

## DONALD CAMPBELL ON CULTURAL RELATIVISM

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Donald Campbell was sitting in his office at Northwestern University, in 1976, smiling his ironic-but-gentle smile. I had just graduated as a PhD in Belgium and was proud to carry my first 'real' book with me: a collection of essays on cultural and linguistic relativism. My own contribution to the volume dealt to some extent with Don's work on perceptual illusions and cultural relativism and it was because of that work that I dared to enter his vault-like office. He made time and space, and started to question me. His first concern was with cultural relativism. He smiled rather conspiringly and said: 'we seem to have some things in common'. Time and again he turned to a large cabinet from which he reappeared with yet another xerox or reprint from his own work. I left him loaded with stuff, minus a copy of my book, and glowing with good feelings and enthusiasm.

Over the years we came to know each other much better and enjoyed talking about other 'mutual interests' (be it ERISS or Evolutionary Epistemology or 'religious atheism'). The last time we met he came driving up to the airport to spend some time with us since we had a three hour time lapse (he cared to make a three hour drive to meet us). On saying goodbye, alas for the last time, he made me promise to write a paper about my present views on cultural relativism 'after all these years, and the field work and all that'. The present contribution is my first step in this endeavour, appropriately set up as a sketch of his work on the subject.

### 1. *Cultural relativism in the strict sense.*

In the sixties and seventies Don Campbell collaborated regularly with anthropologists and actually promoted a group of researchers in cross-cultural psychology and social psychology. The most outstanding anthropologist he worked with was, of course, Melville Herskovits, who was a devoted advocate of cultural relativism. In Don's papers one sees from the beginning a double relationship with relativism. In a sense, he showed a constant 'push and pull' pattern towards it: he was a convinced realist (to adopt a particular form of critical or hypothetical realism over time), and at the same time he saw the good sense of the relativist position. To establish a balanced marriage between both, at first glance contradictory positions, became one of the major emphases of his psychological and of his epistemological work. I will try to show some of that later in this contribution.

Together with Marshall Segall and Melville Herskovits, Don Campbell carried out major work in cross-cultural research on perception. The work was pathbreaking because of its methodological innovations (working with an original testbook of all visual illusions, developing criteria to control translation and interpretation problems in the cross-cultural settings to a maximum, and drawing wide range theoretical and philosophical explanations on the basis of extensive field work).

An example will make clear what this work amounted to. Herskovits suggested that African peoples showed remarkably different reactions to the Müller-Lyer and other illusions than Americans did. His opinion was based on loose observations. With Segall and Campbell a systematic testbook was designed showing each of the illusions in a series of slightly differing formats, one per page. Each page contains one figure in two colors (e.g., the horizontal lines or shafts in red, and the arrow-points in black for the Müller-Lyer), and the series of pages has one of the coloured parameters grow or shrink slightly in a systematic range. The subject is asked for each page which of the target lines is longer (Herskovits et al., 1956). In a supplementary study Campbell (1969 MS) developed the (Sander) parallelogram reproduction test in order to decide a debate about physiological versus experiential interpretations of illusions. By breaking down the figure of the parallelogram in corners and varying the width of the angles systematically, Campbell demonstrated once again the validity of his 'carpentered world'

hypothesis.

What does the 'carpentered world' hypothesis amount to? According to Campbell the naive realistic theory of perception, holding that the external stimuli and the physiology of the eye is all that we need in order to explain visual perception adequately, is flawed. In an early paper on 'Distinguishing differences in perception from failures of communication in cross-cultural studies' (1964) he hints on the epistemological nature of this problem. In a late rejoinder to that paper (1989) he explicitly links Descartes' preliminary work on the status of perception with the recent constructivist and 'hypothetical realist' theorists on knowledge. In this quarter century a lot has happened in psychology and in sociology and history of science, and Campbell has been taking part in the process most of the time. For one thing, he has remained faithful to the combined position of realism and cultural relativism and he has incessantly shown through top-rank research on the methodology of perception and learning analysis (both within our culture and across cultures) how these positions can be combined in a nontrivial way. I will try to render some of this.

The 'carpentered world' hypothesis holds that Western subjects perceive the outside world by means of a cognitive instrument they built up through learning over the years. They incorporated heuristic programs, percepts, a model or prototheory about spatial relationships (such as distance, parallelism and the like) which influences any consecutive visual perception. In plain words, the eye of the Western subject has learned to expect the outside world as a built environment, regulated by (Euclidean) straight lines and right angles. Whenever (s)he sees something, especially instances exhibiting perspective or angles, (s)he will 'correct' the image to match the ideal geometric or 'carpentered' form. It is precisely this 'correction' process that is aimed at in the research on visual illusions. Indeed, the Müller-Lyer and other illusions work as illusions because of the fact that 'the mental eye' distorts the stimuli to some extent. Campbell's hypothesis was that this distortion can be understood adequately in the case of the Westerner by means of the hypothesis of the 'carpentered world' (as internalized cognitive map and as heuristics). The differences in illusion behaviour in other peoples can then be explained similarly by reference to their particular ecological and man-made environment and the way it was processed and mapped in the 'mental eye' of the cultural subject (Campbell, 1972, Segall et al. 1966). The substantial comparative

research on visual illusions carried out by the Campbell-Segall-Herskovits team (over 2000 subjects being tested by 1960) seems to have validated their point.

Linked directly to this work on visual illusions and the relevance for a cultural relativist stand are the famous paper on 'entitativity', and, secondly, the broader discussion on linguistic, cultural and moral relativism.

In a remarkable contribution to a Festschrift for Ludwig van Bertalanffy, Campbell (1973, originally 1966) deals with the role of ostension and of 'entitativity' in language learning. It is needless to say that language learning, especially in the young child, is one of the critical loci to test linguistic or cultural relativist hypotheses (Pinxten; 1976). He voices two critiques: (a) on the one hand it can be granted that language (or linguistic structures) has a role in 'shaping our views on the world' (1973: 1044), but on the other hand we cannot deny a 'complementary role of the world in shaping language' (idem). (b) secondly, traditional or passive inductivism is wrong, and the claim that we learn a language by ostensive definition at an early age has been disproven. Philosophers such as Quine and Wittgenstein have demonstrated that 'in addition to master and pupil there must be the third party of objects talked about' (1973: 1048). Campbell's paper tries to indicate in what ways and to what extent the external world (categories) can be seen at work in early learning of language. The argument takes the form of a careful reconsideration of the status and role of ostension in language learning. The child attaches meanings or conceptualizations to any given ostensive instance. The number of potential conceptualizations is nearly infinite. This could lead to highly idiosyncratic language, as in fact happens to some extent in young children. However, meanings and categorizations are gradually winnowed, because (says Campbell) stable meanings are understood to have survival value in the child's perception of the environment. A crucial aspect of stability 'was built up around entifiable aspects of the environment' (1973:1049-50). That is to say, aspects of the environment (or of the external world) force themselves on the child because they are unmistakably 'stable' 'entities' which are 'highly talkable-about' (idem: 1051). In communication with parents and peers these aspects with a high degree of entitativity recur and prove to be stable anchorpoints to reach understanding through communication.

The vast amount of descriptive work on folk classifications around

the world seems to substantiate the entitativity hypothesis from another angle: although peoples around the world categorize aspects of the world differently, it seems to be the case that e.g., plant and animal classifications show a high degree of overlap: edibility-inedibility and formal features are very similar across cultures (Conklin, 1971, Atran 1990). In terms of the relativism-universalism debate this entails that a simple either/or reasoning or the common dichotomic structure of the argument will not do. Instead, Campbell shows how a dialectic process (my words) between the learner on the one hand and both her physical and her sociocultural environment on the other hand builds up knowledge. The focus in the 1973 paper was on the psychological level: language learning in the infant. However, the relevance of this view is later extended,- following Quine, Wittgenstein and Popper alike,- to speak about the cultural community level, including the scientific community and its notion(s) of knowledge. I do not claim that Campbell simply projected ideas from the psychological to the sociological and epistemological level: he was too refined a thinker to be caught in a position of mere psychological reductionism. I claim that he had his psychological work inspired all the time by epistemological issues on the one hand, and tried to situate the production of scientific knowledge (and thus epistemological issues) in the psychological, sociological and cultural context on the other hand. Within this perspective of a realistic epistemology with an epistemological subject the delicate balance between universalistic and cultural relativistic standpoints is defined. I clearly see a consistent research program in Campbell's case, carrying him all the way into the heart of epistemological debate. I will point out some of his (later) positions, keeping one eye focused on the issue of cultural relativism.

## *2. Cultural relativism, epistemology and sociology of science.*

In his introduction to the Herskovits volume on cultural relativism, Campbell (1972) makes a few statements which will book him a relativist of sorts, siding most of the time with Kuhn, and often with Feyerabend. The following programmatic statement may serve as an example: 'Science and ordinary knowing are now seen to be based upon deeper-seated presumptions about the nature of the world'(1972: XII). These

presumptions and even paradigms find their source in the culture of the scientist. The ethnocentric scientist and the epistemological absolutist is that type of scholar who 'mistakes his own cultural categories as universally correct'(idem: XIII). In this perspective Herkovits' and Campbell's cultural relativism is a healthy antidote against this erroneous absolutism. The epistemological impact of this position is clear, and an intellectual opposition against the colonialist-imperialistic 'ethnocentric moral absolutism' (idem: XXIII) complements this epistemological stand for both Herskovits and Campbell, I think. The synthetic book on ethnocentrism which was jointly written by LeVine and Campbell (1972) underscores these and other socially relevant ideas in a mature and indeed encompassing study.

What interests me in the context of the present paper, however, is the link Campbell defines between the often denigrated 'soft' position of the cultural relativist and the program of a naturalistic epistemology with bases in the history, the sociology and the psychology of science which started to be worked out in the same era by such dominant figures as Toulmin, Kuhn and Feyerabend. Even as late as 1981, when Campbell and Rosenberg organized the ERISS conference philosophers such as Goldman or Laudan were reputed to want to turn away from the so-called messy and indeed logically unsettling program of E(pistemologically) R(elevant) I(nternalist) S(ociology) of S(cience). I remember vividly how the theoretically and logically minded philosophers were vehemently stressing the normative aspects of epistemology, thus isolating the empirically sound criticism of the sociologists and anthropologists of science (like Knorr, Bloor, Woolgar or myself). The normativists seemed to vow for absolutism in order to avoid the difficult and delicate discussion with the naturalistic epistemologists to be, who were not even coming from such serious disciplines like physics or chemistry, but rather from social sciences. While nearly everybody was getting more and more despaired in the course of this long conference because of the depth of the water between both 'parties', Campbell was visibly having a great time in watching the collisions take place. The reason why it did not work out between standard philosophers and standard sociologists of science at that time, I think, was largely because each party was erroneously locked into its own trench, each at one side of a (false) dichotomy: the philosophers defended a logically consistent absolutist view on knowledge (including nihilism, if need be) and the sociologists

argued for relativism as the negation of rockbottom certainty or truth loosing out on the consistency criterion while doing so.<sup>11</sup>

My point with this little anecdote is that, -in retrospect-, Campbell had been there already, since he refused the dichotomy from his early work on, and indulgently pleaded for a synthesis of relativism and a belief in the superior status of scientific ('true') knowledge. Already in his sketch of 'a nested hierarchy of selective-retention processes' (Campbell, 1974), which explained how we can be seen to be 'cousins to the amoeba' yet developing a much more complex, self-critical and more reliable system of knowledge termed 'science' he presented his view of the way science's particular and superior kind of knowing can yet be understood as a sophisticated, historically and socially situated process of trial and error. The character of science is not that it transcends in a categorical way any other type of knowing, but rather that it is the same as and yet specifically differing from other types. His version at the time read: "What is characteristic of science is that the selective system which weeds out among the variety of conjectures involves deliberate contact with the environment through experiment and qualified prediction, designed so that outcomes quite independent of the preferences of the investigator are possible.' (1974: 434).

Clearly, this is not enough, but it is a further step in the naturalistic epistemology he was working on. Much of his later work can be seen, I think, as partial elaborations of particular notions in this statement. Let me mention a few. I will not dwell on the evolutionary model used here (since other contributors will take care of this topic) safe to mention that it is intertwined in his cultural relativist position, rather than being opposed to it (as in most cultural relativists since Boas; see Campbell 1987).

The 'selective system' of science was fleshed out and adapted over the coming years. In the evolutionary epistemology paper (1974) the rather blunt concept of 'blind' or 'random' variation and selective retention is modified and split out in ten different kinds of selective-retention processes, with science qualified as a 'deliberate' search system. Later on this view is further modified to encompass a variety of concepts allowing for social and cultural influences to codetermine the 'winnowing' process of the selectors. A particularly fine example is to be found in the paper linking neuropsychology with philosophy of knowledge (1987b). Campbell discusses the neurological embodiedness

of the non-random 'structural' or 'vicarious selectors' such as can be found in vision (see his earlier work), radar, sonar and 'creative thought' as in science (1987b: 171). The marvellous introduction to the volume in honour of Campbell, by Brewer & Collins (1981) recognizes some of this and suggests a further link with triangulation (which I will not deal with either), but the impact of his cultural relativistic perspective on the modification of the evolutionary theory he held is not clearly documented.

Another notion in the 1974-characterization of science is that of 'deliberate contact' in the form of 'experiment and qualified prediction'. Leaving aside the technicalities of a methodological nature in the second quote, -for which Campbell is probably most famous and certainly most often cited with his work on quasi-experimental designs-, both quotes link theory of science or epistemology and social scientific study of science. The investigating subject is clearly situated: (s)he seeks to make 'deliberate contact' with nature. Hence, the psychology of the scientist or knower does matter for the scientific enterprise, and the methods and system rules of the investigation are to be understood as situated also. This emphasis opens up broad avenues for social study of science, even if (like in most cases) the social scientists do not bother too much to embrace the evolutionary part of Campbell's program. His contribution is to combine these different emphases: descriptive epistemology à la social study of sciences, a darwinian interpretation of culture and knowledge and a critical realism which brings him in the company of many contemporary philosophers. The descriptive epistemology is subscribed mostly by social studies of science; whereas they are seldom allies on the other points. Within this descriptive perspective on theory of knowledge Campbell defends a position of studying the scientist and the scientific inquiry in their sociocultural settings, elaborating on the earlier position of cultural relativism (see the 1988 version of the William James Lectures). Sometimes his characterizations take a step beyond the commonly walked path again, as when he compares the structure of the scientific experiment with that of an oracle (1989). On other occasions he warns enthusiastic sociologists of science not to fall in the pitfall of total relativism, pointing to the entitativity rule once more (1989b). The latter earned him a retaliation by some who claimed not guilty on this point (Bloor, 1989).

A final point I would like to mention has to put the icing on the cake. In his attempts to reconcile evolutionism, cultural relativism,



descriptive epistemology and realism Campbell was forced to formulate a basic philosophical distinction. To my knowledge, his discussion in the William James lectures (1988) are the most explicit and most integrated version of 'Campbell's philosophy'. In other instances he used partial concepts and sometimes different labels (like multiperspectivalness), but the 1988 chapter sums it up most coherently.

The tenets of 'Campbell's philosophy' are that one is a combination of things in matters of epistemology: one can be an ontological realist or relativist. The ontological realist claims there is one reality for all knowers; the relativist claims there could be more, eventually an infinite variety of them which exist independently from one another. In the latter case (as with Feyerabend) Campbell speaks of ontological nihilism. He himself claims from the beginning to be a realist, although a critical or hypothetical one, siding with Toulmin and others. At the epistemological level one can claim that there is only one true or superior knowledge system in close correspondence with reality: this is the position of the moral and epistemological absolutist, which is rejected by Campbell. Instead he allows for many valid or workable perspectives in the construction of knowledge about the one reality (multiperspectivalness, epistemological relativism, sociocultural situatedness of the knower) which can be integrated at any time and in any context to a certain extent to pose as the knowledge of that time. My point is that the initial path-breaking cross-cultural work on perception and language learning, featuring a marriage of cultural relativism and critical realism, finds its abstract correlate in the complex ontology-epistemology model of the later Campbell. If this point has some validity, Campbell was able to give one of the most messy and depreciated attitudes in social science research (namely cultural relativism: see Fabian 1984) a new respectability as a source of inspiration and indeed model building. This is, at least in my view, the accomplishment of a real scientist.

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