The theses (impartiality, autonomy and neutrality), with which Lacey (1997a) explicates the view that the sciences are value free, are about scientific practices. They need not all obtain together, impartiality, for example, may obtain but not autonomy and neutrality, because different factors enter into the various stages of the development and choice of theories. Whereas impartiality "is a thesis pertaining to accepting a theory of a domain or domains of phenomena" (Lacey, 1997a 17), considerations of autonomy and neutrality reflect the "agenda of scientific inquiry," where interests shape the kinds of novel phenomena to be sought out and possibilities to be encapsulated, and thus the s/c strategy (constraint/selection strategy) adopted. The separation affirmed here might be questioned. Is it not the s/c strategies themselves that select and demarcate the domains of phenomena and classes of possibilities of which a theory is taken to be accepted? That is true, but the separation is supported by proposing that there are hierarchically operating "levels of selection involved in making theory choices,"

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where the distinction of levels is “methodologically and logically essential” (Lacey, 1997a 25, 27) This raises another question, however What justifies the claim that the distinction of levels is methodologically and logically essential, and thus that impartiality can be considered separately from autonomy and neutrality? One answer might be grounded in epistemological or pragmatic arguments — either based in “rule-bound accounts of sound scientific judgments,” or in attempts to derive *a priori* a list of essential *cv* (cognitive values) That is not Lacey’s approach. He prefers to regard impartiality as a value which can be more or less manifested in theory choices, so that we can aspire to accept theories in virtue of their high manifestations of the *cv* even though the domains of which they are accepted are selected by deployment of *c/s strategies* whose adoption is linked with (non-cognitive) values.

Considering the thesis of impartiality as a value, made intelligible in view of the distinction of levels at which respectively values and *cv* have their proper roles, is opposed to two opposite contemporary views on the rationality of the processes leading to theory choices. According to the traditional view of logical empiricism of the 50's and 60's, impartiality (that values play no proper role in the acceptance of theories) is based on the view that accepting a theory, i.e., considering it properly included in the stock of knowledge, derives from an activity oriented by rules which express the correct relations that theories should maintain with empirical data. In addition to philosophical criticism that undermined even the idea of the applicability of such rules, case studies of present and past scientific practices support that what scientists consider to be impartial judgments do not require explication in terms of the deployment of rules. On the other hand, by supposing that manifestations of impartiality are neither possible nor even
desirable, some post-modern and relativist philosophers in recent decades have maintained that the thesis of impartiality represents only an "illusion" (Lacey, 1997b) Both traditional and post-modern/relativist views are inadequate the former because it incorrectly identifies the intellectual instruments available to attain impartiality, the latter because it does not recognize the particularity of the scope of application of accepted theories and thus refuses to recognize any efforts to identify the possible manifestations of impartiality. In the latter case, the Humean fallacy is committed inferring value from a (supposed) fact.

The proposed view avoids such inadequacies. It recognizes that empirical investigation of scientific practices may show that impartiality is not a realized fact in certain cases, but this leaves open that it be a value (cf. Lacey, 1997a 33-34, Note 4). In his lectures at USP (1996) and elsewhere (Lacey & Schwartz, 1996), Lacey has argued that "there will always be, to some extent, a gap between values-as-manifested and values-as-articulated," and part of the effort to bring them together — an effort that itself manifests a value — is to improve the articulation of values, to take them as "objects of investigation (psychological, epistemic, and evaluative), of reflection, of discussion, and of critical argument." (Lacey & Schwartz, 1996 322-323)

When impartiality is articulated as a value, it can be considered as one of the "constitutive values of science," a sort of middle ground between (moral and social) values and cv. Lacey rejects any view of science that does not link it in important ways with value perspectives. His view, unlike the traditional logical empiricist one, permits that impartiality obtain to a significant degree of certain theories, but that neutrality not obtain of them. Although theory
choices are made under c/s strategies and therefore made in contexts that incorporate value perspectives, impartiality may still obtain provided that the distinction of levels is respected. It is in this sense that the distinction of levels is logically and methodologically essential. It assures inter alia first that theories chosen under different c/s strategies may be commensurable since “adopting a particular strategy does (and can) not commit one to the truth of any theory,” and secondly that there can be commensurability among c/s strategies themselves since “the adoption of strategies is under long-term empirical constraint” (Lacey, 1997a 27), so that “part of the reason to continue following them is the empirical success gained from following them” (Lacey, forthcoming).

References

Lacey, H & Schwartz, B 1996 “The formation and transformation of values”, in W O'Donohue & R Kitchener (eds), The philosophy of psychology London Sage, 319–38
Lacey, H 1997a “The Constitutive Values of Science” Principia 1(1) 3–40
Lacey, H 1997b “Ciência e Valores” Manuscrito 20 (1) 9–36
Lacey, H (forthcoming) “Scientific understanding and the control of nature”, Science and Education, in press

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