Chapter 5

Ludlow’s view on the close connection between reality and language is not restricted to the one-way claim that whatever appears in a semantic theory as the semantic value of an expression must be real. In Appendix P2 (Ludlow 1999) and in the 2003 article “Referential Semantics for I-Languages” he argues for a strict isomorphism between language and the world: in other words, for the two-way claim that anything appearing as the semantic value of some expression must be real and anything real must appear as the semantic value of some expression. He calls this the “language/world isomorphism” (LWI) hypothesis. Let’s refer to this latter claim, that the set of semantic values is isomorphic to the set of things in the world, as the “strong” LWI hypothesis, and to the former claim, that the set of semantic values is isomorphic to some subset of the things in the world, as the “weak” LWI hypothesis.

Given Ludlow’s claim that the language in question is the language of thought, both hypotheses involve some form of idealism. For current purposes, let’s define idealism as the view that reality, or the external world, depends to some extent on the nature of the human mind. Idealism comes in many forms, two of which are particularly relevant here. According to epistemological idealism, which supposedly characterizes Kant’s views, there is a mind-independent reality out there, but what we can know about it is limited by the nature of the mind. According to what I’ll call “pure” idealism, there is no mind-independent reality, and the very content of our experiences of and knowledge about the world is completely determined by the nature of the mind. The weak LWI hypothesis resembles epistemological idealism inasmuch as it allows for some components of the world to be independent of the language of thought, and the strong LWI hypothesis resembles pure idealism inasmuch as it entails that the set of constituents of the world is completely determined by the language of thought.

Is It Circular?

There is a side issue here which I will explore briefly and then come back to later, and that is Ludlow’s claim that there is a two-way relationship between reality and the language of thought—in other words, that it is not the case simply that the language of thought determines the structure of the world or the structure of some part of the world, but rather that reality is mind-independent to some degree, and mind is reality-independent to some degree—they both exert some kind of influence on each other. Having established that the meaning-related aspects of the language of thought are the ones relevant to ontology and metaphysics, Ludlow describes this two-way connection:
Here I am not advocating an approach... in which we are supposed to reason bottom-up from the theory of meaning to metaphysics. It seems to me that the construction of a theory of meaning without some prior sense of ontology would have us climbing blind. That is, without some sense of the constituent structure of the world we would have no idea of how the theory of meaning is to link up our language with the world. Nor am I advocating the opposite position in which we are to sort out our ontology before we undertake the construction of a theory of meaning. It is only through the theory of meaning that we are able to differentiate the elements of our ontology. . . . What we know about the nature of reality will help shape our semantic theories, but it is also the case that semantic theory will help to shed light on the nature of reality. Of course many philosophers will hold that either metaphysics or the theory of meaning must be more fundamental than the other, but to me this has all the makings of a "chicken or egg" argument. There may be some deep truth about whether chickens or eggs are more fundamental, but no serious biologist would engage in such a debate, nor (I hope) would any serious philosopher be exercised by the question. Likewise, in my opinion, philosophers should worry less about whether metaphysics or the theory of meaning is more fundamental and should worry more about the relations that must hold between them in view of what we already know about each. Roughly, when I say that there is an interesting relation holding between metaphysics and semantics I mean that concrete questions about the nature of reality can be illuminated by what we know about semantic theory, and that important questions in semantic theory may be adjudicated by certain of our metaphysical intuitions about the constitution of reality. (p. 5)

Actually, the views expressed here fit cleanly into neither category of idealism—in epistemological idealism, the mind-independent world exists completely prior to any facts about the nature of human thinking, and the nature of thought simply limits what we can know about it. In pure idealism, there is no mind-independent world, and the nature of thought completely determines the nature of reality. What Ludlow exhibits here is a kind of circular idealism, in which the nature of reality depends on the nature of the mind and the nature of the mind depends on the nature of reality. If neither is more fundamental than the other, how is it possible to make progress in our knowledge of either?

Ludlow claims that because the language of thought happens to be I-language, the object of study in contemporary internalist linguistics, the developments and discoveries of that science give us independent knowledge about the nature of the human mind. He further claims that our “metaphysical intuitions” can give us independent knowledge of the “constitution of reality” (see above). It is unclear whether this position is tenable; its plausibility and its consequences for the rest of Ludlow’s theory will be investigated shortly.
The Weak LWI Hypothesis

The weak LWI hypothesis that Ludlow (1999) evinces in his account of the relationship between time and temporal language is crucial to his resolution of McTaggart’s paradox: if tensed I-language statements refer directly to temporal aspects of reality, and if it can be shown that a semantics for I-language must be given in a tensed metalanguage, then time itself must be tensed (i.e., an A-series). All that is required for this conclusion is a partial isomorphism between language and reality (an isomorphism between tensed language and temporal reality), and the possibility of the existence of further mind- and language-independent entities is left open.

The Strong LWI Hypothesis

Ludlow (1999, Appendix P2; 2003) closes off that option when he argues for full language/world isomorphism, arguing that whatever entities appear to be necessary to provide every natural language expression with a referent should be granted full ontological status. Ludlow’s adoption of the strong LWI hypothesis is part of a larger attempt to reconcile language internalism with referential/semantic externalism, and the version of idealism he promotes is in large part a response to Chomsky’s (1975, 1981, 1995) arguments against externalist semantics. Let’s examine the three arguments Ludlow addresses.

The Argument from Implausible Commitments

If I say “the flaw in the argument is obvious, but it escaped John’s attention,” I am not committed to the absurd view that among things in the world are flaws, one of them in the argument in question. Nevertheless, the NP the flaw in the argument behaves in all relevant respects in the manner of the truly referential expression the coat in the closet. (Chomsky 1981, quoted in Ludlow 2003)

In other words, the argument goes, an externalist semantics (more specifically, an externalist semantics employing either the strong or the weak LWI hypothesis) “allegedly commits us to things that we would never acknowledge as existing” (Ludlow 2003 p. 146).
The Type Mismatch Argument  Chomsky also contends that any externalist semantics which utilizes physical substances or objects as the referents of linguistic expressions “commits us to types of things which are different from the types of things that we ordinarily suppose we are talking about” (Ludlow 2003, p. 246). A typical example centers on what we call “water” and whether or not it is identical to the physical substance H2O. If we suppose that the word “water” refers directly to H2O, we find that “what it appears we are talking about based upon our use of language” doesn’t “match up right” with physical substance: for example, we call the stuff in the Hudson River “water” even though it could hardly be considered H2O, and there are many substances which chemically approximate H2O much more closely than the stuff in the Hudson River, like iced tea, but we don’t call them “water.” Similarly, if someone added tea leaves to an entire city’s water supply so that what came out of sink faucets was chemically identical to iced tea, we would still call it “water,” though we may consider it impure. Thus, the argument goes, the sort of thing that the word “water” refers to seems to be unlike any physical substance.

The Misbehaving Object Argument  According to this argument, the apparent referents of expressions don’t line up properly in time with physical substances. For example, “[s]omething may cease to be water even if no internal physical changes have taken place. For example, the same chemical compound [iced tea] is water when it comes from the tap, but ceases to be water when it is served at a restaurant” (Ludlow 2003, p. 150). Such substances “are so unruly that it is wildly implausible to suppose that they could have any counterparts in the physical world. Hence they have no counterparts that a referential semantics could utilize as their referents” (Ludlow 2003, pp. 150-151).

Ludlow responds to Chomsky’s arguments in an exceedingly simple way: forget about the imperative to utilize physical objects and substances as the referents of semantic expressions, in other words, “the sort of stuff that would play a role in a physical theory” (Ludlow 2003, p. 149), and simply allow all the implausible objects (flaws, water that has different physical properties in different circumstances, etc.) into our ontology. “They are clearly not logically absurd entities,” says Ludlow, “and it need not be conceded that they are particularly odd entities. In the case of flaws, at least, one might say that they are altogether common in the arguments one runs across, and one might wonder why they should be considered any less real than, say, tables and chairs. Likewise, coats hanging in the closet need not have any particular ontological priority over . . . flaws” (2003, pp. 152-153). This is the core of Ludlow’s strong LWI hypothesis—whatever language appears to refer to exists—no matter whether it is granted physical existence by physics or any other scientific theory.

In adopting this solution, Ludlow rejects scientific realism—the view that “physical theory gets to say what’s
real” (Ludlow 2003, p. 153)—in favor of circular idealism and strong LWI:

But why should we make the assumption that...if we are to have a genuine referential semantics in which the referents are “real” existing entities, then we are stuck with the kinds of entities and substances posited by physical theory[?]...[T]his...makes a strong assumption about scientific realism—one which is controversial to say the least, and most likely false, in my view.

There is a great deal of literature in the philosophy of science (for example van Fraassen 1980) which holds that the entities which science posits do not exist in the same sense as mid-sized, earth-bound objects like tables and chairs. Pursuing this line of thinking, we might say that scientific theories, despite their great interest and utility, are not the arbiters of what is real.

...If we set aside the exclusive claims of the physical sciences on our ontology..., then we may well find that [allegedly implausible] substances are entirely plausible candidates for the referents of a semantic theory. So, for example, it may be that the semantic value of “water” is just water... (p. 153)

If the world is full of such substances, then language internalism and semantic externalism are completely compatible. In other words, if the world is populated by entities that precisely reflect our use of language, then those entities can serve as the “external” referents of linguistic expressions which reside completely within the minds of speakers. Ludlow thus reconciles, with the help of the strong LWI hypothesis and the rejection of scientific realism, language internalism with semantic/referential externalism.

**Chomsky’s Response**

Recall that in his account of the relation between language and the world Ludlow claimed that while the nature of reality depends on the nature of language (the language of thought), we have independent access to the nature of language via the science of linguistics. It is the internalist framework, with its attendant conception of language as I-language, on which Ludlow bases all of his language-to-world inferences. But is Ludlow’s attempted reconciliation of internalism and externalism compatible with linguistics as a science? Let’s look at Chomsky’s (2003) response to Ludlow’s move.

At the core of Chomsky’s response is the allegation that Ludlow’s ontological permissiveness and his rejection of scientific realism constitute a registered “lack of interest” in the relevant issues. When we study human language behavior, Chomsky contends, we study it as a mind-independent phenomenon, as “Martian
scientists” would study human language behavior, or as human scientists study ants (p. 291). Rejecting scientific realism and assuming a view according to which the objects in the world are simply the objects we “appear to be talking about,” the objects we need to serve as the referents of an internalist-compatible externalist semantics, amounts to abandoning the scientific inquiry in which linguistics is engaged altogether. In other words, to redefine existence so that internalism and externalism become compatible is to abandon the methods of science.

To illustrate, Chomsky offers an analogy between the study of sound and the study of meaning:

We have no problem assigning sounds to expressions in a vast range of normal cases. If we are satisfied with this result, we can avoid the hard problems of experimental phonetics. Proceeding, we can quantify over flaws [etc.] Again, if satisfied with this result, we can avoid the hard problems of the study of meaning, reference, and language use generally... Though sounds are perfectly robust and simple, much more so than books and rivers and flaws, scientists concerned with the sound aspects of language have not been satisfied with such accounts... They have sought to discover... internal [phonological] entities and to determine how they relate to the kinds of mind-external entities that are studied in the sciences, investigating a relation between internal and external events mediated by sensorimotor systems. (pp. 289-290)

Just as the discoveries of articulatory and acoustic phonetics would have been lost if investigators had been satisfied with the observation that expressions have sounds perfectly robust entities... Many... aspects of the meaning and structure of expressions, and their use in talking about the world, are likely to be missed if we are satisfied to say that we understand the expressions of our language and need inquire no further. (p. 293)

In other words, according to Chomsky, there are systematic and investigable relationships between language and the entities or substances posited by physical theories, and by adopting Ludlow’s strong LWI hypothesis and rejecting scientific realism in favor of his version of idealism, we are “registering a lack of interest” (p. 290) in discovering them.