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On the Individuation of Words

Abstract: The idea that two words can be instances of the same word is a central intuition in our conception of language. This fact underlies many of the claims that we make about how we communicate, and how we understand each other. Given this, irrespective of what we think words are, it is common to think that any putative ontology of words, must be able to explain this feature of language. That is, we need to provide criteria of identity for word-types which allow us to individuate words such that it can be the case that two particular word-instances are instances of the same word-type (on the assumption that there are such types). One solution, recently further developed by Irmak (2018), holds that words are individuated by their history. In this paper, I argue that this view either fails to account for our intuitions about word identity, or is too vague to be a plausible answer to the problem of word individuation.

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The idea that two words can be instances of the same word is a central intuition in our conception of language. This fact underlies many of the claims that we make about how we communicate, and how we understand each other. Given this, irrespective of what we think words are, it is common to think that any putative ontology of words, must be able to explain this feature of language. That is, we need to provide criteria of identity for word-types which allow us to individuate words such that it can be the case that two particular word-instances are instances of the same word-type (on the assumption that there are such types). One solution, recently further developed by Irmak (2018), holds that words are individuated by their history. In this paper, I argue that this view either fails to account for our intuitions about word identity, or is too vague to be a plausible answer to the problem of word individuation.

I

Perhaps the most defended view in the metaphysics of words are those views that posit genuinely existing word-types. Such views can be further split into the platonists that take word-types to be eternal abstract entities (Katz 1981, Wetzel 2009); and views that take word-types to be abstract artefacts (Irmak 2018). Despite various differences between these versions of type-realist views of words, most prominently concerning whether words are created or eternal entities, they agree that what is it for two particular word-instances or tokens to be the same word is for them to both be instances of the same type.[1]

This, naturally, leads to questions about the individuation of word-types and of word-instances. Though connected, these two issues need to be carefully separated. The latter is the question of what connects word-instances such that two instances are instances of the same word-type. The former concerns how we differentiate the types themselves. The focus in this paper is on solutions to the problem of individuating word-types, and thus, unless specified, in the rest of this paper the term 'word' will refer to types, not instances.

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[1] Other prominent options, which I will not discuss here, are nominalism, which has been largely undefended since Quine (1960) and Bloomfield (1933), though see Miller (Ms.) for a recent, sympathetic discussion, and a stage-continuant model (see Kaplan 1990, 2011);

It is well recognised that trying to individuate words through their phonetic, orthographic, or semantic properties is flawed. On so-called form- or shape-theoretic conceptions of words, which hold that two words are instances of the same word if they share the same relevant (physical) shape or form, a quick reflection on the multitude of different pronunciations, spellings, and examples of different handwriting and fonts makes it very hard to see what in terms of shape or form is truly had in common between intuitively genuine cases of multiple instances of the same word. Two people can clearly say the same word despite pronouncing the word differently. 'Color' and 'colour' are similarly the same word, despite the difference between US and British spelling. Homophones are distinct words even though they are pronounced the same, and 'bank' and 'bank' are distinct despite being spelt (and pronounced) in the same way.

Further to this, it seems intuitively to be the case that words undergo phonetic and orthographic change. The 'Great Vowel Shift' did not create a new language.[2] Even it were the case that the shift led to speakers struggling to understand some others, this does not mean that there was a change in language, nor a change in the identity of the words that underwent a change in their pronunciation. Thus, we can reject views that individuate words through their phonetic or orthographic properties.

A semantic account fares little better. Words undergo semantic change just as they undergo phonetic and orthographic change. On some occasions, this even involves a word coming to mean something entirely distinct from its original meaning. Take the recently well-discussed (on the internet) example of many people using the word 'literally' as a near synonym of 'figuratively'. This form of use is prevalent across many places online, and has got a lot of people very angry.[3] Does this mean that the word has changed, or are people using a homophone or homograph in such cases? It seems far more reasonable to

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[2] For more on the Great Vowel Shift, including on the debate about the causes of it, see Nevalainen and Traugott (2012).

[3] See https://www.merriam-webster.com/words-at-play/misuse-of-literally. Note also that literary greats such as F. Scott Fitzgerald, James Joyce, Charlotte Brontë, and Charles Dickens all used literally to mean figuratively on occasion. The supposed 'modern' use of the term is much older than some seem to realise.

think that, if anything, the meaning of the word has changed, and that the word itself remains the same.[4] Semantics, therefore, is also not a good guide to the identity of words.

In light of these, and other problems, theorists have explored versions of an account that places the historical properties or the origin of words as central to their individuation. Thus:

Origin: Words w_1 and w_2 are identical iff w_1 and w_2 have the same originating event (where the originating event is the first performance of a word) (Hawthorne and Lepore 2011: 477).[5]

Origin, though, is still too crude a proposal. There are many cases in which words share an originating event, but are not intuitively the same word. Many distinct words in English, for example, derive from the same Latin root. Furthermore, it rules out unperformed words, or at least assumes that words only come into existence when performed. We might try to respond by allowing that a mental performance of a word is sufficient for origin, but either way, origin does not seem satisfactory due to its demand that there is for each word exactly one performance that is the first performance of that word (Hawthorne and Lepore 2011: 477).

Irmak has used these problems to motivate a broader account where words are individuated via their history. This account places etymology at the centre of our inquiries into word identity: 'Etymology, then, is not merely an empirical investigation concerning the history of words as linguistic units, but also a proper investigation of word identity' (2018: 12), where what we are interested in tracking are the 'changes in their orthographic and phonological forms, and meanings and/or functions' (2018: 12). Irmak thus proposes (2018: 12):

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[4] i.e. that this use did not bring into existence the homophonous word 'literally' such that we would now need to distinguish between two words: 'literally$_1$' and 'literally$_2$'. Use, at best, changed what the singular word *meant*.

[5] Hawthorne and Lepore attribute this view to Richard (1990) and Millikan (1984). See also Kripke (1980).

History: Words w_1 and w_2 are identical if and only if they have the same history.

We are not told what facts are included in history, but we can assume that given Irmak thinks that he view avoids the problems associated with *origin*, that they include both origin and other performance facts, potentially including the mental performances of words (if such events count as performances). Thus *history* does not require, as *origin* did, that there is exactly one event that is the first performance of a word. A word could have two distinct originating events, just so long as both events are part of the history of that word.

History seems to give us the right answers for many of our intuitions about language. The difference between 'color' and 'colour' is insignificant as they share the same history. Homophones, homographs, and synonyms are distinct words because their histories are different, and 'in virtue of significant differences in their histories, specifically the particular way and the time they were borrowed from the donor language, doublets are successfully rendered different yet cognate words despite sharing a common root' (Irmak 2018: 13).

It is accepted that the view is not entirely without problems (Irmak 2018: 13). Words overlap and even share etymologies, both within a language, and across languages. That is, how and when do overlapping words become distinct under this account? How many new uses, and how distinct from other uses, before a new word exists? This is presented as a purely epistemological problem. In what remains, I will argue that the problem goes deeper, and that there is no interpretation of 'same history' that provides us with a plausible account of word individuation.

II

Let us canvass some possibilities, beginning with the strongest reading of 'same', where same means identical such that we get:

History*: Words w_1 and w_2 are identical if and only if they have an identical history.

However, read this way, *History** means that words are, in fact, almost never identical. The reason for this is that history is an ever-growing set of (etymological) facts. The history of the words that I am producing instances of right now is different from those instanced by Jane Austen and Charles Dickens. This is, in part, because the history of my

words *includes* the influential use of words by famous authors that may have adjusted their meaning, made them more popular, changed their spellings, or had any number of effects that contribute to that word's history. The words that I am producing instances of have a history that includes their use by Austen, whilst Austen's do not. Thus it cannot be that Austen and I ever instanced the same word. This, of course, works for more familiar cases too. 'Color' and 'colour' do not actually share an identical history as the history of 'color' includes various uses in America, whilst 'colour' in Britain (as well as various other differences).

This is a serious enough issue that *History** cannot be a plausible account of word individuation. If words cannot, in principle, be shared by speakers of the same language at two distinct times under a given theory, then I propose that that is sufficient reason to reject that theory of word individuation.

An alternative might be to say it is enough that H_1, the set of history facts that individuates w_1, is subset of H_2, the set of history facts that individuates w_2. We might then say that when I write w_1, and Austen has written w_2, then $w_1=w_2$ iff all the facts that are members of H_2 are members of H_1. Thus, Austen and I can write the same word, despite H_1 and H_2 not being identical. Thus we get:

History**: Words w_1 and w_2 are identical if and only if they have the same history, or if the history of w_1 is a subset of w_2.

This, though, will not work. One phenomenon we want to be able to explain is how borrowed words are new words in the language into which they are introduced, distinct from the different but cognate word with which they share a root. But *History*** does not allow for this. For example, 'aardvark' is a borrowed word in English from Afrikaans. In Afrikaans, 'aardvark' is now an obsolete term, having been replaced by 'erdvark'.

This shared root means that 'aardvark' and 'erdvark' have a significantly shared history. The English word has a history that includes all of the history of the (now obsolete) Afrikaans word as a subset. That is, the full etymology of 'aardvark' in English will include all the etymological facts of 'aardvark' in Afrikaans, at least up until the moment of that the word was borrowed. Thus, at that moment at least, the two words would satisfy history**, but intuitively they are still distinct words.

Given this, we might say that the histories only have to be sufficiently similar:

History***: Words w_1 and w_2 are identical if and only if they have the same or sufficiently similar history.

However, this is so vague as to be unhelpful. Taking about the 'aardvark' example from above. 'aardvark' (in English) and 'erdvark' (the current term in Afrikaans) have a significantly shared history. Are they then the same word? For myself, intuitively they are not, but *History**** leaves open the possibility that they are. At the same time, 'color' and 'colour', intuitively are the same, but *History**** leaves open the possibility that they are not.

The problem is that it is not clear at all how much similarity is required to determine questions about word identity. At worst, in the above case identity in history may not be sufficient for word identity: an English instance of "aardvark" and an Afrikaans instance of "erdwark" do not count as instances of the same word, despite sharing their history.

It should be noted that such vagueness in the notion of 'sufficient similarity' is not unique to *history*, but is common to many of the proposals for word individuation. Versions of the same problem have been argued as being sufficient to reject the attempt to individuate words through their shape or form (Wetzel 2009; Hawthorne and Lepore 2011; Irmak 2018), through meaning (Irmak 2018), and through the intentions of speakers (Cappelen 2000). If we accept, as most have, such an issue to be enough to lead us to reject those other proposals, then it would seem that it should be enough to reject *history* too.

III

In what remains, I will respond to some immediate objections to my argument.

It might be responded that I have confused word types with word instances. That is, that I have used history applied to word instances to make a point about a theory aimed at providing a criteria of identity for word types. However, whilst I have used word instances in making my point, in each case the question has been about whether history can provide individuating conditions for types. History is taken to provide a solution to that question as, by individuating word types, we aim to be able to individuate the instances. I asked whether w_1, an instance of which was produced by Austen, is the same word as w_2, an instance of which was produced by me, here in 2018. On any reasonable specification of

how much history w_1 and w_2 must share to be identical, either the theory produces the wrong answer (e.g. Austen and I did not instance the same word), or becomes as vague as the previously outlined positions. Thus, though w_1 and w_2 are instances, the conclusion is about whether or not the proposed criteria of identity for the type, W, explains how w_1 and w_2 are instances of the same word,

One way that my objection could be avoided is by adopting a version of Platonism where, given that words are eternal unchanging entities, the history of a word already includes facts about uses of that word in the future (from our current perspective). This would avoid the problem as it would allow us to say that the word that Austen and I instance do have the same history, as the history of the word instanced by Austen (and me) includes all the facts relating to my use of the word, and all other instancings of the word.

However, this immediately has some very strange consequences for how we think of words in that it would make it the case that the history of a word is predetermined, or even necessary. That is, if history already includes facts about all uses of a word in the future, then we would have to accept that those future uses could not be different, else the word would actually be a different word. This is highly counter-intuitive. We think that various aspects about language and words are contingent, including facts about whether, say, some word is adopted by some community of speakers, or comes to be spelt or pronounced in a different way. It should not be the case that how we individuate words means that it is necessary that 'shew' came later to be spelt 'show', or that a word will shift its meaning.

Furthermore, this response would make the practical job of individuating words almost impossible. We simply would not know whether the full history of two instances of words used now are the same word as history includes relevant facts about future uses. Perhaps for the Platonist, this is not too problematic; they after all already have to handle objections about how it possible for us to in any sense come to know or grasp eternal unchanging abstract entities.[6] However, this at least shows that the view is more counter-intuitive than it might initially seem.

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[6] See Benacerraf 1965, 1983 and Field 1980, 1989 for discussion of such problems; see Wetzel 2009 for a response to these concerns.

Furthermore, even if those problems can be avoided, this route is not available to at least some realists about word-types such as Irmak who argues that words, though being abstract, still come into existence (2018). If words genuinely come into existence, then it seems as though it would not be the case that the word would have all of its historical facts at that moment of creation. If a major benefit of *history* is that we can maintain our intuitive way of speaking that a word's history changes and grows over time, then that benefit would be lost if we adopt this response to the arguments above.

One further response might be that I have been overly metaphysical in my reasoning here. Perhaps:

looking for precise boundaries for word identity will either result in determinate answers to complicated cases where major revisions are required in our linguistic practices concerning word identity, or in so far as it attempts to respect and even justify such practices it will eventually fail. It must be noted that for the vast majority of cases the problem does not even arise. The concern here is about those cases where the similarities and differences in word histories are not even nearly decisive (Irmak 2018: 13)

However, first, in the examples I have used here, I have shown that these concerns arise for all sorts of ordinary words. 'aardvark' is not an unusual case, and it is not a (particularly) uncommon word. It seems that these problems do not arise in the vast majority of cases only because we are not looking.

Analogously, to those who have not read the metaphysical literature, the puzzles about material composition only arise in the most strange and extreme examples, but that should not that persuade us that there is no question there. We might have other reasons for thinking that the questions are non-substantive, but that we do not normally care about whether a table is really just particles-arranged-tablewise is *by itself* no reason to think that no good answer is forthcoming. Similarly, just because I do not, in ordinary conversation, stop the speaker to ask whether they are uttering an instance of 'w_1' or 'w_2' because the context tells which it is, not does free us from the metaphysical puzzle, irrespective of whether we want to be revisionists about linguistic practices or not.

It may that determinate answers on this topic, as with many in metaphysics, would seem to require revisions to our linguistic practice, but only if we think that we should (let alone could) abide by correct metaphysical principles in all parts of our lives. Compositional

nihilists do not think that people should stop talking as if composite objects exist. A revisionist metaphysics of words does not mean that we think that people should stop talking whatever way is best for them in a particular context. In both cases, if truly revisionary, then some account might be needed to explain why other less revisionary accounts should not be favoured. However, none of this is an argument against looking for precise boundaries; only to be aware of the consequences for any proposed precise boundaries on both philosophical and 'common-sense' contexts.

IV

The lack of a good account of criterion of individuation for words is well-recognised. This has lead Hawthorne and Lepore to the position of 'sloppy realism' wherein we accept that there must be some criterion of individuation for words, but that we cannot (at least currently) specify them (2011). Despite the arguments in this paper, I am more hopeful than that. Like Irmak, I do think that there are objective facts about the individuation of words (Irmak 2018: 13), even if such facts will involve facts about humans, and I think that we can at least improve on our accounts of what such facts are. But even granting this, *history,* as currently stated, is either too vague or too restrictive, and thus is not a significant improvement on previous theories of word individuation.

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