms. The assumption would have us count much too much as meaningless. Needless to say, this is not a new point. Indeed, it is one of the reasons Ayer himself gives for rejecting conclusive verifiability as a criterion of meaning. Yet is is a point often ignored in discussing ethics. Once meaning is allowed to sentences which cannot be defined purely in observational terms, Logical Positivists cannot legitimately demand that ethical assertions, if they are to be meaningful, must be definable in non-moral terms. Definability just is not the relevant issue; what matters (to an empiricist) should be whether experience can be used to confirm or disconfirm moral claims.

In any case, the verification principle, as a criterion of meaning, has all but been abandoned. As a result, both the peculiarity and the stringency of the definability requirement are only of historical interest. Still, the verifiability principle, taken as a criterion of science, rather than as a criterion of meaning, seems to impose a reasonable requirement: if there is no way to verify the claims of a purported “science” then there is no reason to think of it as a science at all. Though we might allow meaning to ethical claims, we might nonetheless want to deny the possibility of developing a moral science.

The structure of the Logical Positivists’ attack on “moral science” would then remain basically the same. To count as science the claims of a theory must either (1) be analytic or (2) be capable, at least in principle, of experimental test. Moral claims are neither. Therefore, to the extent that moral theory makes moral claims, it cannot be viewed as “moral science.” Plainly, room remains for “moral science” as moral psychology; but not for “moral science” as the theory of the Right and the Good.

Often the Logical Positivists’ epistemological program is chastised for neglecting the fact that observation is theory-laden. Of course, the theory-ladenness of observations does do serious damage to the Positivists’ epistemology, but it need not undermine their attack on “moral science.” When it comes to criticizing “moral science” the Positivists can admit that observation is theory-laden; their complaint is that moral theory is not observation-laden. All they must maintain is that, theory-laden or not, observation is relevant to science in a way in which it is not relevant to moral theory.

This version of the verifiability attack on “moral science” is bolstered by the common assumption that an unbridgeable chasm lies between what is and what ought to be. After all, an “ought” cannot be deduced from an “is”; this suggests (to some) that “ought claims” are not “is claims.” Since observation is

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11. Language, Truth and Logic, p. 38

12. I should say that the definability requirement ought to be only of historical interest; some, Gilbert Harman for instance, still seem to think a naturalistic world-view can allow “moral science” only if moral claims can be reduced to non-moral claims. See The Nature of Morality, p. 22.
always of what is, we have reason to suspect observation is irrelevant to what ought to be.

Such a suspicion, however, proves to be unsupported. The argument for the is/ought distinction, like Ayer’s criticism of naturalism, turns on moral assertions not being definitionally reducible to non-moral assertions. No matter what we know about the non-moral facts of the case, the argument points out, we cannot uncontroversially infer the moral facts. Since non-moral assertions report what is, and since moral claims are not reducible to these others, then moral claims must not report what is. Or so the argument goes. By similar lines of reasoning, though, we would be constrained to admit that the claims made in psychology are not claims about facts; for psychology, no less than morality, resists definition reduction. No matter what we know of the non-psychological facts of the case, we cannot uncontroversially infer the psychological facts. If the argument offered in support of the is/ought distinction worked, we would find ourselves stuck with an is/thought distinction as well. Psychology, we would have to say, reports not what is but merely what is thought. Yet while it is true that what is thought to be is not always so (just as what ought to be is not always so), reports that something is thought to be (or that something ought to be), are no less assertions concerning what is the case because of this.

One might, perhaps, take the irreducibility of psychology as showing that psychological properties don’t really exist. Nonetheless, it would still be a mistake to think that psychology is not concerned to study what is. In the same way, one might take the irreducibility of morality as showing that moral properties don’t really exist. Nonetheless, it would still be a mistake to think that moral theory is not concerned to study what is. Moral theory is as concerned with what is as is psychology. In making claims about what ought to be, moral theory is claiming that what ought to be is such and such. Moral theory characteristically asserts things like “Killing humans for entertainment is wrong.”; “An action is made worse if it results in excruciating pain for others”; “The Ku Klux Klan is a morally corrupt organization”...

Even without the is/ought distinction, though, the claim that moral theory is not observation-laden has admirable support from common sense. For if people, or actions, or states of affairs, have a worth, or a dignity, or a rightness, about them, this is something we cannot sense directly. Intuitionism aside, most moral theories recognize this by construing moral properties as unobservable. In this respect, moral theory is no different from atomic theory. One can sense neither atomic weights, nor the laws by which the behavior of atoms is governed. Despite this, both atomic theory and moral theory do have empirical consequences; both are susceptible of experiential test.

In fact, moral theory passes the testability requirement in the same way as any uncontroversially scientific theory. Duhem and Quine have emphasized that scientific theories do not pass the requirement by having each of their principles pass independently; theoretical principles of science have no observational import when considered in isolation. We do, however, derive experientially testable predictions from scientific theories when the principles of a theory are combined. In the same way, while moral principles are testable only when combined with the appropriate background assumptions, they are nonetheless experientially testable. For instance, to test the view that an action is wrong if and only if there is some alternative action available which will bring about more happiness, we might combine it with the (plausible) assumption that punishing the innocent is wrong. From these two principles taken together, we get the empirically testable prediction that there will never be a time when punishing the innocent brings more happiness than any other action which is available. Alternatively, consider Plato’s contention that “virtue pays.” If combined with some account of what virtue is and with the view that “payment” is a matter of satisfying preferences, we get as a testable consequence the prediction that those who are virtuous (in whatever sense we settle on) will have more of their preferences satisfied than if they had not been virtuous. Or again, if a moral theory holds that a just state does not allow capital punishment, and if we assume some particular state is just, we get as a testable consequence the claim that this country does not allow capital punishment. In each of these case our principles, assumptions, or observations, may be incorrect. It may turn out that punishing the innocent does sometimes increase happiness, or that misery often accompanies virtue, or that the country question does allow capital punishment. Upon making such discoveries we face a choice; we can abandon (or amend) our theories, or our assumptions, or our confidence in our discoveries. Some one of these has to give way. 13 Experience, though, cannot settle this choice for us;

we can always make suitable adjustments in our assumptions or in the credence we give to our “discoveries” if we wish to save our theory. The same, of course, is true with respect to scientific theories. Moral theories, like scientific theories, can face the tribunal of experience.

The Logical Positivists’ attack on “moral science” retains no destructive force: moral theory does not fail as science because it is meaningless, nor does it fail because it has no testable consequences. If moral theory does fail as science, it must be for reasons other than those given by the Logical Positivists.