rationality. According to that model, scientific (dis)agreement can occur at three levels: the factual/theoretical, methodological, and axiological levels. On the 'hierarchical model', which Laudan contrasts with his reticulational model, factual/theoretical disputes are adjudicated by appeal to methodological principles, and methodological disputes are adjudicated by appeal to axiology, i.e. to the aims or goals of science. When scientists disagree about axiology, on the hierarchical view such agreement cannot be rationally resolved, since there is nothing higher than axiology in the hierarchy to appeal to. The hierarchical model, coupled with other assumptions of a Kuhnian flavour, thus paves the way toward the conclusion that science is irrational (Laudan, 1984, chaps. 3–4). The reticulational model provides the avenue through which Laudan presents his new account of science's rationality, according to which both methodological and axiological disputes can be rationally resolved by reticulation, i.e. by mutual adjustment and justification among facts/theories, methodology, and axiology.

II. Normative Naturalism: The Empirical Character of Methodology and Science's Rationality

On Laudan's view, methodological rules and principles are best understood as hypothetical imperatives:

> Scientists presumably have the methodological rules they do because they suppose that following the rules in question will bring about ... the realization of their cognitive or doxastic aims. So conceived, methodological rules are nothing but putative instrumentalities for the realization of one's cognitive ends; in a word, the rules of science are designed simply as means to cognitive ends or tools for performing a task (Laudan, 1984, p. 34).

> I submit that all methodological rules should be construed not ... as if they were categorical imperatives, but rather as *hypothetical* imperatives. Specifically, I believe that methodological rules, when freed from the elliptical form in which they are often formulated, take the form of hypothetical imperatives whose antecedent is a statement about aims or goals, and whose consequent is the elliptical expression of the mandated action. Put schematically, methodological rules of the form:
>
> (0) 'One ought to do x',
>
> should be understood as having the form:
>
> (1) 'If one's goal is y, then one ought to do x'.
>
> ...
>
> Imperatives of the sort schematized by (1) above always assert a relation between means and ends.... Methodological rules are thus statements about instrumentalities, about effective means for realizing cherished ends (Laudan, 1987, p. 24, emphasis in original. See also Laudan, 1988, pp. 349–350).

Construing methodological rules as 'instrumentalities', as hypothetical imperatives relating desired ends with effective means for realizing those ends,