In the preface to this voluminous and important book, Tyler Burge sets out his task as “to understand and explain the origins of representational aspects of mind, particularly in representation of the physical world.” Hence his book aims, firstly, to rehabilitate the concept of representation (taken by some philosophers of mind as key to their theories, but abhorred by others); and, secondly, to reappraise how the objectivity is achieved by the epistemic subject. In both these respects the book succeeds in bringing something truly novel and thus justly serves to stir philosophical discussions.

The book consists of three parts. The first contains, along with a general introduction, a chapter on terminology and another summarizing the author’s doctrine of “anti-individualism,” which constitutes the background for the considerations to be presented in the subsequent parts of the book. The characterization Burge offers in the introductory chapter of the motives underlying his work is worth citing at length (p. 9):

I believe that there is a kind, representation, that is distinctively instantiated in perception, language, and thought. This kind is a fundamental and distinctive feature of mind. It lies at the origins of primitive forms of objectivity and of perspective or point of view. It is a kind distinctively associated with explanations in terms of states, occurrences, or symbols with veridicality conditions—conditions for being accurate, or for being true or false. It is a kind that involves attribution and reference to the world.

This kind, representation, has been obscured in philosophy and psychology. The kind has been seriously and systematically mischaracterized by the large current in philosophy that I alluded to—the current that required, as a condition on representation, that it be accompanied by a capacity to represent preconditions on representation. The kind is largely ignored in the more recent currents in

1 Viz., e.g., Fodor’s (1981; 1998) *Representational theory of mind*.
2 Viz. Davidson (1989): „It is good to be rid of representations, and with them the correspondence theory of truth, for it is thinking that there are representations that engenders thoughts of relativism.”
psychology and philosophy that employ the term ‘representation’ in such a broad way that it has no distinctive psychological application. I believe that, without being fully aware of its own accomplishment, the science of perceptual psychology has discovered a kind, distinctive of psychology, that the term naturally applies to.

My objective in this book is to go some way toward answering the questions with which it opened. Answering the questions requires developing an understanding of representation as a distinctively psychological kind, associated with distinctive types of explanation in terms of states with veridicality or accuracy conditions.

I find the chapter on the terminological foundations of Burge’s project disappointing. Indeed I think that if a reader were to assume that here it is where she learns what the author means by terms such as representation and objectivity, I fear that she would soon have to relinquish her reading. (But, fortunately, the terms are more clearly elucidated, albeit implicitly, further in the book.)

The trouble with the term representation is that its usage is so multifarious that it cannot lay claim to any constant meaning across philosophical literature; hence anybody wanting to anatomize representations must take pains to pin the term down to a clear and specific meaning. Burge starts his elucidation by saying that his sense of the concept of representation will be based on the concept of reference. I find this puzzling, for I find the concept of reference at least as problematic as the concept of representation itself, especially when used in the broad sense Burge adopts: “Reference,” he says (p. 31), “is both a certain relation to an entity in a subject matter, and a function (or exercise of the function) of a state, event, or activity to establish a reference relation.” “The reference relation,” he continues, “holds between a psychological state or event, or a piece or use of language, on one hand, and a subject matter, on the other.” I am afraid, however, that we never learn what makes a relation between such two kinds of entities the relation of reference. What makes the relation between a sign and an object a reference relation? And what holds for the concept of reference holds for the concept of representation – its elucidation in this chapter is at best blurry. All in all, this chapter does not appear too useful.

The remaining chapter of this part elucidates Burge’s “anti-individualism,” which we know from his previous writings (see Burge 2007). This, basically, is the claim that “the natures of many mental states constitutively depend on relations between a subject matter beyond the
individual and the individual that has the mental states, where relevant relations help determine specific natures of those states” (p. 61).

In the second part of the book Burge turns to what he calls Individual Representationalism. He holds this to be the view which dominated philosophical discussions of the past century and he puts it forward as the view with which his own view presented in the book contrasts. What makes his reconstruction controversial, but also interesting, is that under this heading he subsumes two very different intellectual currents (indeed, currents normally taken almost as antipodal). He characterizes this “syndrome” (as he calls it) as follows (p. 13):

The core assumption of the syndrome is that an individual cannot empirically and objectively represent an ordinary macro-physical subject matter unless the individual has resources that can represent some constitutive conditions for such representation. Objective representation of a macro-physical subject matter is attribution of some of the specific macro-features that the physical environment in fact has.

Thus, on this view, objective empirical representation of physical, environmental particulars cannot stand on its own, among an individual’s representations. It must be derived from, supplemented by, or embedded in other sorts of representations available in the individual’s psychology. These other sorts must represent some constitutive conditions for veridical representation of environmental particulars.

However, the conditions for the objective representation of ordinary things that must be represented by an individual are of two very different kinds. Firstly, the assumption may be that the necessary precondition of such objective representation is the representation of something proto-objective, of some sense data, out of which the representations of things are built. Needless to say that this is the empiricist train of thought which prevailed in philosophy during the first half of twentieth century, its main representatives, according to Burge, having been Russell, Moore, Broad, Price, Ayer, Schlick, early Carnap, Husserl, Merleau-Ponty, William James and C. I. Lewis. Secondly, there is, according to Burge, a very different kind of assumption, namely that objective representation presupposes representations of “general constitutive preconditions or principles of objective representation” (p. 14). The representatives of this second strand of “Individual Representationalism” listed by Burge are Frege, Cassirer, Kripke’s Wittgenstein, Sellars
and Sellarsians, Dummett, Strawson, Evans, other Strawsonians, Quine and Quineans, and Davidson. What, according to Burge, makes it possible to subsume these, *prima facie* very different epistemic doctrines under a single heading is the fact that “in either case, objective representation of the environment depends on the individual’s having a representational capacity to meet fundamental conditions on objectivity by *representing them*” (*ibid.*).

Given this background, the third, longest, and by far the most interesting part of the book concerns the development of a new notion of objectivity, free of “Individual Representationalism” and thus, Burge maintains, of the over-intellectualization of the concept of objectivity, of which philosophers of the twentieth century are guilty almost without exception. Burge’s objectivity is not a matter of more representations to be added to those already suggested; instead, it is an integral part of the way we grasp the objects of our knowledge. (As this amounts to treating objectivity as a dimension of our *doing* – acquiring knowledge – I would be tempted to call this notion of objectivity *pragmatist*, but Burge does not use the word and I suspect he might not like it.) Most of this part of the book is devoted to the analysis of perception, especially vision.

The main goal followed in this part of the book is twofold. Firstly, Burge attempts at a certain rehabilitation of the concept of *representation*, which according to him, is a necessary ingredient of any scientifically viable theory of vision and hence of acquiring knowledge of a subject’s environment. Secondly, there is his reassessment of the notion of *objectivity*. Let us consider these two topics in turn.

Burge offers two types of argument for the indispensability of representations. First, there is a ‘pragmatic’ argument maintaining that scientific studies of how a human subject perceives the surrounding environment have always found the concept of representation indispensable. Second, another type of argument appears to be that representation, and especially perceptual representation, is something distinctive in that it comes with certain “veridicality conditions,” which cannot be reduced to the conditions of success or anything else, and thus constitute a very specific kind of entities. Both these motives are encapsulated in the following paragraph (p. 310):

Empirical science has found that explanations that make essential explanatory reference to representational states are fruitful. The sci-
ence of the formation of visual states takes states type-individuated in terms of their representational content to be basic—both in what is explained and in the principles used to explain such formation. The explanation takes perceptual states with representational contents as primitives in the explanations. The laws and kinds of the explanation essentially involve representational contents, which set veridicality conditions. These explanations therefore utilize an explanatory kind constitutively associated with a function. The explanations have a teleological element.

The distinctiveness of possessing “veridicality conditions,” and their irreducibility, are crucial for Burge’s theory (p. 339):

Given that veridicality and non-veridicality cannot be reduced to success and failure (respectively) in fulfilling biological function, we must recognize a type of function that is not a biological function, a representational function. The basic representational functions concern representational success—veridicality, truth, making veridical, preserving truth, and so on.

In my view, the all-important question is whether this irreducibility really is indisputable. Many philosophers claim the contrary (see Millikan 1984, for one); but I think that Burge has a point in emphasizing that we usually assess, e.g., visual representations in terms that are not directly tied to any kind of success of the creature possessing the representations. Just as playing chess successfully or correctly need not necessarily mean being a generally successful human creature or behaving correctly from, say, the moral point of view, perceiving successfully or correctly need not be doing something that is successful or correct in more general respects. The crux, for me, is that certain things we humans do have grown into enterprises so complex that they have developed their own ‘internal’ forms of ‘correctness’ or ‘success’, not easily reducible to any ‘external’ standards.

But I am not sure this engenders irreducibility in its strongest sense. After all, though neither the notion of correctness of a chess move, nor that of winning a chess game, is a concept straightforwardly reducible to evolutionary terms, I do not think this prevents the whole enterprise of chess (and with it its internal notions of correctness, victory etc.) from being explainable in these terms. Hence everything hinges on how we construe irreducibility. Is truth and representational success something that is just independent of the evolutionary ‘fitness’ of the cor-
responding organisms, or are they rather a matter of certain ‘promon-
tories’ of evolution which have grown so internally complex that they
have necessitated their own, internal terms of assessment? It is not clear
to me to which of these options Burge subscribes (p. 549):

Representational veridicality and objectivity per se are not driving
forces of evolution. They are not selected for per se. Representa-
tional function is not biological function. Nature nonetheless evolved
sensory systems that are representational and primitively objec-
tive. Representational function and objectivity in representation are
closely enough related to evolutionary success that evolution can
aid understanding of the emergence of structures that serve veridi-
cality and objectivity, as well as fitness.

What bothers me too is the term *veridicality* Burge uses for visual repre-
sentations. It suggests that already here the correctness of representa-
tion has something to do with *truth* – and that hence the more abstract
kinds of representations, such as linguistic ones, for which *truth* ap-
ppears to be quite crucial, are continuous with them. I disagree. I think
that visual representation is special in that it can be thought of as pro-
ducing *pictures* in the literal sense of the word3 – and we naturally know
how to compare a picture with what it pictures. What remains to be
seen is whether representations in general can be made continuous
with this pictorial species.4

What about, now, the concept of objectivity? Here it seems to me
that Burge is most persuasive and his book most deep and novel. Using
a broad spectrum of recent literature ranging from physiology to
psychology he takes pains to elucidate how a perceiving subject arrives
at her visual representation, and argues that this process constitutively
involves a gradual distinguishing of “non-perspectival physical enti-
ties” from their messy background. This is a process he calls *objectifica-
tion*: “distinguishing and contrasting, in the operations of the system,
what concerns the individual’s receptors and what concerns a receptor-

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3 Though this might be more of a useful metaphor than a literary truth, since
the picture of visual perception as literally producing pictures is slowly
being dismantled (see, for example, Nöe 2004).

4 Remember that the crucial point of the most vigorous “antirepresenta-
tionalist”, Richard Rorty (1980), is not that visual perception cannot be
accounted for in terms of representations, but rather that cognition in
general cannot be accounted for as a kind of vision.
independent reality” (p. 398). The distinction, as he puts it, is “between registrations on sensory receptors and representations of mind-independent, or perspective-independent, environmental reality” (ibid.). He summarizes (p. 399):

Objectification separates registration of surface stimulation that is local to individual and occasion from elements in that registration that are (according to formation patterns) representationally specific to attributes in the physical environment. Thus objectification separates local, idiosyncratic registrations from representations of individual-independent, occasion-independent, mind-independent, perspective-independent reality, beyond the individual. Objectification of particulars is guided by this perceptual objectification of environmental attributes. Objectification of particulars consists in separating perceptual occurrences (applications) that refer to environmental particulars from occurrences in a registered sensory array.

It is important to realize that this objectification is not done by the subject in the sense that it would be its action – not even an unconscious action. For it is, as Burge, stresses, “a sub-individual process”: “Objectified empirical representation precedes subjective representation both constitutively and phylogenetically.” (p. 402) This makes it possible for him to sharpen the distinction between his view and the “Individual Representationalism” he criticizes in the earlier part of the book. The error of all the “Individual Representationalists,” according to him, is that they assume that objectification is effected by the individual. Burge claims that objectification comes earlier in the chain going from the object to knowledge: it takes place already before any actions of the knowing individual are conceivable.

I find Burge’s analysis of visual perception, and of the role played by the concept of representation in his accounts for it, deeply interesting. What remains to be seen is how far this analysis might be generalized to other forms of perception and other forms of human cognition. Burge himself seems to take for granted that this is straightforward (pp. 432-3):

Reference and meaning in language in its initial stages, and representation and representational content in belief, derive largely from perception. Perception contributes reference and representational content before propositional inference, intentional action, explicative understanding, or verification procedures get started.
His idea appears to be that already in perception we encounter the basic building blocks we need for any kind of thinking – viz. objects and properties – and that the step to higher, more abstract thinking – and representations – such as those manifested in language consists merely in putting these building blocks to a more flexible use (p. 541):

Conceptual attributives, or predicates, are by nature elements in propositional structure. To have conceptual attributives, one must be able to use attributives other than in modifying and guiding context-dependent singular representation as of a particular. An ability to engage in pure attribution is constitutively necessary to having propositional and conceptual ability.

I am skeptical about this kind of account. For me, the most reasonable way to see a concept – in so far as it is taken to be, constitutively, a component of a proposition – is as a kind of role that is usually assumed by a word (for only the complicated array of words making up language have the ability to carry the fantastically complex practices capable of fabricating concepts). Therefore I do not think it makes sense to see concepts as already present in perception. (My inclination would be to say the same about objects, but in this case I think Burge’s arguments to the contrary do hold some sway.) In my view, perception does not present us with properties which then must be merely liberated from the fetters of the nexus with a concrete object: instead I would argue that a different source – namely that of language and linguistic practices – comes into play and crucially amends perception.

Despite all the questions it raises, Burge’s book is admirable. It offers a quite novel visual angle from which to view some age-old philosophical problems. It presents meticulous analyses of ways in which representations find their places within the process of perception. It brings together philosophy and science without squeezing either into the other’s mold. These are all reasons for which the book is worth reading.

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References

Igor Hanzel: *Studies in the Methodology of Natural and Social Sciences*

Frankfurt am Main: Peter Lang, 2010, 410 s.

Ako naznačuje názov, Štúdie Igora Hanzela, ktoré vyšli ešte na jeseň roku 2010 v medzinárodnom nakladateľstve Peter Lang, nie sú „knihou jedného argumentu“. Pokrývajú veľmi pestrý tematický rozsah a otvárajú množstvo otázok. Za šírkou záberu sa skrýva orientácia, ktorá je z architektoniky práce i predkladaných argumentov zrejmá, hoci ju autor podrobne neexplikuje. Štúdie vychádzajú z presvedčenia, že problémy filozofie, resp. metodológie vedy nemožno úspešne riešiť inak než v úzkom kontakte s vedeckými teóriami samými. Obmedzenia tradičného chápania merania, vedeckého zákona, metódy výstavby teórie a v konečnom dôsledku aj samého poslania vedy, preto Hanzel v jednotlivých kapitolách skúma na Newtonových Principiach, Ricardových Zásadách, Marxovom Kapitáli, no i na príkladoch Perrinovho výpočtu Avogadrovej konštanty, sporu historickej sociológie a teórie racionálnej voľby alebo tzv. „zakotvenej teórie“ (grounded theory) sociálnych vied. Vychádza pritom z troch zdrojov.

Prvým je sama moderná filozofia vedy: Okrem klasických príspevkov Carnapa, Poppera a Hempela sa Hanzel opiera o ideálna konceptú vedeckého zákona, ktorá v 70. rokoch minulého storočia vzišla z poznanskej školy, a polemicky tiež o Bhaskarov kritický realismus. Často opomínané, no z hľadiska Hanzelovho prístupu klúčové sú staršie práce Václava Černíka (pozri Černík 1977 a 1986), na ktoré nadvázuje a kriticke ich rozvíja.

Druhým zdrojom je Hegelov kategoriálny systém, ktorý Hanzel uplatňuje pri analýze štruktúry vybraných teórií. Hoci ani v slovníku...