I had seen what he was driving at, but was unpersuaded until I saw more empirical than philosophical, and will mostly sort themselves out as we learn more about how minds are actually constructed.

On the back of the dust jacket of this fine book, one can barely make out two representations of a customized penny for our thoughts, drawn by John Haugeland. Accompanying Honest Abe on the heads side appear the words ‘Existential Commitment’, ‘Thought’, and ‘Self’; while tails shows the Lincoln Memorial and E pluribus unum, surrounded by two unlikely additions: ‘Constituted Domain’ and ‘Objects’. Haugeland explains: “The basic Kantian/Heideggerian conclusion can be summed up this way: the constituted objective world and the free constituting subject are intelligible only as two sides of one coin.” Not everything with eyes and ears and a brain is a “free constituting subject”; apes and dogs and dolphins do not have ontologies because they do not have thoughts; they do not have thoughts because they do not have the “censoriousness” in their cultures or social structures which provides the leverage for understanding, distinguishing a true thought from a false thought, and without that, thoughts cannot really have content. There are, to be sure, important differences in the Umwelt or manifest image of different species, but cats have no more metaphysics than clams or chrysanthemums do. Objects are constituted by people only, and our ultimately moral sense of norms, of “existential” commitment, far from being a sort of ethical add-on to the factual world of objects and properties, is the very ground on which our capacity to know, and reflect upon, objects depends.

This is a collection of essays, all but two previously published, so the question must be posed: Are the benefits of the synergy worth the cost? Here is one point in favor: I had read almost all these essays several times, and discussed some of them with Haugeland for dozens of hours, and even published commentaries on several of them, but I did not get the big picture until I read the book. That is, I had seen what he was driving at, but was unpersuaded until I saw the pieces put together anew. I now think he is largely right. Even better: the points on which I harbor residual doubts are, in general, more empirical than philosophical, and will mostly sort themselves out as we learn more about how minds are actually constructed.

Haugeland claims that the difference in kind, not degree, between the “cognitive” capacities of people and animals is too obvious to require argument. This might be true in the philosophical community, but it is at any rate no longer true in the world of animal cognition research, where the backlash against the behaviorism of yore makes fighting words of any such pronouncement. Still, Haugeland is right that the gulf between animal mind and human mind is huge. It is not that surprising to see a philosopher claim that even the brightest of beasts do not have a manifest image much like ours, but the paths he takes from this starting point are strikingly novel. In particular, he firmly bucks the fashion and declares that language is not the key to this huge chasm.

I certainly do not deny that language is characteristic of people, and centrally important to what we are. But I want to resist what strikes me as an all too prevalent tendency to make of language a magic fulcrum on which every human quality turns—as if language were the whole essence of what distinguishes us from machines on the one hand, and beasts on the other (256).

A strange centerpiece of Haugeland’s case against the role of language in making—not just marking—the chasm is an extended thought experiment about imaginary “supermonkeys” who have no language but nevertheless play chess! They play real chess, embedded in the matrix of norms that constitute proper play, not the pseudo-chess of Deep Blue, whose Umwelt is as bereft of the appreciations of norms as a spreadsheet’s Umwelt is of an appreciation of the human value of a dollar. There is nothing constitutively linguistic about chess, certainly, but the contortions of Haugeland’s tale of how the supermonkeys come to their norm-guided involvement in the game are unpersuasive to me. Let us compare these curious beings to others we might imagine: superorangutans, also languageless, who somehow manage to build and navigate aircraft carriers. An aircraft carrier with no written signs, no instruction manuals, no gossiping crew or order-issuing captain may be logically possible in some philosophical sense, but so what? Haugeland is right to resist the popular, lazy idea of language as a magic fulcrum; but what about language as a garden-variety fulcrum, causally required in this world for chess, for building aircraft carriers—and for “normativity” itself? If human language and human norms emerged in a co-evolving package, with innovations in each laying the ground for elaborations in the other, back and forth—and that is how evolution typically works—then both ‘Language made norms possible’ and ‘Norms made language possible’ are misleading over-
Haugeland’s resistance to the former is, however, salutary.

Haugeland’s work on the conceptual foundations of cognitive science has been deservedly influential, and several of the classics are reprinted here: his auspicious debut with a target article in *Behavioral and Brain Sciences*, “The Nature and Plausibility of Cognitivism” (1978), and “The Intentionality All-Stars” (1990). Put these together with “Analog and Analog” (1981) and “Mind Embodied and Embedded” (1995), and you have a lucid and balanced setting for what I consider the most valuable essay in the collection, “Representational Genera” (1989). He describes this as “perhaps the most disveled piece in the volume” (5), but while one can see why he was tempted to issue this self-disparagement, the fact is that this is a stunning piece, hugely ambitious, and surprisingly successful in meeting its ambitions. It purports to be a revisionist taxonomy of representations, and that it surely is, but its new taxonomy amounts to a strikingly new way of thinking about representations. Few topics have been mulled over more than representations in the last half century, and one would think that by now all the major moves had been made, and that it was time for fine tuning. Indeed, as Haugeland says, all this mulling has concealed into canonical accounts—which he nicely defines as “what almost everybody expects almost everybody else to believe.”

According to the canon, the two main genera are logical/linguistic and iconic/pictorial. Today, we are faced with the interesting question of whether the much-touted distributed representations of connectionism (or holograms, for instance) deserve to be recognized as a distinct genus, as different from pictures and sentences as pictures and sentences are from each other. Although the quirky problems in characterizing the “essences” of these primary genera have long been acknowledged, the canonical wisdom has been that this is not to be done in terms of the content of what they represent, but somehow in their manner or format or system of representing. Haugeland sets out to show that the received wisdom is not just bedeviled by unsolved problems (everybody knows that), but that these problems are unlikely to be solved since this underlying assumption is a huge mistake. This certainly must strike the mavens of the field, as it first did me, as wildly implausible. Ah, all the more reason to think that maybe Haugeland has caught a big fish.

He develops his case with a very well-considered game plan. Indeed, this essay is a bravura display of philosophical move making of the highest order. If I were to put together a “how to” book on “how to do philosophy,” this essay would be one I would dissect at length, revealing its virtues. Most philosophical books and articles have a rather plodding plan of attack, along the lines of: many believe that p; there are n familiar arguments against p, and there are n + δ familiar rebuttals to those arguments; here is a new argument against p. Haugeland sees his task more subtly in a three-stage development. It begins with some loosening-up counterexamples which he does not bother refining in the standard way, since they are just attention directors; this he follows by some “outlandish countertheses,” which are themselves not to be taken seriously but which hint at the opening to come in the third movement: a way of seeing how our canonical assumption might be undercut.

I am arguing instead that all three canonical accounts misfire for a single underlying reason—namely, they all mislocated the generic essences in the representing relation—and hence, the appropriate response is neither repair nor despair, but fundamental reconstruction (177).

The fundamental reconception involves taking on a hitherto unremarked distinction between recording, which can be a “witless” process, and representing, which, in general, cannot. This is promising, somewhat to our surprise, precisely because Haugeland is not planning to use it to make some “No machine can ever do x” claim—a good example of the tactical discretion which abounds in this essay. His distinction between “witless” and “knowing” processes enables him to describe a new type of theoretical entity: “virtual logical representations (the ‘facts’)” (183). We all know, do we not, that any doctrine of atomic and molecular facts is doomed if it treats such facts as somehow independent of language expressing them? But once again, he is not planning to push his doctrine of facts into that hopeless cause; he has imagined another, more defensible use for them.

The task facing any “Heideggerian/Kantian” theorist is to do justice to the role of us in constituting the denizens of “our” world without lapsing into awful relativism/subjectivism on one side or caving in to noumena or a “God’s eye view,” on the other. Haugeland’s solution, which grows on me, is to show how and why it is hard to “constitute” a world (that takes care of anything-goes relativism) but not because there is a privileged way that the world—the real world—has always been constituted. His view is a close kin, I think, of my view of the evolution of colors: before color vision evolved on this planet, sunsets and cliffs and volcanic eruptions had the reflective properties they did, but it makes no sense to ask if those sunsets were, say,
red—since that question has no meaning independently of a refer-
ence class of normal observers. We can, of course, extrapolate back
from our current vantage point and fix and answer such questions,
using ourselves as the touchstone for colors, but we must recognize
that we are doing that. Were there dinosaurs before *Homo sapiens*
came along and invented censoriousness and then ontology so that
dinosaurs could be constituted? Of course there were, but do not
make the mistake of thinking that this acknowledges a fact that is
independent of *Homo sapiens*.

Haugeland is not a neurophilosopher or psychophilosopher or
cognitive scientist; he is a pure (or hard core—chacun à son goût)
philosopher. Yet he brings to his task—the unflinching considera-
tion of grand metaphysical themes from Immanuel Kant to Richard
Rorty—an engineer’s deep commitment to clarity and making sure
things work. He once turned an old IBM selectric typewriter into a
computer printer (think about *that* interface problem!) and is the
author (in assembly language) of some impressive software for doing
automatic file back-ups, so he has plenty of hands-on acquaintance
with the relations between mechanisms and codes, “symbols” and re-
alities, hardware and software. Like the computer scientist/meta-
physician Brian Cantwell Smith, whose remarkable book *On the
Origin of Objects*\(^1\) would make a superb seminar mate with this
volume, he has seen that philosophers’ fantasies about computation
and representation have not been innocent oversimplifications but
major misleaders that must be replaced.

The corrections of outlook Haugeland recommends are always
presented in a constructive spirit. “The Intentionality All-Stars” is a
frequently hilarious view of all the occupied positions on the topic of
intentionality, laid out on a baseball diamond, and while he makes it
very clear where his own sympathies lie, there are no idiots on the
field of play. Haugeland’s pedagogical caricatures, unlike many in
philosophy, bring out the best in each position. It turns out, for in-
stance, that the main differences along the spectrum from first base
(neo-Cartesian theory—for example, Jerry Fodor) and second base
(neo-behaviorist—for example, Donald Davidson and me), to third
base (neo-pragmatic theory—for example, John Dewey, Martin Hei-
degger, Wilfrid Sellars, and Haugeland himself) can be seen to be
due mainly to different empirical hunches about the relative impor-
tance of factors admitted by all. For all its brilliance, this essay will
not be readily understood by those without a substantial knowledge
of baseball; the many allusions to the lore of the game really do a lot
of work, and I know from experience that British philosophers of
mind miss a lot of the wisdom. My prescription: philosophers every-
where now have a very good reason to add baseball to their stock of
common knowledge. I also know from experience that my American
undergraduates, who know the baseball, need help appreciating
the essay’s glories because they do not have the requisite familiarity
with the philosophical literature it positions. Same prescription: do
your homework; it is worth it.

Finally, I want to end this review with a specific compliment and a
general complaint and call to arms. Some of the footnotes in this
book are gems, deeply important, and not to be missed: for example,
footnote 7 on page 44; footnote 10 on page 61; footnote 9 on pages
164-65. Down with “endnotes”! There is no excuse, in this age of
computer typesetting, for the “economy” of endnotes, either at the
end of each chapter or at the end of the book. Few if any philoso-
phy books need be read with only one hand, but why should we
need three? I find that placing a Post-it on the edge of the current
notes page provides a useful fingertab, and can be moved along as
one goes, but this is still an annoying interruption. Authors, join the
cause: ask publishers to put substantive footnotes at the bottom of
each page, and all bibliographical material in some version of sci-
entific format (Jones, 1994, p. 17)! Then philosophy books can aspire
to be page turners in the good sense.

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\(^1\) Cambridge: MIT, 1996.