

THE DAVIDSON – QUINE DISPUTE ON MEANING  
AND KNOWLEDGE: A CONCISE GUIDE

Tomáš Marvan

Summary

*The paper addresses the debate between Donald Davidson and W. V. O. Quine on the nature of meanings and knowledge. It is argued that Davidson's misgivings, though interesting, are not devastating for Quine's version of empiricism, which is not easily translatable into traditional philosophical categories.*

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Can we arrive at a reasonable conception of world-bound thought without succumbing to an account of meaning and knowledge which starts with a private mental realm, and only then tries to work its way to external reality? Such is the question concerning a broadly empiricist philosophy which Donald Davidson has repeatedly invited us to contemplate. It is one thing to say that without perception, there would be no knowledge of the world and no communication. It is quite another to commit oneself to the view according to which our meanings or theories are determined or justified by something that literally happens in us. The former is, for Davidson, a “pallid” construal of empiricism (1990, 68) – indeed, so pallid is the construal that Davidson would rather drop the label “empiricism” altogether, for the platitude is something that all are expected to endorse; it cannot mark a distinctive philosophical position. The latter is the hallmark of empiricism as traditionally conceived.

This view of things permeates the debate Davidson led with Quine. The debate, spanning in fact a couple of decades, leaves impressions of deep mutual misunderstanding – ever more surprising given that both protagonists knew the works of each other well. In the following reconstruction, I will present the debate from what is essentially a Davidsonian perspective – it was, after all, Davidson who sensed incongruity in Quine’s system and was keen on keeping the debate alive. However, I will often be drawing conclusions which are not Davidsonian in spirit.

In both semantics and epistemology, the debate predominantly revolves around the role to be assigned to “stimulations” – surface irritations, patterns of neuroreceptors triggered. According to Davidson, Quine vacillated between two distinct points of view, “proximal” and “distal.” The former account would have contents of words individuated by something private to the individual uttering of the words, and similarly for beliefs about the world and what grounds them; the latter lets the sentences and beliefs be individuated directly in terms of external objects, events and situations. Let’s take meanings first.

## 1 Meanings

It is utterly natural to think that sentences dealing with concurrent circumstances – “observation sentences” – are directly linked to publicly observable things, events and situations. This direct link, amongst other things, enables the Quinean field linguist to translate the sentences of a hitherto unknown language – for it is beyond doubt that we should not credit him with knowledge of his informant’s patterns of triggered receptors. However, Quine often adopts a different point of view, that of a theorist who is equipped with the conceptual apparatus of natural science. It is from this perspective *exclusively* that the notion of stimulation of the subject’s surface is applied. And it seems to be operating in proximalist fashion: Quine propounds, for example, a notion of “stimulus meaning” which is simply the ordered pair of stimulations that prompt an assent to a sentence or dissent from it. Now the two perspectives, Davidson submits, are ultimately irreconcilable. He therefore recommends an unreserved adoption of the distal view which, according to him, is free of the difficulties of the proximal outlook;<sup>1</sup> and he reminds us that it was, after all, Quine himself who introduced the distal perspective into semantics in *Word and object* and later writings where the importance of shared, intersubjectively available clues for language acquisition is unequivocally stressed.<sup>2</sup>

What, then, is the role of stimulations in Quine’s view of meaning? Let’s begin with a slightly more tractable query: is the classification of sentences by attendant stimulations *semantical* in nature? Suppose one puts the notion of stimulus meaning to work by saying that sentences are *about* sensory stimulations. This, of course, is hopeless, and Quine himself deprecates this picture.<sup>3</sup> No: the theorist applying the concept is not trying to

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1 I shall get to some of these presently.

2 Davidson was never tired of pointing this out in print; see e.g. his 1990; 2000.

3 Quine, 1981a, p. 25.

figure out what the sentences of the autochthons are about, this being the task of the field linguist; rather, he is interested in “why it works.”<sup>4</sup>

This can be put a little bit more transparently. By talking of stimulations, Quine was trying to contribute to our understanding of the actual practice of linguistic intercourse by anchoring it to something intelligible within a certain scientific discourse. What made stimulations attractive in his eyes, I assume, was not only the fact that they enable psychologically respectable talk of individual observation sentences used but, more importantly, that they seemed to provide a framework for identifying *semantical relations* between such sentences – it was, we recall, in the context of speculating on the process of radical *translation* that the concept made its way into *Word and Object*. Notice that talk about semantical relations between sentences could be carried out even without detailed knowledge of what the sentences mean.<sup>5</sup> Suppose we say that my observation sentence S and the native observation sentence N are synonymous. How shall we back up the claim? The explanation that the sentences are “about the same things in the world” will not appeal to the more scientifically minded, who will demand a more rigorous and transparent account. Quine would thus try the appeal to stimulations: we assume that a relevantly similar set of receptors was triggered in both speakers by the scene they were jointly witnessing.

There are other ways of construing the synonymy talk, to be sure: we can appeal to the assumption of relevantly similar brain states of the two speakers, or to the assumption of their relevantly similar visual and other experiences of the scene witnessed. But here Quine’s pragmatic considerations enter. We are better off with stimulations, he held, for we don’t want things to get too labyrinthine. Brain states are too complicated to work with; experiences are too rich and difficult to characterize. And even straight worldly phenomena, if we settle for them in accounts of linguistic

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4 Quine, 1999, p. 74.

5 Conversations with Olaf Müller helped me to appreciate this point.

communication, will bring problems in their train – for example, in the case of “It’s raining,” we would have to invoke some unobtrusive notion like that of a “situation” to explain the verbal behaviour of the speaker. To repeat, we *could* have chosen other conceptual means than stimulations – “interface is an artifice” (Quine, 1993, p. 113) – but this method is commendable for its simplicity and transparency. The point of the approach is to select the most appropriate place where the information from outer objects “comes together” and is neatly identified and classified – though only in principle, for Quine certainly wasn’t suggesting that we should literally start investigating people’s retinas (and other parts of their surfaces).

However, Quine later realized, with the help of a number of objectors, that semantics can be pursued even without recourse to the concept of stimulus meaning which implies near homology of the receptors triggered in different persons at the occasion: in more recent writings, he opted for abandoning it (“the villain of the piece”) altogether.<sup>6</sup> Homology is not crucial for communication; moreover, stimulus meanings do not carry us far in the matters of a full-blown linguistic communication.<sup>7</sup> Going by stimulations alone, we could end up with groupings of sentences of two persons that would dramatically differ from the groupings based on their external referents. The same object spoken about might be seen from different angles, from different distances and in different lighting conditions, and this will account for a potentially great diversity in concomitant stimulations. Moreover, as Davidson once remarked, a person might be wearing reverting goggles which will make her stimulations altogether distinct from the stimulations of non-bespectacled observers of the same event. This, however, will not block her linguistic intercourse with others, at least not for long (she will need some time to get accustomed to the new way of experiencing). Extreme discrepancies in stimulus meanings might not affect agreement in meaning proper – and the account which would have

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6 Quine, 1993, p. 114.

7 Quine, 1986, p. 365.

meanings of sentences from different languages paired by what happens at the corporeal surface is doomed.

This much said, one is led to wonder what, if any, is the role of stimulations in theorizing about communication for the later Quine. Provided we can do without the assumption of more or less shared stimulus meanings, the rationale for retaining the stimulations-talk becomes dim. But be this as it may, Davidson's assumption<sup>8</sup> that the role of stimulations for Quine was to provide sentences with their fine-grained semantic contents is unwarranted. Quine's observation sentences are not only not about stimulations: the stimulations do not even determine their contents. What, ultimately, puts the value of stimulus meanings into question is not, *pace* Davidson, their proximal nature but their theoretical *unimportance* in accounts of linguistic behaviour.

This, however, is not meant as a criticism of Quine's semantical views. When we ask how the linguist manages to translate the native discourse, all we hear from Quine is that it is by empathy-guided recourse to publicly observable objects, situations and events. And when we ask what determines semantic content of a great part of our discourse (and, indirectly, of its yet greater part), we get the same answer: publicly observable circumstances. That's why we can take him literally when he remarks that his "position in semantics is as distal as Davidson's."<sup>9</sup>

The commentators, to my mind, often insufficiently appreciate the fact that the distal view is, for Quine, nowhere near *explaining* anything about communicative use of language. Rather, it is just one of the things one takes for granted when one starts pondering semantics. The distinctively Quinean attempt at explanation would then invoke the concept of stimulation as the unpretentious starting point of what, in the fullness of time, hopefully becomes a full-blown naturalistic account of communication. However, it seems that by recanting stimulus meaning, Quine admitted

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8 Voiced in Davidson, 1990.

9 Quine, 1993, p. 114.

that the concept in question is not the best instrument of capturing communication in a transparent and scientifically respectable way. And this, if anything, strengthens the conclusion that his views on content determination are not proximal in the Davidsonian sense.

## 2 Epistemology: Scepticism and Intermediaries

In matters epistemological, the stimulations, again, are at the centre stage of the dispute. Quine allegedly

gives ... stimulations an epistemic role very similar in relevant respects to the role sense data (raw experiences, percepts, unprocessed sensory intake, etc.) played in the writings of earlier empiricists ... he liked the idea of unprocessed empirical intake as the basis of our beliefs about the world, and he thought that patterns of stimulation constituted a less confused basis (Davidson, 1999, p. 134).

This sounds bad enough, but first we must be clear about the sense in which the term “basis” is used by Davidson. Do we, according to Davidson’s Quine, have recourse to stimulations in order to *justify* our beliefs about outer reality? Are they our only, or decisive, *evidence*? Well, I do not think that an attempt to ascribe the tenet to Quine will go smoothly, for Quine was often using the term “evidence” in a perfectly ordinary and unobjectionable way – for example in his response to Keith Lehrer in which he claimed that “observation is the locus of evidence.”<sup>10</sup> Here, evidence is quite plainly something that is available to the subject engaged in scientific inquiry. However, and this is crucial for Davidson, different places in Quine seem to alter the picture considerably. There, evidence is *just* the stimulations themselves.<sup>11</sup>

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10 2000, p. 412. See also 1993, pp. 110–111, where Quine characterized observation sentences as “vehicles” of evidence for scientific statements of a more theoretical vein.

11 Quine, 1976, p. 229; 1969, p. 75; 1974, p. 40; 1981b, p. 40.

(i) There are two strands to the Davidsonian critique of the latter approach.<sup>12</sup> A more simple and better-known objection to talk of stimulation is that it contains a straightforward category mistake: it doesn't quite make sense to speak of stimulations as an evidence justifying our beliefs and theories, since evidence can come only in a propositional form which the stimulations do not display.<sup>13</sup> Stimulations cannot buttress beliefs, as beliefs cannot buttress buildings; only a *belief* can buttress another belief.<sup>14</sup> The senses and their surface stimulations are, of course, causally instrumental in bringing our perceptual beliefs about, but this truism doesn't have, for Davidson, *any* epistemological corollaries worth mentioning. The "end products" of the cognitive enterprise are publicly observable entities, states and events on the one hand, and our beliefs on the other.

On my reading of Quine, this objection is absurd. That is, it is absurd when presented as a criticism of *Quine*, however perceptive it might be with regard to doctrines of a host of other writers. For one thing, Quine, to repeat, never thought that retinal and other stimulations are something to which the perceiving subject – or, for that matter, the epistemologist studying him – can have conscious access. The majority of people is very probably ignorant of the very existence of their surface receptors, let alone of the irradiated patterns of the receptors. In analogy to the semantical case treated above, Quine's reasons for selecting stimulations for epistemological purposes were pragmatic. The evidence he had in mind was the third-person, naturalized epistemologist's evidence which the epistemologist postulates in order to throw some light on the process of the subject's arriving at a theory of the world. Moreover, evidence, in this peculiar sense, is something unreservedly *causal*. No talk of justification is in evidence here, and Quine, who, to the best of my knowledge, always shunned the

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12 To be precise, there is also a third one, focused on the conundrum of "conceptual relativism." I will ignore this agenda in the present paper.

13 Davidson, 2001, p. 292.

14 See Davidson, 1986, p. 319.

word in his writings, was even more reluctant to use it when presented with Davidson's misgivings.<sup>15</sup> To borrow his own phrase, nothing in his system hinges on it.<sup>16</sup> So the difference between Davidsonian and Quinean epistemology consists in the fact that whereas the former aims at an account of justification of beliefs and theories along with the causal story of what brought the beliefs and theories about, the latter opts for a causal account only.<sup>17</sup> One can thus object to Quine that his "epistemology" is too alienated from the more traditional concerns in the field but not that it is blatantly irrational. (I am not trying to vindicate this new fashion of conducting epistemology, only to acquit it of a charge that seems to be misplaced).

(ii) Let's see whether the second voyage of Davidson's fares better. Davidson accuses modern-day empiricism, as exemplified by sense-data theories à la Russell and Ayer, of introducing a *tertium quid*, a thing standing betwixt our thoughts about the world and the world itself, representing to the mind something extraneous to it. And he would have Quine as the last and heroic exponent of this tradition, offering his stimulations for outdated sense-data – though for much the same purpose. These "neurological substitutes" (Davidson, 1990, p. 69), in the same vein as their predecessors, represent the outer reality to the mind.

As far as I can see, the perils that worry Davidson concern the compatibility of this representationalist epistemology with extreme forms of scepticism. Reliance on "entities before the mind" registering "the outer" and informing "the inner" is risky, for the intermediaries could present

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<sup>15</sup> See Quine, 1994, p. 502.

<sup>16</sup> Quine, 1990, p. 80.

<sup>17</sup> In 2000, p. 412, Quine explains that he recommended the turn to empirical psychology not in order to banish the issue of justification altogether, but only to *divorce* it from considerations of what we are "actually doing" when we are engaged in studying nature, human subjects including. Talk of justification is to be replaced by causal accounts of which stimulations elicit which verbal responses in us. He then goes on to expound his positive views on justification in science: it lies in successful prediction and in preselecting the candidate theories worth testing.

to us the world *very* inaccurately: the stimulations we are enjoying could remain exactly the same even if the world farther out changed dramatically and our perceptual and other beliefs about it, accordingly, turned largely false.<sup>18</sup> Davidson sees no other way out of this predicament than abandoning the intermediaries altogether, again in the spirit of uncluttered distalism.

Are, then, Quine's stimulations *tertia* in Davidson's sense? To begin with, I think that something of the conclusion of the foregoing section suggests itself: the stimulations cannot be intermediary objects presented to the mind (or "grasped" by it) simply because – *unlike* sense-data – they are not accessible to the subject (nor to his or her interpreter). But suppose that Davidson presses on, declaring that being an object of conscious attention is *not* one of the distinguishing features of an epistemic intermediary. No matter, we still cannot get hold of them; as our only presumed source of information about a reality farther out, they just *are* intermediaries of a sort. And it is not reasonable to trust them, for they might be telling us lies.

Now one strategy to defuse the worry is simply to *concede* the sceptical point. Surprisingly, in his 1981 response to Barry Stroud, Quine seems to be thinking precisely along these lines. Science, we are told, can claim about the world only that it is "somehow so structured as to assure the sequences of stimulation that our theory gives us to expect" (Quine, 1981d, p. 474). Shall we take this as endorsement of scepticism and of self-imposed limitations of representational epistemology? Shall we take Quine as acquiescing that we cannot get *beyond* our stimulations, stopping short of the external world? This conclusion, according to Davidson, sits well with the notorious Quinean idea of "posits," since the posit theory seems to treat external objects merely "as if" they existed.<sup>19</sup> And if objects exist

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18 Davidson, 1986, p. 313.

19 Davidson, 1990, p. 73; 1994, p. 187.

only “as if,” Quine is in thrall to a version of anti-realist constructivism that puts the very idea of mind-independent reality into question.<sup>20</sup>

I think that this interpretative strategy is misguided, despite a couple of passages<sup>21</sup> in Quine’s writings which suggest the contrary. To begin with, it is not reasonable to view Quine as an exponent of a movement that would take external objects and events as posits *constructed out of* the essentially idiosyncratic patterns of stimulations. We certainly do not construe them in the sense of putting simple elements together into a more encompassing whole. The theoretical posits of Quine are not results of “synthesising” of any sort. They are *irreducible* entities, postulated, at best, *in response* to stimulations, not fabricated out of them.<sup>22</sup> But not only this. Quine more than once evinced his firm belief in robust external realism. He spoke of an “antecedently acknowledged external world,”<sup>23</sup> the acknowledgement being the starting point of the naturalizing epistemologist, not a result of his inquiry into our knowledge of reality.<sup>24</sup> So, at least the extreme versions of scepticism are impossible to square with Quine’s official ontological commitments.<sup>25</sup> To the objection that he is committed to the reality of stimulations and the ideality of remaining objects in the world, he responded in the following manner:

I have forces from real external objects impinging on our nerve endings, and I have us acquiring sentences about real external objects partly

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20 Some of the most competent Quine scholars have taken the idea of posits as indicating a full-blown commitment to constructivism. This is most clearly expressed by Lars Bergström: “Quine accepts the view that the world is, in a sense, a human construction or projection (a ‘posit’),” 2001, p. 31. Robert Fogelin, 2004, p. 38, also reads Quine as a life-long anti-realist.

21 See also Quine and Ullian, 1978, p. 22.

22 Quine, 1953, p. 51.

23 Quine, 1992, p. 19.

24 See Hylton, 1997.

25 Notice that the brain-in-a-vat scenario is simply inapplicable to Quine, for the stimulations are part of the mind-external reality.

through conditioning to those neural excitations and partly through complex relations of sentences to sentences (1981c, p. 181).

What, perhaps, compels many readers of Quine to ascribe to him the strongly anti-realist representationalist view is the fact that the talk of posits seems, intuitively, to imply the *non-reality* of objects posited. But this is just not so. Posits are not unreal (*pace* the gods of Homer, phlogiston, aether and what not). The posit-talk only indicates that all entities in the world that exist according to this or that theory are ultimately posited in response to stimulations. Quine's point is epistemological, not ontological. He doesn't distinguish external physical things into two fundamental groups, one really existing (the stimulations), the other only seemingly existing (the rest).<sup>26</sup>

Besides, we must take seriously the fact that stimulations are *caused* by worldly happenings. Quine always consistently depicted this as a scientific finding; we accept it willy-nilly, unless science produces a better grounded result. Stimulations are thus physical objects, on a par with trees, stones and electrones that help to arouse them. No talk of representation can find its niche in this purely causal setting: that X causes Y does by no means imply that Y *represents* X. Instead of upholding intermediary representations, Quine, by his sheer causalism, deprived them of their breeding ground.

Note, finally, that if stimulations were intermediaries, their going astray would have to occur due to some interference exercising its influence somewhere between the skin and the reality farther out. But what could this be? We would need a sample of a situation inverse to the one involving reverting goggles: something in the world, something with which we are in perceptual touch, would have to change without corresponding turn in our stimulations. And I frankly confess I can't think of any example that wouldn't sound silly the moment it was put on paper. This, at least

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<sup>26</sup> Dreben, 1992, also underlines this point.

for me, is an additional reason for holding that stimulations are not fit for the role of intermediaries. Take, again, the sense-data: their champions claimed that the objects mind inspects represent something with largely unknown properties.<sup>27</sup> Such a view does provide a leeway for the deep mismatch between representations (sense-data) and what they represent. The contrast with Quine is striking, for he speaks about stimulations and their familiar worldly causes: my current stimulations are caused by the familiar desk, not by some largely unknown *Ding an sich*.

### **3 Conclusion**

My conclusion is that Davidson overstated the analogy between the modern empiricist's and Quine's notion of meaning and knowledge. As the dispute amply testifies, Quine is not readily translatable into the more traditional philosophical idiom. He himself tended to view his own projects as a continuation of the traditional philosophical enterprise, but transformed, i.e., naturalized. Many of his readers, on the other hand, protested that his new way of philosophy is a far cry from what we traditionally associate with the subject and that what he was doing deserves different labels. But labels hardly matter – another Quinean point. What matters is that by forcing Quine's views into the Procrustean bed of traditional philosophy, we are likely to miss the lessons they have to offer.<sup>28</sup>

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<sup>27</sup> Russell, for example, famously concluded that we simply *can't* get most of the features of external reality right, except for a couple of structural features of external things that can safely be gathered from our representations (the features concerning, e.g., the relative positions of the things in spacetime). See Russell, 1912.

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## References

- Bergström, L. (2001): *Davidson's objections to Quine's empiricism*. In *Interpreting Davidson*, edited by Petr Kofátko, Peter Pagin and Gabriel Segal. Stanford: CSLI, pp. 17–36.
- Davidson, D. (1986): *A coherence theory of truth and knowledge*. In *Truth and interpretation. Perspectives on the philosophy of Donald Davidson*, edited by Ernest LePore. Oxford: Blackwell, pp. 307–319.
- Davidson, D. (1990): *Meaning, truth and evidence*. In *Perspectives on Quine*, edited by Robert B. Barrett and Roger F. Gibson. Cambridge, MA: Blackwell, pp. 68–79.
- Davidson, D. (1994): *On Quine's philosophy*. *Theoria* 60, pp. 184–192.
- Davidson, D. (2000): *Quine's externalism*. In *The philosophy of Quine. Naturalism and ethics*, edited by Dagfinn Føllesdall. New York and London: Garland, pp. 75–86.
- Davidson, D. (2001): *Comments on Karlovy Vary papers*. In *Interpreting Davidson*, edited by Petr Kofátko, Peter Pagin and Gabriel Segal. Stanford: CSLI, pp. 285–307.
- Davidson, D. (1999): *Reply to Roger F. Gibson*. In *Donald Davidson: Truth, meaning and knowledge*, edited by Urszula M. Żegleń. London and New York: Routledge, pp. 134–135.
- Dreben, B. (1992): *Putnam, Quine – and the facts*. *Philosophical Topics* 20, pp. 293–315.
- Fogelin, R. (2004): *Aspects of Quine's naturalized epistemology*. In *The Cambridge companion to Quine*, edited by Roger F. Gibson. Cambridge: Cambridge University Press, pp. 19–46.
- Hylton, P. (1997): *Rorty and Quine on scheme and content*. *Philosophical topics* 25, pp. 67–86.
- Quine, W. V. O. (1953): *Two dogmas of empiricism*. In Quine, *From a logical point of view*. New York: Harper and Row, pp. 20–46.
- Quine, W. V. O. (1960): *Word and object*. Cambridge, MA: MIT Press.
- Quine, W. V. O. (1969): *Epistemology naturalized*. In Quine, *Ontological relativity and other essays*. New York, Columbia University Press, pp. 69–90.

- Quine, W. V. O. (1974): *The roots of reference*. La Salle: Open Court.
- Quine, W. V. O. (1975): *On empirically equivalent systems of the world*. *Erkenntnis* 9, pp. 313–328.
- Quine, W. V. O. (1976): *The scope and language of science*. In Quine, *The ways of paradox and other essays*, 2nd ed. Cambridge, MA: Harvard University Press, pp. 228–245.
- Quine, W. V. O. (1981a): *Empirical content*. In Quine, *Theories and things*. Cambridge, MA: The Belknap Press of Harvard University Press, pp. 24–30.
- Quine, W. V. O. (1981b): *On the very idea of a third dogma*. *Ibid.*, pp. 38–42.
- Quine, W. V. O. (1981c): *Responding to M. J. Cresswell*. *Ibid.*, pp. 179–181.
- Quine, W. V. O. (1981d): *Reply to Stroud*. In *Midwest Studies in Philosophy*, vol. 6: *The Foundations of Analytic Philosophy*, edited by Peter A. French, Theodore E. Uehling, and Howard K. Wettstein. Morris: University of Minnesota Press, pp. 473–475.
- Quine, W. V. O. (1986): *Reply to Robert Nozick*. In *The Philosophy of W.V. Quine*, edited by Lewis E. Hahn and Paul A. Schilpp. La Salle: Open Court, pp. 364–367.
- Quine, W. V. O. (1990): *Comment on Davidson*. In *Perspectives on Quine*, edited by Robert B. Barrett and Roger F. Gibson. Cambridge, MA: Blackwell, p. 80.
- Quine, W. V. O. (1992): *Pursuit of truth*, 2nd ed. Cambridge, MA: Harvard University Press.
- Quine, W. V. O. (1993): *In praise of observation sentences*. *The Journal of Philosophy* 90, pp. 107–116.
- Quine, W. V. O. (1994): *Response to Gibson*. *Inquiry* 37, pp. 501–502.
- Quine, W. V. O. (2000): *Response to Lehrer*. In *Knowledge, language and logic: Questions for Quine*, edited by Petr Kofátko and Alex Orenstein. Dordrecht: Kluwer, pp. 411–412.
- Quine, W. V. O., and Joseph S. U. (1978): *The web of belief*, 2nd ed. New York: Random House.
- Russell, B. (1912): *The problems of philosophy*. London: Home University Library.

*Tomáš Marvan, Ph.D.*  
Institute of Philosophy  
Czech Academy of Sciences  
Jilská 1  
110 00 Praha 1  
Czech Republic  
*e-mail: marvan@flu.cas.cz*