

## COMMENTS AND CRITICISM

WHAT ARE WORDS? COMMENTS ON KAPLAN (1990), ON  
HAWTHORNE AND LEPORE, AND ON THE ISSUE\*

David Kaplan in his 1990 paper “Words,” and John Hawthorne and Ernest Lepore in theirs in this issue, address three tightly intertwined questions about words in general, and about names in particular: “What are they?” “How can (or should) they be individuated?” “When are two instances instances of the same one?” In these comments I will concentrate on the first question and only as it pertains to words in general, not names in particular; that is, I will focus on the question “What are words?” and leave for another occasion the consequences of what I write for the other issues they raise.

The question “What are words?” is woefully underspecified. Its only clues are the topic ‘word’, the default interrogative ‘what’, and the default plural tense bearer. Reformulating it, as Hawthorne and Lepore do at one point, as “What is the nature of words?” hardly adds anything helpful. Do words even have a nature? The question can be understood as querying for a genus under which words can be enlighteningly subsumed, and then for how they differ from other members of that genus, and from things not under the genus at all. But what could such a genus be? Sounds? That leaves out inner speech, writing, and signs. How about illusions? After all, utterances (inner and overt), inscriptions, and signs are largely illusory: their linguistic attributes are not in the physical signal but are assigned in top-down perceptual processing. (Consider, for example, word boundaries in flowing speech, stress in writing, filled reduced vowels, meanings, functional relationships, and so on. Think of how foreign speech comes across.) So utterances—and for that matter inscriptions and Sign languages productions—group naturally with the Big Dipper, the Müller-Lyer line, the enlarged moon near the horizon, and the

\*An earlier version of these comments was presented at the 2010 meeting of the Pacific Division of the American Philosophical Association. At that meeting David Kaplan read a response to Hawthorne and Lepore’s paper, but I was never given a written copy of that response and was not able to absorb much of it from Kaplan’s animated presentation while I was setting myself to give my own talk. Nor did I have a chance to review the version included in this issue, which was sent to the *JOURNAL* long after my own paper had been set in proof form. So, in these comments, I limit myself, as far as Kaplan is concerned, to his 1990 paper. Hawthorne and Lepore had sent me a copy of their paper well in advance of the meetings, and I am most grateful for that.

missing fundamentals in violin performances, as perceptual illusions. We could—maybe should—treat the question as calling for how perceived words are like and unlike other illusions. That would be an intriguing inquiry indeed, but it is not the one that engages our authors. They do not think of individual utterances or inscriptions as illusions at all. They think of them as denumerable physical entities, and they think of words as distinct further denumerable entities with spatiotemporal instances.

But that hardly pins down the question “What are words?”; nor does it pin down what is at stake in their debate. And so, not surprisingly, Kaplan on one side, and Hawthorne and Lepore on the other, approach the question and its requirements with very different concerns in mind and end up often at cross purposes, leaving some essential aspects of words unattended.

#### I. KAPLAN'S TREATMENT OF “WHAT ARE WORDS?” IN “WORDS”

Kaplan describes his undertaking in his paper as follows: “I propose a...model according to which utterances and inscriptions are *stages of words*, which are the *continuants* made up of these interpersonal stages along with some more mysterious *intrapersonal stages*” (Kaplan's italics).<sup>1</sup> He does not propose an analysis of whatever concept, if any, the English word ‘word’ might encode. Nor is he after the satisfaction conditions for the predication ‘...is a word’. Nor is he after a genus-differentia determination of distinctive properties that only words might have in common. Nor is he after smoking out whatever ontological presuppositions might underlie common talk about words. He is after a “model,” a “different conception of the fundamental elements of language.”<sup>2</sup> He is thus proposing to displace our everyday, unanalyzed, multiple notions of words, as well as the orthodox Peircian type-token doctrine, and possibly other notions, and to replace them with a presumably more useful new notion embedded in a new theoretical framework.

His proposal is that we think of each word as what some philosophers used to call a substance. Words are to be thought of as persistent individuated entities each of which retains its identity as it grows and develops through what Kaplan calls “stages.” The term ‘stage’ is used idiosyncratically. What he calls stages are actual physical utterances and inscriptions produced at specific times and places by specific individuals. They are not what etymologists might mean by the “stages” of a word, namely, successive form and meaning combinations arising in a process of historical evolution. Each word in Kaplan's “model” is a growing tree-like structure made up of actual utterances

<sup>1</sup> David Kaplan, “Words,” *Aristotelian Society Supplementary Volume*, LXIV (1990): 93–119, at p. 98.

<sup>2</sup> *Ibid.*

and inscriptions, each of which is related to a predecessor in the structure, a predecessor that the speaker or writer intends to copy, though not necessarily exactly. Such predecessors may themselves be actual utterances or inscriptions, but they may also be icons in memory. Furthermore, each word, in Kaplan's "model," is rooted in an initial stage, its first production in time. That stage does not stand as intended copy to any predecessor. Its role is to individuate the word containing its successive repetitions. Hawthorne and Lepore construe Kaplan as also viewing these structures as mereological joints of their stages, but I am not sure that he is actually committed to such a view or its shortcomings.

Kaplan's invitation to change how we think of words calls not for empirical evidence, obviously, but for recommendations. What is there to recommend it? A number of things are mentioned explicitly in the paper.

His "model" does not have the defects of the classical type-token conception. That conception—according to Kaplan—entails that each word (type) is an abstract template matched exactly by each of its instances (tokens). It is useless, since many, if not most, utterances of a word are dissimilar in some respect and thus could not all mirror exactly one common template.

His "model" furthermore does justice to the fact that words, whatever they ultimately turn out to be, are at bottom human creations, and that they are mostly acquired through interpersonal exposure.

His "model" also allows us to hang on to many platitudes of ordinary talk about words. For instance, that each word has an origin and has undergone and will in all likelihood continue to undergo changes of meaning, pronunciation, and spelling, in short has a history; that many words are pronounced and spelled differently by different users because of dialectical differences, circumstances, or other contingencies.

But most important, according to Kaplan, his "model" includes a principle of individuation for words in general, and for names in particular, that allows for numerically distinct words that are nevertheless qualitatively identical (within tolerable limits) in pronunciation, spelling, and direct reference qua meaning. That is not a platitude! It is a consequence to be prized because, according to Kaplan, it allegedly yields a solution to the Paderewski conundrum. Under Kaplan's "model," misinformed Peter can allegedly believe that Paderewski is a musician and also believe that Paderewski is not a musician without being guilty of (knowingly) subscribing to a contradiction. Furthermore, this can be said of him without imputing to him contradictory beliefs (not the same thing: the latter pertains to the effability of the imputation; the former, to the belief state itself).

I must admit that, in spite of sincere efforts, I was unable to reconstruct Kaplan's solution. The paper describes two sets of circumstances under which two words (or at least two names) can be numerically distinct though qualitatively, that is, semantically, phonologically, orthographically, indistinguishable. The first description is explicitly put forth as solving the Paderewski conundrum; the other is part of the discussion of proper names in their distinct guise as generic names and as common currency names. However, neither extricates us in any obvious way from the conundrum. The first requires that a memory icon in Peter's mind/brain accidentally split at some point in his life. Even if we disregard that there is no evidence that such splitting of memory icons, or traces, or representations, is even possible, the Paderewski conundrum rests on an epistemic predicament that does not hinge on such a possibility. It suffices that Peter heard two unrelated reports about Paderewski that he never connected. The second description requires that some individual be baptized on two different occasions (possibly by two different people) with the same generic name. The occurrence of such an episode is more plausible than the occurrence of splitting memory icons, but the Paderewski conundrum does not hang on such baptismal episodes.

Hawthorne and Lepore read Kaplan as being more committed to tenets of folk linguistics than I do, but some of their more telling objections do not depend on this. Kaplan's proposal, after all, includes some empirically testable ideas. Their most decisive objection<sup>3</sup> is that Kaplan's "model" and principle of individuation require that each time we use a term, we use it with the intention of mimicking a specific previous use or a memory icon of that term, or that we create a new word, and thus that we never access the generative powers of our morphology. And if that is false—which it indubitably is—then there is little left of most of Kaplan's so-called stages, and thus little left to make up words as he thinks of them. It would, in fact, be surprising if there were more than a small number of such words. Maybe a few names. And even these will turn out to behave in ways not covered by his "model."<sup>4</sup>

My own strongest objection to the model is of a different order. Kaplan's "model" is too barren to be adopted. Any reasonably insightful and useful conception of words would do more than accommodate commonplaces about words or the fact that people occasionally mimic perceptually and referentially similar performances, or speculate

<sup>3</sup> Some of their other objections are discussed in the next section.

<sup>4</sup> See Ora Matushansky, "On the Linguistic Complexity of Proper Names," *Linguistics and Philosophy*, xxxi, 5 (October 2008): 573–627.

imaginatively about mental contingencies, or raise hopes to solve a vexing conundrum. Any worthwhile conception would take aboard that words function as constituents of phrases and sentences. It would acknowledge that they play their defining roles merged with other terms, and thus, that—whatever their intrinsic perceptual and referential features—it is of the essence of words that they can appear in juxtapositions through which they receive and assign thematic roles,<sup>5</sup> and stand in various functional relationships. It would make room for such facts as that the first word in ‘John is easy to please’ denotes a theme, whereas in ‘John is eager to please’ it denotes an agent; that a different difference holds between the occurrences of ‘tomatoes’ in ‘I want to grow tomatoes’ and in ‘I want tomatoes to grow’; that ‘dog’ and ‘dogs’ are related in rule-governed ways complicated by pairs like ‘mouse’ and ‘mice’. Any worthwhile conception of words would acknowledge that our ability to parse continuous speech into words itself calls for explanation, as does the fact that young children can come to do this in their linguistic developments. And so on, and so on. Kaplan’s “model” meets none of these basic essential desiderata.<sup>6</sup>

In short, Kaplan’s proposal, as it now stands, rests on too truncated and impoverished a view of lexical mastery. But my objection is not that it failed to provide a fuller account of that mastery. That was not Kaplan’s project, and that would be an unreasonable demand. My objection is that his proposal distorts and diminishes that mastery, and is therefore incompatible with any plausible account of that mastery. His proposal is original, is ingenious, is intellectually adventurous, is addressed to a real set of issues, probably describes real spatiotemporal entities (unnamed before him, and of no linguistic interest, but no doubt acceptable to any tolerant ontology); it may even hint at a way out of the Paderewski conundrum, but it is just not a trustworthy starter for thinking about words or their identity.

## II. HAWTHORNE AND LEPORE’S TREATMENT OF “WHAT ARE WORDS?” IN “ON WORDS”

Unlike Kaplan, Hawthorne and Lepore are not motivated primarily by a specific philosophic enigma. They are concerned primarily with certain uses of the English word ‘word’. Though not explicitly, they interpret the question as calling for a Quinean “semantic ascent” on that word and those uses. Mindful that the English word ‘word’ is polysemous, they aim at uses they deem to be at the heart of Kaplan’s

<sup>5</sup>This is not to hold that meaning is primarily contextual.

<sup>6</sup>More about this in the last section of these comments.

concerns, uses they assume—though without offering any evidence—philosophers and linguists rely on in connection with “a variety of puzzles and problems that are foundational to the very subject matter of philosophy of language and linguistics,”<sup>7</sup> uses in “many contexts in which the word ‘word’ picks out neither particular performances nor an abstract entity which merely serves to encode the superficial form of particular performances.”<sup>8</sup> They assume—as I read them—that the English word ‘word’—when so used—is used to refer and has an extension. The question for them becomes “What is peculiar to the members of that extension?” “How are these members individuated?” They favor a familiar answer to the former: “...the *abstracta-articulations model*.”<sup>9</sup> “[T]here is more hope for a model of words as abstracta, though one that breaks with the standard type-token model’s picture of the relevant abstracta as pattern-like.”<sup>10</sup> And they hold that no unproblematic answer is to be had to the second question.

Whatever the merits or defects of their “model”—which they present as more valid than Kaplan’s—their paper is not primarily devoted to its defense, but is primarily designed as an evaluation of Kaplan’s “model.” I will confine my discussion to that evaluation. I take it to rest crucially on their presumption—mistaken, I think—that Kaplan intended to explicate certain uses of the English word ‘word’ rather than advocate an altogether new concept. I will not dwell on that point, but will adopt that interpretation of “What are words?” for the sake of discussion. I will dwell, however, on their further presumption that certain manners of speaking about words are authoritative about what words are. That presumption, at least as it is treated in this paper, is blind to too many essential features of words. I will concentrate on three early typical passages of the paper that by themselves are sufficient to bring out why the proposals in “On Words” will not do.

The first of these passages is the passage in which Hawthorne and Lepore discuss a thesis about which they agree with Kaplan. As they put it “...we quite agree with Kaplan that a philosophically satisfying theory of words cannot proceed entirely within a shape- or form-theoretic framework.”<sup>11</sup> They hedge the point in two ways, first by inserting ‘entirely’, and second by remarking shortly thereafter: “We

<sup>7</sup> Hawthorne and Lepore, “On Words,” this JOURNAL, CVIII, 9 (September 2011): 447–85, at pp. 447–48.

<sup>8</sup> *Ibid.*, p. 484.

<sup>9</sup> *Ibid.*, p. 453.

<sup>10</sup> *Ibid.*, p. 484.

<sup>11</sup> *Ibid.*, p. 451.

do not deny that there may [*sic*] be *certain* contexts in which we use ‘word’ to speak about entities that are individuated by shape or form” (their italics).<sup>12</sup> They then write that they are not interested in those uses. But even with those somewhat puzzling hedges, the thesis—and the reasons they give to bolster it—call for close critical scrutiny. For what is at stake are serious theoretical options that the claim would close, but that a sound philosophic approach should keep open and explore.

The thesis is initially brought up by Kaplan as he argues—as I mentioned above—that words could not be a kind of (abstract) template duplicated by each and every one of their instances. For that thesis would entail that all the physical instances of any given word would also duplicate each other, and it is obvious that they mostly do not, and need not for practical purposes. That much is beyond dispute. In fact, we can often predict how they will not. Take, for instance, the ordinary preposition ‘in’. In normal speech, the last segment (the segment spelled ‘n’) is produced and pronounced one way when followed by, for instance, ‘New York’ (voiced, noncontinuant, alveolar, coronal, nasal, sonorant, ... n), another way when followed by, for example, ‘Paris’ (... noncoronal, bilabial m), and yet a third way when followed by, for example, ‘Kansas’ (... noncoronal, velar eng ŋ). Note that a relatively explicit single notion of form is at hand in such instances: acoustic form.<sup>13</sup> Analogous observations can be made about written tokens, where the relative notion of range of forms, and their interdependencies, is also readily analyzed.

None of this establishes, however, that a good, insightful, ontologically sound theory of words cannot “proceed...within a shape- or form-theoretic framework.” It shows at best that such a framework requires refinements. And, of course, no framework pertaining to forms alone can hold the full story about what is essential to words: words have other essential characteristics. But that is not part of Hawthorne and Lepore’s argument.

Hawthorne and Lepore do not limit their evidence, as does Kaplan, to the fact that spoken tokens of a word can differ from each other, or that written tokens of a word can differ from each other. They draw on more drastic differences. They write, “Simple reflection on the fact that the same word can be written, uttered, signed, Brailled, or semaphored already renders such a conception dubious: after all,

<sup>12</sup> *Ibid.*

<sup>13</sup> I say acoustic form, not auditory form, because we are apt not to perceive these differences except under special conditions. We are more attuned to invariance in formant patterns than actual frequencies and amplitudes. Of course, articulatory pattern is also implicated, but that is not relevant for their discussion.

there is hardly anything shape- or form-like in common among an utterance, an inscription, a hand gesture, and a bump on a panel.”<sup>14</sup> They might have pointed out further that there is hardly anything shape- or form-like in common between the oral gestures performed in the production of a word and the acoustic events that result, let alone the auditory experiences induced, or between the latter and inner spoken words, or words in memory, or between any of those and the kinds of instances they mention.

No doubt simple reflection on these facts may cast doubt on what they call the form conception, but less simple reflection should not, but elicit that these facts carry different implications when scrutinized more closely and put together with further facts.

Consider first their assertion that “the same word can be...signed....” That may come across as an innocuous remark, but it is not; it is symptomatic of an outlook on language too removed from reality to warrant any philosophic claim, let alone one about methodology. In a footnote they specify that by “signed” they mean signed in something called “Signed English”; they do not mean American Sign Language (ASL). And there are indeed signing systems called Signed English, also called Manually Coded English (MCE)—a number of them. But none of these systems, in spite of their name, is an encoding of English: each encodes a form of pidgin ASL.<sup>15</sup> The basic vocabulary of these systems is largely identical to the vocabulary of ASL, with some additions for inflections, articles, pronouns, copulas, affixes signed in ASL manual alphabet abbreviations, and simplified uses of space and indexing. The very morphology is thus utterly unlike that of English. For instance, the sign to express “believe” is a compound of “think” and “marry.” And, of course, the analogue of phonology relies on completely unrelated structures of features; the syllables do not begin to map onto English syllables; and so on. The surface word order and the distribution of lexical items does come closer to that of English than that of ASL. And not by accident. The systems were created to help communication between hearers and Deafs, and to help Deafs parse written English.<sup>16</sup> However, syntactic word surface order and distribution presuppose, but do not exhaust the ontological substance of words, which is the topic under discussion.<sup>17</sup> MCEs do not

<sup>14</sup> *Ibid.*

<sup>15</sup> One is in fact called “Pidgin ASL,” a label assigned, I believe, by Signers.

<sup>16</sup> Actually, many sentences in Signed English are indistinguishable from their ASL version.

<sup>17</sup> English can no more be signed than it can be Frenched. “Je fais pas aimer brocoli” is not Frenched English for “I don’t like broccoli.” There is no such thing, though we might find a use for the phrase “Frenched English” as we have for “Signed English.”

even encode a natural language (a language that can be acquired as first language), let alone English. The possibility of relying on English syntax while using the ASL lexicon raises interesting issues that do deserve philosophic attention, but that is largely because no same word can be both uttered and signed.<sup>18</sup>

Let me turn next to the remainder of Hawthorne and Lepore's presumed evidence, namely, that there is hardly anything shape- or form-like in common among the various other types of instances on their list. That indisputable fact does not entail that a good, insightful, ontologically sound "theory of words cannot proceed...within a shape- or form-theoretic framework." It only entails that such a theory could not itself be simple, and that it would have to be specific about distinctions and take care of details. It would take into account explicitly that spoken and written instances belong to distinct ontological domains, domains each grounded on a specific range of essential attributes. It would indeed take into account that spoken tokens have articulatory, auditory, and acoustic properties; that their elements vanish immediately upon production; that they occur sequenced in time; that they are produced by mouth; and so on. It would also take into account that none of this holds for written tokens, and that written tokens, unlike spoken ones, have topological, material, and optical properties, as well as that the elements of written tokens persist in time, are linearized in space, and are produced through many different processes.<sup>19</sup> It would also crucially take into account that written words are cognitively parasitical on spoken ones, which they presuppose and encode (semaphored and Morsed words, in turn, are parasitical on written ones), and thus that though spoken ones can be acquired through exposure, written ones require prior ability to speak.<sup>20</sup> Such a theory would take into account that even within the realm of spoken words, different types of forms interact: forms belonging to sequences of articulatory gestures, forms belonging to auditory experiences, forms belonging to inner speech, underlying forms, and so on, and so on. But, most importantly, such a theory would also allow for the fact that these profound differences between forms are bridged by principle-governed, analyzable interdependences and mappings (some conventional). So, for instance, chronological

<sup>18</sup> There is such a thing as the Rochester method, which relies heavily on alphabet signing, but it is basically unusable, and my comments below about writing and semaphore apply to the uses of that method.

<sup>19</sup> Inner speech, which I leave out, has its own peculiar ontological dimensions.

<sup>20</sup> This has to be qualified in some respects, but not in ways that matter for present purposes. See for instance Stanislas Dehaene, *Reading in the Brain: The Science and Evolution of a Human Invention* (New York: Penguin, 2009), chapter 2.

sequencing in speech is mapped in linear spatial order in writing; phonemic segmentation is mapped in linear segmentation; phonological attributes are mapped on orthographic ones; and so on. Furthermore, it would establish whether—as seems most plausible—for each set of interrelated instances there exists a core instance to which all of the others, in spite of their ontological dissimilarities, are related in systematic ways. The dimensions and peculiarities of such core instances raise knotty questions that beg for cooperation by philosophers, linguists, cognitive scientists, and neurologists, but towards whose solution progress is actually being made. (I will come back to this point in the last section.) In any case, conjectures about such core instances and their form, or theorizing about the reality of inter-modality connections, must not be casually dismissed because their existence is not presupposed by certain manners of speaking. Manners of speaking are no doubt convenient for many purposes, but they are not canonical about facts or even plausibility. Nor should “shape- or form-theoretic frameworks” be dismissed on the false presumption that resemblance—either exact or vague—is the only relation through which the forms of word manifestations can be systematically mapped on each other. Regardless of how we might allude to the facts, simple reflection on the fluent, spontaneous performances of speaker-hearer-writer-readers should render such a presumption extremely dubious.

I next turn to another passage a short way later in “On Words.” Unlike the one discussed above, it states an objection to Kaplan’s proposal. The objection is that “Kaplan is committed to the view that all words are articulated in one way or another.”<sup>21</sup> In other words, that Kaplan’s model has no provisions for words that have no instances, have no performances, have not even an initial occurrence. They put forth essentially three considerations in support of the view that there are such words. First, it is only a contingent fact that, for instance, some affixations of the English prefix ‘un-’ and some arbitrary English adjective has never been produced. They might have been produced. Second, let  $n$  be the largest number of occurrences of ‘anti-’ in any instance of ‘anti-...ballistic’ ever produced. An instance with one more prefixed ‘anti-’ could have been produced, even though no such instance happens to have ever been produced. That too is but an accident. The relevant morphology is productive and open-ended. Third, more generally, the productive rules of morphology governing affixation and compounding are mute about which affixations and compounds have actually been produced.

<sup>21</sup> Hawthorne and Lepore, *op. cit.*, pp. 454–55.

And so, to use their formulation, they urge, it would be very awkward to deny that “such words” exist.

Each of these observations is beyond dispute. And the awkwardness of any unqualified blunt denial that such words (never-produced words) exist would probably be real. We do not converse that sparsely, as Grice has taught us. But to infer that there are therefore abstract words with no instances, that the furniture of reality, so to say, includes such abstract entities, is a plain non sequitur. What there is are human mind-brains endowed with the capacity to produce utterances (and inscriptions and so on), and that capacity is not exhausted by past, present, or future productions. The above observations do not entail that there are such things as words with no instances. They do not presuppose an ontology of instance-less abstract words. Without speaker-writer mind-brains there would be no instances at all. With speaker-writer mind-brains there still are no noninstantiated words, though there are unexhausted capacities. In short, speaker-writer mind-brains endowed with grammars and lexicons leave no need for abstracta. Nor should any philosophic theory posit them out of respect for how we sometimes economically express the facts.<sup>22</sup>

The last passage I shall discuss before turning to more general considerations is about what they call the “Evolutionary Constraint,” a proposition on which they again agree with Kaplan and which they advocate as a “framing principle,” that is, a principle that the metaphysics of words should respect, presumably because they hold that it is metaphysically sound and important. The principle is, “As it is transmitted from one epoch to another, [a word] can change not only its phonological and orthographic contours, but its semantic and grammatical ones as well.”<sup>23</sup>

How sound is the principle as stated? The facts about the semantics and syntactic “contour” of a word touch on too many controversial technical issues to be fruitfully examined here. But what I write below about the phonological changes should apply with some nonessential modifications to them. The phonological facts, and the phonetic ones they induce, are more readily describable.

Normally, single words do not change in isolation, but whole families of words that share features change together as certain shared constituent features get replaced in shared phonological environments. These changes are often remarkably law-like<sup>24</sup> and are

<sup>22</sup> For a splendid set of arguments for the contrary view, see Linda Wetzel, *Types and Tokens: On Abstract Objects* (Cambridge: MIT, 2009).

<sup>23</sup> Hawthorne and Lepore, *op. cit.*, p. 459.

<sup>24</sup> They are also remarkable similar in form to synchronic regularities.

often labeled as such by linguists. So we have Grimm's law, responsible for the spiritization of voiceless stops in Germanic; Verner's law, which followed it in time and effected voicing in certain configurations; the Great Vowel Shift in English in the fifteenth century, resulting in drastic but systematic changes in long vowels; the current North American Vowel Shift; and the Valley Girls Rise, which is spreading from California through the United States and is driving my wife crazy. It was the reconstruction of such systematic featural changes that led to the revolutionary discovery of Indo-European and pre-German, otherwise completely unattested languages.

Furthermore, the only changes that necessarily and sufficiently made up those events were people changes. People changed, not "words"! Nothing like the disembodied Platonic words alluded to in Hawthorne and Lepore's "Evolutionary Constraint" was involved.<sup>25</sup> And the same is true for all diachronic lexical changes past, present, and future.<sup>26</sup> What actually happens is that specific, real, flesh-and-blood, human individuals, often across generations, often influenced by contacts with foreign neighbors or conquerors, or moved by pressures for articulatory and auditory efficiency, or the wish to follow some fashion, or other motives or pressures, start to talk differently, to move their articulators in different patterns, to internalize different rules or constraints, sometimes to the point of achieving creolization, and to adjust their perceptual expectations accordingly. In the case of Grimm's law, for instance, Germanic speakers of one generation produced bilabial stops in certain contexts, and then Germanic speakers of a later generation started to produce labio-dental continuants instead. (Think of the difference between how the Latin 'pater' and the English 'father' are produced.) Morris Halle and I have speculated about the form such changes take in the internal grammars of individuals. Whether we were right or wrong, the indisputable fact remains that talk of words changing is at best a convenient shortcut, and a way of being noncommittal about empirical details. But the moral, once again, is that anyone seriously interested in the ontology of language ought not to take *façons de parler* about change at face value. The "Evolutionary Constraint" as a guide to ontology is vacuous.

In the last section of their paper, Hawthorne and Lepore switch from issues about the defining character of words—what distinguishes them as words from other things—to closely related issues about word

<sup>25</sup> If they are abstract entities, how could they change?

<sup>26</sup> What are we then to make of etymology? Etymology is not ontology. Though it abstracts from facts, it is not about abstracta. Actually, the methodology of etymology deserves more attention from philosophers than it has received.

individuation—what distinguishes individual words from each other.<sup>27</sup> They base their discussion—they write—on a reading of the word ‘word’ “according to which it is used in a way that conforms to the lexeme conception.”<sup>28</sup> Unfortunately they do not tell us which of the many versions of that conception and term they have in mind; how the conception they have in mind covers suppletion, or handles words in agglunative and polysynthetic languages (where the demarcation between words and phrases can be problematic); or what notions it assumes of the relation between phonology and phonetics, or between the syntax and morphology. So their switch in terminology is of little help, for the notion of lexeme raises as many thorny issues as (if not more than) our everyday notion of word. At one point they seem to admit as much.<sup>29</sup> After a careful, and in many ways insightful, critical review of options, they conclude that no useful criterion of identity is available now or is likely to be in the near future. And even if one is ever to be found “most of the work remains to be done.”<sup>30</sup> They put the moral they draw as follows: “The good news is that the elusiveness of questions of word individuation need not indict our practice of positing words. The bad news is that the accessible facts about words run so shallow that there is little philosophical payoff to ruminations about word identity.”<sup>31</sup> Their “good news” has a certain plausibility, but it leaves us in the dark as to whether “our practice of positing words” needs to come down to more than just using the word ‘word’ as a syntactic noun. Their “bad news,” on the other hand, advocates a resignation that should be resisted. The ontological issues are real; they refer to important gaps in our image of reality, of lexical memory, of language capacities in general, and of ourselves. Though these are thorny, labyrinthine issues, and though their solution may call for widespread explorations, we owe it to ourselves and to those who rely on us to pursue them. Fortunately, the “accessible facts about words” do not run shallow at all, except for those who limit themselves to commonplaces. In what follows I turn to that aspect of things.

### III. FURTHER THOUGHTS ON THE QUESTION “WHAT ARE WORDS?”

As I wrote at the outset, “What are words?” is woefully underspecified. Kaplan reads it one way; Hawthorne and Lepore read it in a radically

<sup>27</sup> They actually discuss jointly the two questions “How can words be individuated?” and “When are two instances instances of the same word?”

<sup>28</sup> Hawthorne and Lepore, *op. cit.*, p. 476.

<sup>29</sup> They write, “When one looks at discussions of lexemes within theoretical inquiry, confident judgments of identity and difference—and associated diagnostics—are typically local.” *Ibid.*, p. 482.

<sup>30</sup> *Ibid.*

<sup>31</sup> *Ibid.*

different way. Neither reading turned out to be very fruitful. In this section I want to sketch a reading that strikes me as more promising and more urgent for the ontology of words and linguistic constituents in general.

Contrary to what Hawthorne and Lepore write as quoted above, the accessible facts about words do not run shallow. On the contrary, we know a lot about words. That is not surprising: they have been under intense study since at least the fourth century BC (Pāṇini). Here is a random sample of things we know about words. Every human natural language, no matter how unrelated, systematically organizes words.<sup>32</sup> Each word, in every language, is constituted of hierarchies of segments and belongs to lexicons made up of other words, or is derived or compounded from such other words. Words are distinguished by their syntactic, phonological, and semantic features,<sup>33</sup> which affect their distribution in phrases, for they get merged with other words into phrases and sentences under universal (though sometimes idiosyncratic) and parameterized rules or constraints. Words are the domain of morphological conditions on affixation, cliticization, and compounding. They are the domain (depending on the language) of stress or tone assignment.<sup>34</sup> They are the theme of phonological and morphological processes of assimilation, vowel shift, metathesis, reduplication, and phonotactic constraints. They manifest themselves as sequences of articulatory gestures and auditory events or sub-vocal performances by specific individuals at specific times. For some people, such episodes can be guided or encoded by alphabetic, syllabary, or ideographic scripts. New words can be acquired long after all other aspects of one's language have been fixed. And so on, and so on.

These facts—and facts like them—clearly raise ontological issues expressible as “What are the truth makers of these facts and facts like them?” Or, somewhat more controversially, “What sorts of things must exist in a world in which they obtain, but need not exist in a world in which they do not obtain, and why?” And these are also reasonably promising specifications of our question “What are words?”

One thing is certain: these facts are rooted in people. They hold because certain facts hold of people, flesh-and-blood speaker-hearers, not of abstracta in some Platonic heaven or grinnin' Wonderland.

<sup>32</sup> Whether the notion is usefully extended to cover the smallest free forms in linearized artificial notational systems (for example, logics) that have no phonology is debatable, and is probably best set aside until what is at stake about words becomes clearer.

<sup>33</sup> That needs some pedantic qualification; for there are pleonasm, empty categories, and so on.

<sup>34</sup> That too needs some pedantic qualifications.

Furthermore, they hold because a person who has internalized words is thereby in a state that enables that person to meaningfully produce, parse, understand, and entertain utterances—a very special, probably species-restricted capacity. But it is also a capacity that requires more than the acquisition of individual words. It requires the possession of a whole grammar, that is, a phonology, a morphology, a syntax, a semantics, a pragmatics, and so on, not to mention a certain anatomy and specialized neuro-physiology. It is, to say the least, a very complex capacity! There can be no words where there is no such capacity.

That capacity includes the capacity to unconsciously plan and execute complex processes, as attested by the fact that even in informal, casual talk or thought, our sentences flow out preplanned, structured, conforming to all manner of functional and linearization requirements and constraints. Subjects come before verbs in English; ‘wh-’s occur in complementizer positions and not where they get their thematic role; ‘do’ in English picks up tenses where main verbs are blocked from doing so by negations (or interrogation); agreements are respected; affixes assimilate phonetically to their stems (or vice versa); and so on, and so on.<sup>35</sup>

As we speak (and listen) even casually, we thus carry out complicated processes. Not merely cognitive processes, but physical ones as well that implicate motor neurons controlling our abdominal muscles, vocal folds, velum, back of the tongue, blade of the tongue, sides of the tongue, and lips in incredibly subtle, targeted gymnastics.<sup>36</sup>

Yet none of these processes, not even their input (what initiates what we are going to say), is accessible to awareness. None of that planning, none of these physico-mental, presumably intentional activities are open to our consciousness! That is an aspect of hearer-speaker predicaments that deserves much more attention than it has received from philosophers. We are held responsible for what we say. We hold ourselves responsible for and in charge of what we say and how we say it. We impute all manners of reasoning as determining what we say. And that is as it should be. We are not automata! But at what point in our talk do we start or cease to be agents?

We do not even have, as part of our everyday conversational notions, notions that are up to the task of stating, or of bringing to consciousness, what we presumably do intentionally when we speak. Let me illustrate this with a revealing conversation I had a few years ago with my

<sup>35</sup> I am limiting my illustrations to English speech. They are readily expanded and adjusted to cover other and *prima facie* very different languages.

<sup>36</sup> Related processes are implicated in writing, reading, signing.

lovely, then two-year-old granddaughter Eliza. It also shows how seriously flawed Kaplan's notion of repetition is.

Eliza: Me play.  
 Sylvain: Eliza, sweetheart, say "I play."  
 Eliza: Me play.  
 Sylvain: No, no, not "me," "I." OK? Say "I."  
 Eliza: Me.  
 Sylvain: Say "ayayayay."  
 Eliza: Ayayayay.  
 Sylvain: Say "bye bye."  
 Eliza: Bye bye.  
 Sylvain: Great! Now say "I."  
 Eliza: Me.

Puzzled by this exchange, I turned to my friend and colleague Ken Wexler, who, unlike me, really knows linguistics and linguistic development. It turns out that the phenomenon is widespread and has been studied. The explanation runs roughly as follows. Up to a certain age, children do not "have case" in their inner grammar. As a consequence they do not produce nominative case. A noun phrase gets nominative case when used in a certain relationship to a tensed verb, roughly, when it is used as the subject of a tensed verb. (Genitive and accusative or dative require different syntactic relationships.) Case is phonologically and phonetically overt in English, unlike in many other languages, only on certain pronouns, though it is assigned to other noun phrases covertly as well.<sup>37</sup> 'I' is the nominative case form of the first-person singular pronoun in English; 'me' is what is called the "unmarked" case, the default case, the no-case, so to say. (So when someone asks, "Who did this?" you answer, "Me," not "I," in the absence of any verb.) Eliza, not having case in her grammar, produced what she did have access to: the default form. (Notice my use of the word 'form'.) And when she did acquire the full panoply of cases later in life, she was totally unaware of her transformation, and, until schooled, remained unaware of its effects. Actually case, and case assignment in agent position of tensed verbs, though an essential feature of our linguistic practice, is still not well understood and is certainly not mentioned in our commonplaces about words. But a place must be opened for it in any "philosophically satisfying theory of words."

All this puts us in a vexing intellectual predicament. "What are the truth makers of the above propositions about words?"—the way I urge

<sup>37</sup> This accounts for the fact that 'John seems to be happy' and 'It seems that John is happy' are fine, whereas 'It seems John to be happy' is not fine.

that we interpret “What are words?”—must do justice to the fact that these truths hold by virtue of human-specific capacities; it must invoke the nature and character of these capacities and of the processes that realize them. That is impossible if we limit ourselves to the everyday and philosophic *façons de parler*. Hypostasizing abstracta and common currency notions only takes us in the wrong direction. Unfortunately, delving into phonology, phonetics, morphology, syntax, linguistic development, and so on is also futile at this point in our knowledge. As far as I know—and I may be simply displaying my ignorance here—no real help is forthcoming from those quarters yet. Emphasis on “yet.” Emphasis on “yet.” Emphasis on “yet.” Hawthorne and Lepore are right when they write “most of the work remains to be done,” though “most” is misleading about actual progress.

To fully spell out what I have in mind would take us far afield and require much more space and technicalities than are appropriate here. But an example from what philosophers probably deem the least problematic dimension of speech, so-called “sounds,” may give an inkling of what is at stake. Phonologists study, among other things, alternations. Examples: ‘electric’/‘electricity’, ‘sane’/‘sanity’, ‘knife’/‘knives’. Members of each pair are conjectured, on good theoretical grounds, to derive from a common memorized<sup>38</sup> element, what is called an “underlying representation” (the word ‘representation’ is unfortunate<sup>39</sup>), through the application of rules or the implementation of constraints. So, for instance, ‘electricity’ is derived from ‘electric’, and in the course of the derivation the ‘k’ turns into an ‘s’ sound. ‘k’ and ‘s’ are specified in the theory as arrays of articulatory gestures, such as, in the case of ‘k’, obstructing of the vocal tract, raising of the back of the tongue, stiffening of the vocal cords. But that cannot be the content of ‘k’ when used as what underlies the ‘s’ sound production in ‘electricity’. The production of ‘electricity’ does not involve any such gestures. But what then are we talking about when we talk about underlying phonological representations? What in the world are they? What are their features? What is their ontological and cognitive constitution? The foundations of phonology are replete with confounding issues like this one.<sup>40</sup>

We have been urged by Wittgenstein, Horwich, and innumerable other wise philosophers, “Do not ask for the meaning, but ask for the use.” But the use of what? Underlying representations? As far as I know,

<sup>38</sup> Not consciously.

<sup>39</sup> Some linguists prefer other terminology, for example, ‘lexical entry’.

<sup>40</sup> The issue survives even if we switch from articulatory features to auditory ones.

the question should have us tongue-tied at this moment of our intellectual history. Emphasis: at this moment of our intellectual history!

And so, more generally, no detailed and solidly warranted answer to “What are words?”—as a question about the truth makers of linguistic facts—is forthcoming from linguistics, at least the bits of linguistics with which I have had contact. None is forthcoming at this point from the brain sciences either, as far as I know, though wonderful research is done there. But at least we are at a point where we can appreciate with some precision what we know we do not know. That is progress! Promising progress! The road to knowledge is paved with acknowledged, pinpointed ignorance. And we have good reason to believe that after more empirical discoveries, more conceptual innovations, more unification of disciplines, more theoretical developments, answers will emerge, as they have in other areas. In most likelihood, these answers will break up the notion of word into a number of more precise and theoretically manageable ones.<sup>41</sup> Meanwhile there is work to be done. Much is being done. Philosophers could be most helpful in that work. They have relevant analytical skills that are invaluable and that few others have had the chance to develop. But they will have to turn their metaphysical binoculars around to see the facts more closely. Not abstract facts, but concrete ones. Not how we talk about words or might prefer to talk about words to avoid puzzles, but what words come to in the actual world. As I suggested above, what is at stake is our understanding not only of words, but of ourselves.

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<sup>41</sup> For an early version of such an approach, see Anna-Maria Di Sculio and Edwin Williams, *On the Definition of Word* (Cambridge: MIT, 1987).