

science banishes inquiry concerning the rationality of science because rationality is a non-natural concept (Giere, 1985, 1988), and treats theory choice descriptively only. The normative dimensions of epistemology and philosophy of science are either ignored or actively denounced by most contemporary naturalists.

Views of naturalism which banish normative concerns face a severe self-reflexive difficulty: they are incapable of justifying themselves without contradiction. Non-normative naturalism cannot itself be justified naturalistically; by its own lights, therefore, it is not justified. Putative naturalistic justifications of naturalism beg the question against the non-naturalist; non-naturalistic justifications of naturalism are self-defeating (Siegel, 1980, 1984, 1989). Thus it appears that any viable naturalism must retain a normative dimension.

Larry Laudan's version of naturalized philosophy of science does retain that normative dimension. Laudan's version seeks to reconcile normativity and naturalism; he argues that naturalized methodological rules 'retain all the[ir] normative force', but 'they derive their warrant from empirical information about how this particular world is constituted. One can thus "naturalize" methodology . . . without being forced (with Quine) to believe that making it empirical and descriptive robs it of its normative force' (Laudan, 1988, p. 350).

In this paper I examine Laudan's normative naturalism. My aim is to determine whether Laudan's version of naturalism, which seemingly avoids the self-reflexive problem that undermines more standard non-normative versions of naturalism, can successfully avoid other difficulties which accrue to normative naturalism. I shall argue that Laudan's naturalism, and the conception of rationality which underlies it, faces difficulties which are at least as serious as those facing non-normative versions of naturalism.

### I. Very Brief Overview

Laudan is a strong advocate of philosophy of science retaining a normative character, and his naturalism is developed against that background. '[P]roviding an epistemic warrant for accepting scientific theories', he writes, is 'an unquestionably important philosophical problem' (Laudan, 1980, p. 182).<sup>2</sup> Basic to Laudan's view is the thesis that naturalization does not preclude normativity: '... a denormativization of methodology is not entailed by its naturalization. Quite the contrary, *one can show that a thoroughly "scientific" and robustly "descriptive" methodology will have normative consequences*' (Laudan, 1987, p. 25, emphasis in original). Indeed, *Science and Values* (Laudan, 1984), in which Laudan introduces his normative naturalism, is devoted to the articulation and defence of a normative theory of the rationality of science. Basic to that theory is what Laudan calls the 'reticulation model' of scientific

<sup>2</sup>See also Laudan (1983), pp. 321–322.