

THEORY LADENNESS OF PERCEPTION, CONCEPTS, AND COGNITIVE IMPENETRABILITY OF PERCEPTION

Athanassios Raftopoulos,
Dept. of Psychology, University of Cyprus
araftop@ucy.ac.cy

I have proposed a definition of NCC according to which X is in a representational state S with NCC P, if X has (or is being disposed to have) a content that is (directly) causally connected in a certain way to instantiated Phood independent of the cognitive states of X. The content P of state S is independent of the content of the cognitive states of X iff the (conceptual) contents of the cognitive states do not enter into P, in that there is not an epistemic relation between the conceptual content and the content of the perceptual states. Hence, NCC is the content of perceptual states that are cognitively impenetrable (or conceptually encapsulated).

In my view, the existence of bottom-up or cognitively impenetrable mechanisms that extract information directly from the environment is both a necessary and sufficient condition for nonconceptual content. Thus, iff content P of a perceptual state S is such that the processes by virtue of which the subject is in S and has an experience as of P cannot, in principle, be affected directly in a top-down manner by cognitive/conceptual processes, then both P and S are nonconceptual. The reason for this claim is that if the processing at all stages of perception is directly modulated by top-down conceptual influences then there is no NCC, since NCC should be unconstrained by one's concepts. Furthermore, if there are perceptual bottom-up mechanisms that retrieve information directly from a scene then this information is the NCC of the perceptual states because it is content that is unaffected by one's concepts.

In discussions concerning the theory-ladenness of perception, one frequently comes across terms such as “cognitive penetrability of perception”, “theory-ladenness

of perception”, and “conceptual effects on perception”. However, these terms are not necessarily coextensive, and, thus, if one uses them interchangeably, one needs to justify this. In this paper, I explain first the sense in which I take the three terms to be coextensive. Since, I take cognitive penetrability and theory ladenness to be coextensive, the aforementioned definition of cognitive impenetrability entails that the content of a perceptual state is theory neutral (that is, non theory-laden), if it is not conceptually structured, or, in other words, if conceptual contents of higher cognitive states are not epistemically related to that content (which means that cognitive states do not causally affect the relevant perceptual states).

One might raise two objections against my view that perception is cognitively impenetrable and theory neutral. First, one might accept that even though my definition yields a sufficient condition for perceptual content to be NCC, it does not provide a necessary condition, since the role of concepts in disambiguating ambiguous figures suggests that concepts do affect the way we perceive things and, therefore, our theories disambiguate ambiguous figures, even though the relevant perceptual contents may be conceived as NCC. Second, perception is theory laden not in the sense that cognitive states causally affect perceptual states, but in the sense that our perceptual system, in order to solve the underdetermination problem of the distal object from the retinal image and the underdetermination of the percept from the retinal image, employs a set of principles, which are thought to be hardwired in the perceptual system, that reflect the geometry and the physics of our environment. (Spelke calls them “object principles,” Burge “formation principles,” and I have called them “operational constraints.”) The contents of these principles consist of concepts. In addition, they reflect some sort of theory about the world that our perceptual systems have constructed in their phylogenetic development in order to cope successfully with

the world. Thus, perception is theory laden because its very operation is guided or constrained by some sort of theory. Furthermore, perception contains inherently concepts and, thus, even though it is not affected by the concepts in the cognitive system, it is conceptually structured.

In this paper, I defend my definition against these two objections. I argue against the first objection that the role of concepts in disambiguating ambiguous figures does not entail that perception is cognitively penetrated. Against the second objection, I argue that the operational constraints hard-wired in the perceptual circuits do not constitute theories whose principles are represented in perception and inferentially guide perception, and, therefore, they do not signify the theory ladenness of perception. Moreover, even if one wishes to claim that the principles are articulated by means of concepts and that these concepts figure constitutively in perception, the term 'concept' is not used in the same way as in the debate concerning the conceptual or nonconceptual nature of perceptual content.