

SAMENESS OF WORD

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ABSTRACT

Although the metaphysics of words remains a relatively understudied domain, one of the more discussed topics has been the question of how to account for the apparent sameness of words. Put one way, the question concerns what it is that makes two wordinstances (or tokens) instances of the same word. In this paper, I argue that the existing solutions to the problems all fail as they take the problem of sameness of word to be a problem about how one object relates to another. I propose an alternative solution to the problem of sameness of word which is instead focused on the intrinsic nature of the properties possessed by words. The result is a more thoroughgoing version of nominalism than is currently defended in the literature.

Keywords: words; nominalism; tropes; identity; resemblance.

1. Stating the Problem

The problem of sameness of word can be taken, on first pass, to be the problem of accounting for the seeming ability of two speakers, or the same speaker at different times or in different mediums (written, spoken, signed etc.), to be able to say (write, sign, etc.) the same word. That is, how can I say one word now, and write that *same* word at another time? Or, how, if at all, can grammatical variants of the same word appear in sentences as a verb and a noun? What, in these cases, makes them the *same* word, or should we take them to be resembling but metaphysically non-identical particulars?

One way, though not the only, to understand this issue is as a specific version of the familiar problem of universals, most commonly discussed with respect to properties. In the case of words, the problem is particularly pressing as the ability to recognise words as being the same underlies many of our abilities to communicate with each other. In writing this paper, I am assuming that you, the reader, are able to recognise my words and understand them, and, prima facie, an account of how that is possible requires explaining your ability to recognise the words on this page as particular instances of words that you have on some other occasion expressed, heard, or read.

It should be clear immediately that the problem of sameness of word is closely related to debates about the ontology of words. The solutions to the problem, and possibly even how the problem is stated, will reflect a difference in the underlying ontology being defended, making any simple theory-neutral statement of the problem difficult. For example, probably the most common way of stating the problem of sameness of word has been to ask, as we did above, what is it that makes two instances of a word instances of the same word, or, more precisely, what makes two tokens tokens of the same type. This way of phrasing the question suggests a commitment to a type-token ontology, according to which the particular words on this page are tokens of some abstract type, and the sameness of two tokens is secured through them being tokens of the same type (see, inter alia, Wetzel 2009; Katz 1981).

This type-realist conception of the problem takes the problem to actually be two problems. The first is the question of individuating word-types, and the second is about how two tokens are tokens of the same type. These

¹ Or the problem of one over many, or the problem of many over one; see, inter alia, Armstrong (1989) MacBride (2005), Ramsey (1925) and Rodriguez-Pererya (2002). An exception is Kaplan (1990, 2011) under whose analysis this is not a version of the problem of universals, but a question about words as stage-continuant entities.

questions are distinct, but closely related. For example, a type-realist might think that what it is for some token to be a token of that type is for that token to resemble the type in some relevant way. Identifying the property or characteristic that individuates word-types would therefore provide us with a way to recognise when two tokens as being tokens of the same type. However, as discussed later, explaining what makes two tokens tokens of the same type, and individuating types in a metaphysically rigorous way, has been notoriously difficult.

Another way of stating the problem comes from nominalist ontologies of words. A nominalist account of words, often attributed to Quine (1960) and Bloomfield (1933), denies any ontological commitment to word-types, and instead posits only particular word-tokens or instances. This means that for the nominalist, to talk about 'the word 'table'' does not commit us to the existence of type-level entities, but is to only talk about some collection or class of particular words that resemble each other to a sufficient degree to be grouped together, relative to our explanatory purposes. This makes the problem of sameness of word to be a problem of accounting for when it is the case that tokens or instances resemble each other such that we can create collections or classes of those particular entities.

Within these distinct views,² and their distinct ways of stating the problem of sameness of word, it is important to therefore reflect on what would count as an answer or solution to this problem. Naturally, different theories will disagree here, in part due to their differing ontological commitments. However, there is also the issue that there are a huge number of potential data points arising from our intuitions about when it is the case that two words are the same that we might want a theory to be able to accommodate. And, as we will see, that data is often not consistent, and is prone to variation across speakers, communities, and time periods. Given this, I suggest that while we are after a theory that can (broadly) explain (most of) our intuitions about language, a theory need not be one that satisfies them all. That is, our proposed ontology and its related solution may be revisionary rather than being merely descriptive, though quite *how*

² It should be noted that this list of views is not intended to be exhaustive. For example, there is also Kaplan's (1990, 2011) stage-continuant ontology on which the problem of sameness of word is a question of when are two stages stages of the same continuant. We could also hold a reductionist or nihilist view of words. The view would hold that in fact no words exist. Instead, words should be reduced to, or analysed as being, morphemes-arranged-word-wise, perhaps akin to certain views about the nature of ordinary objects such as tables (cf. van Inwagen 1990). Under this view, it would strictly speaking be false to think two words can be the same word, as no such things exist. I will defer a discussion of the plausibility of such views to later research and focus on the disagreement between the nominalist and type-realist. I also will here assume that words are genuinely existing objects.

revisionary a theory can be before we think it *too* revisionary is a very difficult question, and not one I can answer here.

Hopefully this introduction at least serves to provide an overview of what the problem of sameness of word is, and how there might be different approaches to its solution depending on our ontological commitments. In the next two sections, I will outline some prominent families of views and their proposed solutions to this problem. In section 4, I will argue that they all share a common assumption that the sameness of words is a question concerning the identity of words qua *objects* and that it is this assumption which explains why the proposed solutions fail. The remaining sections will then outline a new account which does not make this assumption, and instead attempts to solve the problem of the sameness of word by considering the properties instantiated by token words.

2. Type-Realism

Type-realist views are the most common theories within the literature. They can be (loosely) split into Platonist theories, that take word-types to be eternal abstract entities (see Katz 1981; Wetzel 2009); and theories that take word-types to be non-eternal abstract artifacts (see Hawthorne and Lepore 2011; Irmak 2018). Ignoring many differences between these views, 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.

Under such ontologies, the intuitive first approach to answering the question of sameness of word is to hold that there will be some property, or properties, that all tokens of a type have in virtue of being tokens of that type.³ However, it is well recognised, even by supporters of the type-realist view, that there is no such property. None of the orthographic, semantic, syntactic, or historical properties that particular tokens instantiate are shared by all tokens of that type, let alone uniquely by tokens of that type (see Miller 2020a), and the problems facing attempts to individuate types through their origin or other historical properties are well known (see Hawthorne and Lepore 2011; Miller 2020b; Hughes Ms.). This would, of course, not be a problem if we did not posit genuinely existing types (as I will explore in later sections). But, for the type-realist, this is deeply problematic, as it would mean that, prima facie, type-realists can provide no way to say when it is the case that two instances of words are instances of the same word-type.

³ Excepting, for now, the claim that the relevant property that all tokens have is that of 'being a token of type X'. I will discuss this sort of claim later in the paper.

The lack of a good criterion of individuation for words has been recognised by some defenders of type-realist accounts. Hawthorne and Lepore (2011) accept what they call 'sloppy realism' wherein we accept that there must be some criterion of individuation for words, but that we cannot (at least currently) specify them. Wetzel (2009) holds a somewhat similar view, wherein there is no property that all tokens of a type have in common other than being tokens of that word.

This explanation of the sameness of word appeals to a brute instantiation relation between tokens and types that those not antecedently committed to the existence of types might find difficult to accept (see Miller 2020a). It also raises the question of how we could tell whether two tokens are tokens of the same type. If all that tokens have in common is that they have the property of being tokens of a certain type, then there would seem to be nothing in the observable properties of the tokens that we can appeal to to help us tell whether certain tokens are tokens of the same type. Beyond the appeal to intuitions, it would seem that sloppy realism or positing brute instantiation relations provides us with no justification for saying when it is that a token has been correctly identified as being an instance of some particular type, nor can it provide any insight into which types are the genuinely existing types. The sloppy realist is unable to provide a reason for rejecting the possibility that any (or even all) tokens might turn out to be instances of the same type.

To see this, consider two tokens 'cat' and 'dog'. It would seem clear that they are tokens of distinct types, but the sloppy realist cannot rule out that we have consistently misidentified which types exist, and that the tokens are in fact tokens of the same type. That is, nothing rules out that we all fail to see that there is in fact, contra our intuitions, some type that both of these tokens are tokens of. Indeed, every word in this paper could, on the sloppy realist view, turn out to be an instance of the same type, or instances of distinct types. Sloppy realism fails to provide any defence against a rampant scepticism about our ability to identify types, and identify which types tokens are instances of.

Wetzel's response here is to appeal to the notion of 'family resemblances'. Thus, she argues that

it is not a brute fact that word token t is a token of word T; plenty of tokens of 'cat' are spelled 'c'-'a'-'t' or pronounced ['kœt]...Spelling and pronunciation are some of the factors that help determine, for each word token t, what word type T it is a token of and why. Other factors include: the linguistic context (...) and the intentions of the producer (...). (Wetzel 2009, 70f)

The idea here seems to be that the properties of the tokens resemble each other the way members of a family do, and it is this that allows us to begin to grasp whether some token is of some particular type. Such types are then relative to particular theories. In one linguistic theory, we might favour one family resemblance, whilst in a second another, and so on, with the intuitions of speakers being themselves reflective of their own (perhaps unconscious) theories about the limits of family resemblances. Thus, Wetzel thinks of the job of a linguist studying words to be like that of a zoologist, using theories that reflect or highlight family resemblances to ensure that we do not arrive at the conclusion that 'cat' and 'dog' are tokens of the same type.

This flexibility of typing has been argued to be an advantage for the type-realist. The suggestion is that we can embrace the idea that our ability to recognise types relies on family resemblances, and begin to think of word-types as structural-functional types, individuated through a set of complex semantic and syntactic properties, argument structure, stress and tone patterns (Gasparri 2016). This could certainly be an advantage, and would align with the variety of different ways in which the term 'word' is used by both ordinary speakers and linguists. It would allow us to say that there are multiple different types in the vicinity, some relating to some aspects of this structural-functional properties, and others relating to alternative ways in which we use the word 'word'.

However, ultimately this undermines the explanatory benefits that were the original reason for invoking a realism about types. The reason for this is that it is unclear how many different types we would thereby be committed to, as including all of the structural-functional properties within our typing would recreate all of the problems observed previously for certain tokens that differ in ways that do not rule them out as being of the same type, and tokens that share properties despite being of a different type. We could not hold that types include all of the structural-functional properties as part of their identity as this would be too strong, but it would seem to be arbitrary to exclude some structural-functional properties rather than others. That is, if x and y are two particular tokens, each possessing a range of structuralfunctional properties, then which of these properties is relevant when assessing whether x and y are tokens of the same type? If less than all of the structural-functional properties, then the previous problem for individuating types reasserts itself. If all of them, then rarely, if ever, will x and y be tokens of the same type, undercutting the explanatory power we gained by invoking genuinely existing types.

Perhaps there is some middle ground. The realist could accept that there are types corresponding to every (or at least a wide range of) structural

functional properties, including perhaps disjunctive and conjunctive properties. We might then argue that we only *care* about some of these properties, and not others.

I have no direct argument at this point against this proposal. However, below (in section 5) I will argue for a similar nominalist solution to the problem of typing, but without the ontological cost of positing genuinely existing type-level entities. And, if the nominalist and the realist appeal to the same solution, but the nominalist does so with fewer ontological posits, then there seems to be no reason to reify types as the realist suggests. That is, if we accept this realist proposal, it is again unclear what benefit we get by reifying types in the way that a realist does, rather than denying the existence of types and positing nominalist collections or classes in their place.

The arguments I have given here are unlikely to persuade a staunch defender of type-realism. However, they should be enough to suggest that type-realism does not provide as neat an answer to the problem of sameness of word as initially supposed. Positing types on first glance seems to solve the problem easily, but as ever the devil is in the details.

3. Nominalism

Nominalism, as discussed in the metaphysics of words, is typically credited to Bloomfield (1933) and Quine (1960), and, more recently, Bromberger (2011). At its core, a nominalist theory of words holds that

no explanatory work will be done by picking out some one abstract entity as the sign type. That's to say, it might be that reifying sign types would be explanatorily superfluous; it might in no way contribute to giving an account of what spoken, written, Braille, etc. tokens of "Alice" have in common. (Cappelen 1999, 100)

This, of course, does not mean that the nominalist needs to reject type-talk entirely. What the position entails is that types (or kinds) should not be taken to be genuinely existing abstract entities. Types instead are taken to be classes, collections, or models. The nominalist holds that judgments of word sameness track or establish classes of word tokens, but such that those classes are nominalist collections of word tokens that resemble each other in various ways. For the nominalist, then, such classes do not exist in addition to the existence of instances or tokens.

Some versions of nominalism, such as Bloomfield's, are also independently committed to a strong form of physicalism, in part, as detailed by Katz (1981), stemming from a commitment to behaviourism, and the subsequent rejection of any non-physical and non-behaviorally analyzable properties, including meaning properties. For example, Bloomfield stats that:

Non-linguists (unless they happen to be physicalists) constantly forget that a speaker is making noise, and credit him, instead, with the possession of impalpable 'ideas'. It remains for linguists to show, in detail, that the speaker has no 'ideas', and that the noise is sufficient. (Bloomfield 1936, 93)

This leads to what has become known as the shape- or form- theoretic conception of words wherein all that there are are tokens or instances, and those tokens are nothing more than sound waves or ink patterns. All talk of words that seems to reify types should be interpreted as being talk about some collection or class of tokens where such collections or classes can only be constructed with members that have the same phonetic or orthographic properties.

This form of nominalism seems to be unable to account for even simple cases of the sameness of words. By limiting themselves solely to the 'physical' properties of words—specifically their pronunciation and spelling—shape-theoretic nominalism can only hold that two words are the same word if they share the same spelling or pronunciation. That is, 'color' and 'colour' end up being distinct words, and variations in accents also mean that even speakers within the same community will not actually be saying the same words. 'color' and 'colour' are members of different collections as there is no collection that both of them are members of, as there are no properties *except* phonetic and orthographic properties around which such collections or classes could be built.

It is plausible that any nominalism committed to the shape- or form-theoretic view of words must be wrong. However, this should not mean that we immediately give up on nominalism. Nominalism does not require a commitment to shape-theoreticism. Rather, shape-theoretic nominalism is just one of the possible versions of nominalism, and other versions will be more flexible in terms of what members of a (nominalistic) type or kind all resemble with respect to.

For example, take Bromberger's (1989) view that words are 'archetypes'. Bromberger argues for a view of words that is intended to be able to maintain type-talk, but without accepting the existence of abstract entities.

For Bromberger, tokens are members of quasi-natural kinds, and types are archetypes (or models) of those kinds. As Wetzel puts it, types are

defined as something that models all the tokens of a kind with respect to projectable questions but not something that admits of answers to individuating questions. Thus, for Bromberger the type is not the kind itself, but models all the tokens of the kind. (Wetzel 2006)

Importantly, this view is still nominalist. Types are models which are "object[s] so designed that, by finding the answers to some questions about it, a competent user can figure out the answer to questions about something else" (Bromberger 1989, 62). Models allow us to discover information about the entities that they are models of due to a resemblance relation between the model and the entity it models. Thus, to talk of the word 'table' is not to talk about the kind 'TABLE'. Rather this talk is about a model that can be used to understand certain tokens.

Furthermore, for Bromberger, "no pair of objects stands (or fails to stand) in the model/modelled relation absolutely, but only relative to specific sets of questions, pairings of questions, and algorithms" (Bromberger 1989, 63). This further establishes the nominalist nature of Bromberger's proposal as the types—or models—are not absolute, and will change relative to time and our particular interests. This means that the model which we label 'table' could be different depending on the relevant projectable questions, and may change over time if we begin to use tokens of 'table' in new ways that are inconsistent with the current model. With such models in place, Bromberger states that "speaker-writer mind-brains endowed with grammars and lexicons leave no need for abstracta" (2011, 496), in line with the nominalist denial of such entities.

For clarity, it is important to stress how nuanced Bromberger's nominalism is compared to that which might arise from a commitment to shape-theoreticism. Under Bromberger's account, the model may model tokens in a variety of ways, in no way limited to the phonetic or orthographic properties of the token. A model may, for instance, be a model of the semantic properties instantiated by a certain set of particular tokens. However, despite the complexity of Bromberger's view, there is a problem. The problem is that any proposed archetype or model will fail to serve as an archetype or model for all of the tokens that we intuitively would want it to model. This is because some tokens will fail to have the projectable properties that the models have. We have already seen this issue in discussing type-realist accounts above, and it carries over to Bromberger's view too.

This has led some to argue that these more complex forms of nominalism carry an implicit commitment to some genuine type-level entity (see Wetzel 2000). The suggestion is that whilst the nominalist claims that all we need to posit is tokens that resemble, we ultimately need to know what it is that those tokens resemble. It cannot be that a token is the archetype as we would not be able to specify *which* token is to be the archetype, and some intuitively genuine tokens will be found that fail to resemble that archetype. Thus, the objection runs, we must in fact posit a genuine type-level entity as the entity that the tokens resemble. If this objection is right, then it seems that resemblance between tokens is not enough.

4. A Common Problem

Reflecting more on the arguments against realist and nominalist views highlights the core of the problem facing them all. The problem, as I see it, for each view is that they rely on the supposition that it is words qua *objects* that the relevant identity or resemblance relation holds between. That is, if we take, as Wetzel does, the issue to turn on whether a token instantiates a type, then we are positing as instantiation relation between a token — an object — and a type — another object. If, as Bromberger suggests, a type is a model, then we are positing some suitable resemblance relation between the token — an object — and the type-as-model — again, an object. What has been assumed is that we should take the type-token relation, however we understand it and irrespective of the nature of a type, to hold between *objects*, and hence that the problem of sameness of word is a problem about how one object relates to another.

This is, I think, the source of many of the problems we have seen that arise for solutions to the problem of the sameness of word. As we have seen, if we take the sameness of word to be a problem about objects, then once we recognise the variation that exists between those objects, then we have little to appeal to to explain sameness. For example, Wetzel's type-realism is forced to appeal to the property of 'being a token of a type', something that is, I've argued, not persuasive unless we are already antecedently committed to the existence of (abstract) types. We might try to complement these theories with some notion of non-exact resemblance between particular words (somewhat similar to the one that I will propose below), but this will not greatly aid our understanding. This is because even if we accept that tokens can non-exactly resemble, the problem of sameness of word for the type-realist is not a problem about why tokens are similar to each other, but one about how those tokens are tokens of the same type. And for Bromberger, the problem is again not about whether or not tokens are similar to each other, but whether they stand in the relevant modelmodelled relation to some archetype. In both cases, non-exact resemblance cannot solve the problem of sameness of word as for any type or archetype there will always be some other objects (tokens) that non-exactly resemble the type/archetype which, intuitively, we do not think are tokens of that type or modelled by that archetype.

Facing this problem, it is not surprising that, as noted above, some have appealed to mysterious or brute facts of the matter about which tokens are members of which type. If we are focused on the tokens as *objects* then there is no feature of those objects shared by all (and only) the objects that we would like to share them (or those objects we would like the archetype to model).

My suggestion is that our failure to date to solve the problem of sameness of word should encourage us to look for alternative sorts of answers. In particular, I suggest that we look for a solution that does not assume that the sameness of word turns on the nature of the word qua *object*, but rather takes it to be a question concerning the intrinsic nature of the *properties* possessed by words. Rather than trying to say what makes two objects the 'same', we should instead consider the (exact and non-exact) resemblance relations that hold between the *properties* that particular words instantiate. Drawing on some of my other work (Miller 2021a), I will argue that by shifting the resemblance relation from words qua objects to the properties of those words, we can provide a new (and in my view better) solution to the problem of the sameness of word.

5. Towards a New Sort of Solution

The new form of nominalism takes inspiration from so-called trope theories in the metaphysics of objects. I do not intend here to provide an exhaustive analysis of the ways in which trope theories could be spelt out. Rather, I only wish to introduce a familiar version of such theories, with particular emphasis on those parts that will be relevant once we turn back to considering words.

Trope theories hold that properties are tropes, where tropes are particular property instances. Tropes are numerically distinct, but may (exactly) resemble other trope properties in virtue of their intrinsic nature alone. This means that, for the trope theorist, what it means to say that two apples are exactly the same shade of red is to say that those apples have red tropes that (exactly) resemble each other. Note that these apples will only have exactly resembling tropes if they are qualitatively identical with respect to their redness. Tropes can also be non-exactly resembling, as would be the

case if the apples were different shades of red. In line with common views in the literature, I will also take tropes to resemble, exactly or non-exactly, in virtue of their intrinsic natures (see Maurin 2013). That is, what it is for two tropes to be exactly resembling redness tropes is for them to simply be the tropes that they are. Trope theories have often been combined with bundle theories. Objects are thus analysed as being collections or fusions of tropes. An apple is thus a bundle of various tropes, including, but not limited to, shape, colour, and weight tropes.⁴

Taking inspiration from such bundle and trope theories, I propose that word-instances can be analysed as being collections of trope properties. That is, a token of the word 'table' can be analysed as being a collection of phonetic, orthographic, semantic, syntactic, pragmatic, inferential, and other properties that we might want to attribute to words. This builds on the more general defence and outline of a bundle view of words I have provided elsewhere (Miller 2021a). There are, though, two key differences between that prior work, and the view defended in this paper. First, that prior work is not as thoroughgoing a version of nominalism as the view I will defend here as in that work I remained neutral between trope and universal bundle views of words, thereby allowing the possibility that we should adopt a theory on which words are bundles of universals. Here I explicitly adopt a trope bundle view and apply this view to the problem of sameness.

Second, again by allowing that words might be bundles of universals, the prior account may still explain the sameness of word by positing an identity relation. That is, if words are bundles of universals, it seems reasonable to hold that claims about the identity of two words are ways of speaking which express facts about particular words being partly composed of shared universals. To say that 'table' and 'table' are the same word is to say that they are partly composed of the same, strictly identical, multiply realisable universal property. Such an account would, in my view, be an improvement over type-realism as it does at least locate the relevant identity relations as holding between properties instantiated by the word and not by the word as an object. However, in what follows, I will argue that sameness of word is best explained by resemblance, not strict identity, and that this results in a more thoroughgoing version of nominalism about words.

⁴ There are various additional claims and debates surrounding the positing of tropes, and the connection of positing tropes with bundle theories. I will not rehearse them all here as my claims rely only on the basic idea within the metaphysics literature that objects are taken to be bundles of tropes, such that those tropes may due to their intrinsic nature exactly resemble each other (see Maurin 2013).

The easiest way to see how a trope bundle theory of words works is through some examples. It should be noted, though, that I will focus on certain properties that words are typically taken to have, but this is not intended to be exhaustive. If words have intentional, pragmatic or contextual properties, then those properties can also be accommodated within this ontology in different ways depending on how we understand the nature of those sorts of properties. With that noted, consider the following words (and sentences):

- 1) The cat is on the **table**.
- 2) The **table** is brown.

Under the proposed ontology, the properties that partly compose the highlighted word in (1) are numerically distinct from, but resemble those that compose the highlighted word in (2). The highlighted word in (1) can be analysed as being the collection of certain phonetic, orthographic, semantic tropes—let us call them P_1 , O_1 , and S_1 . Similarly, let us say the highlighted word in (2) is composed of the properties P_2 , O_2 , and S_2 .

In this case, several of those properties would seem to be exactly resembling properties. For example, O_1 and O_2 are exactly resembling in that both tokens are spelt the same way, are in the same font, colour, etc. The relata of this (exact) resemblance relation though is the *properties*, not the object. I argue that to say that the highlighted words in (1) and (2) resemble is to say that those objects are partly composed of (exactly) resembling, but numerically distinct, trope properties.

The ways in which particular instances can resemble (or not resemble) go beyond the spelling or pronunciation of those instances. In each case, I suggest a similar analysis. The highlighted word in (3) orthographically resembles the highlighted word in (4) but they are not semantically resembling:

- 3) Many animals live near the **bank**.
- 4) John went to deposit money at the **bank**.

Focusing purely on orthographic and semantic properties, we can thus analyse this case such that the word in (3) is composed of tropes $\{O_3, S_3\}$ and the word in (4) is composed of tropes $\{O_4, S_4\}$, where O_3 and O_4 are orthographic tropes, and S_3 and S_4 are semantic tropes. The observable resemblance between the words in (3) and (4) thus comes about because O_3 and O_4 are numerically distinct but exactly resembling tropes, whilst S_3 and S_4 are non-resembling.

Or, in (5) and (6) the words resemble semantically, but differ orthographically:

- 5) Anna likes the **color** green.
- 6) Mary's favorite **colour** is blue.

The words in (3) and (4) resemble in ways that (5) and (6) do not, and vice versa. If the word in (5) is analysed as being a bundle of tropes $\{O_5, S_5\}$ and the word in (6) is analysed as being a bundle of tropes $\{O_6, S_6\}$, then in this case, S_5 and S_6 are numerically distinct but exactly resembling tropes, whilst O_5 and O_6 are non-exactly resembling.

Perhaps the words in (5) and (6) are composed of more exactly resembling tropes than the words in (3) and (4), explaining our intuition that the words in (3) and (4) are not the same, but those in (5) and (6) are. In each case, though, it is the *properties*, not the object, that resemble, and, as properties are tropes, they resemble in virtue of their intrinsic nature.

Under this account, two particular words can resemble (or not) in virtue of any property that partly composes them. Synonyms, for instance, are explained as cases where the tokens do not resemble in virtue of their orthographic properties but do (exactly) resemble in virtue of their semantic properties. Homophones are cases where two tokens resemble phonetically, but do not resemble semantically.

We can also explain how particular words can resemble grammatically. The highlighted words in (7) and (8) resemble each other grammatically, whilst those in (7) and (9) do not (even though those in (7) and (9) do resemble in other ways):

- 7) Sophie walked down the street.
- 8) Mark **kicked** the stone.
- 9) Leo went for a walk.

The above cases have focused on cases where there is exact resemblance, however, within trope theories, resemblance comes in degrees. For example, it is intuitive that (10) and (11) partially resemble each other orthographically and, at least in some accents, phonetically:

- 10) Bat
- 11) Bag

(10) and (11) are not composed of *exactly* resembling tropes, but we need to explain the intuitive sense in which they do still resemble. Under the

proposed ontology, we can explain this as we can hold that the orthographic and phonetic properties that partly compose (10) and (11) are non-exactly resembling tropes. Particular words thus may exactly resemble in virtue of some properties, non-exactly resemble in virtue of other properties, and not resemble at all in virtue of other properties.

A possible case of this might be differences across dialects where speakers have seemingly distinct terms that strictly refer to the same class of objects, and the terms behave in grammatically similar ways within each of their dialects. In such cases, it could be that the terms exactly resemble semantically, non-exactly resemble grammatically (perhaps because these are dialects of the same language), but are strongly non-resembling phonetically and orthographically. This is not to propose this as the only way to analyse such cases. Rather, this is only a suggestion of possible ways in which words might resemble and not resemble in a variety of different ways.

All of this is familiar to those that have studied traditional trope bundle theories. Under such views, it is common to hold that two objects may be partly composed of some exactly resembling properties, and other non-exactly resembling and non-resembling properties. In this regard, I am not proposing anything new or revolutionary. What I am doing is applying that ontology to provide a new way to think about words. Words have been assumed to be things that *have* properties. The proposed ontology holds instead that words are collections of properties, taken to be tropes, and this allows us to explain various claims we typically make about the resemblance or non-resemblance of words.

6. Bundle Theory of Words and Sameness of Word

Thus far, I have only sketched an ontological framework for words. What about the problem of sameness of words? Unsurprisingly, I propose that when we talk about two tokens being tokens of the same type, we are not ontologically committing ourselves to the existence of some abstract type. Rather, such talk only intends to pick out some collection or class of tokens that exactly or non-exactly resemble in virtue of a certain relevant property (or properties).

To use the examples above again, this means that when we say that the highlighted words in (1) and (2) are the 'same', what we are doing is saying that they are both members of a collection such that all members of that collection have certain exactly resembling semantic and orthographic properties. We do not say that the words in (3) and (4) are the same,

because even though both are members of a collection such that members of that collection exactly resemble orthographically, they are not members of a collection whose members resemble semantically. It is the latter collection that we (tend to) think of as explanatorily important, and we can easily accommodate such cases of homographs (and the parallel cases of homophones).

What of synonyms? True synonyms, assuming that there are any, will be cases where the word instances are exactly resembling semantically, but do not exactly resemble phonetically and orthographically. Near synonyms will be cases where the instances non-exactly resemble semantically. Consequently, under this view, true synonyms are, in one sense, the 'same' word. However, rather than thinking this is a problem for the view, I suggest that it is a benefit as it means that this view has a built-in explanation as to why synonyms are synonyms. True synonyms are true synonyms because they are tokens that share (are partly composed of) exactly resembling semantic properties.

In line with other nominalist views, any group of tokens could form a collection. The tokens 'dog' and 'cat' could be a collection. All of the words in this paper could form a collection. However, I argue that what property is the relevant property to consider when we are constructing such collections depends on the explanatory purpose that we have at that time. That is, I accept there are a multitude of collections, but only some of them are relevant or important to us. Typically, in ordinary cases, we construct collections by focusing on semantic, phonetic, or orthographic properties. We happily state that the highlighted words in (7) and (9) are the 'same' as we recognise that they share resembling semantic properties because that is normally what we care about when we talk about whether words are the same. In other more technical or unusual cases, we might focus on other properties that partly compose words, and whether those tropes are (exactly) resembling.

Some other strange cases are possible depending on our other (philosophical and linguistic) commitments. For example, if we are committed to a Millian view of names, then we might conclude that the instances 'Superman' and 'Clark Kent' form a collection such that the instances within it are partly composed of exactly resembling semantic properties. This would make them, in this sense at least, the 'same' word as there is collection of the instances that exactly resemble with respect to that semantic property. Strange or unusual cases like this might seem like

⁵ For defences of Millian views of names, see inter alia, Marcus (1961), Kripke (1979, 1980), Salmon (1986), and Soames (2002).

a problem for the ontology—after all, what ordinary speaker would think that 'Superman' and 'Clark Kent' are the same word?

However, if a Millian view of names is correct, this conclusion should actually be unsurprising. If it is correct, then it is just true that the instances 'Superman' and 'Clark Kent' have exactly resembling semantic properties, and (presumably) someone committed to this view would argue that changing any instance of 'Superman' to 'Clark Kent' would not change the (literal) semantics of any sentence in which the instance of 'Superman' appears (and will have solutions to the possible counterexamples to this).

I am not committed to any theory of meaning here, so I cannot say if this case is a genuine a case of exact resemblance of semantic properties. My point is that I do not think this is the counterexample many may intuitively think it is. That ordinary speakers do not generally think that 'Superman' and 'Clark Kent' have exactly resembling semantic properties is something to be explained by our best semantic theories, not by our ontology of words. There is no commitment from any ontology of words that the intuitions of ordinary speakers should align with all of the findings and consequences of the ontology.⁶

More broadly, as Wetzel (2009) argues, ordinary cases cover up the variety of cases where particular tokens are bound together only by family resemblances. Many ontologies of words could embrace the notion of family resemblance. We might be type-realists and hold that there is only a family resemblance relation holding between tokens of the type. However, if this is done, it is unclear what theoretical role the type itself plays within a theory. If the type-realist posits only resemblance relations between tokens of the same type, then what explanatory role remains for the type to fulfil? The ontology defended here can instead accommodate resemblances arising from ordinary use and those arising from other philosophical commitments without any additional ontological posits. To recognise family resemblances between particular words is not a hint as to whether the tokens are tokens of the same abstract type, but rather just

⁶ And, again if the Millian view is right, then we would be able to analyse namesakes differently. 'Steve McQueen' is an instance that, by stipulation is partly composed of the semantic property 'refers to Steve McQueen_{ACTOR}', while the distinct instance 'Steve McQueen' is an instance that is by stipulation partly composed of the semantic property 'refers to Steve McQueen_{DIRECTOR}'. These instances exactly resemble in virtue of their orthographic/phonetic properties, but do not resemble in virtue of their semantic properties. Thus, namesakes are the same word in the sense of there being a collection of the instances that exactly resemble with respect to that orthographic/phonetic property. But namesakes are not the same word in the sense that they are not members of the collection whose members are all partly composed of the same semantic property. Again, this is not to support such a semantic theory. Instead, it is just to illustrate how one might analyse such cases *if* we were to accept the Millian view of names. If we reject Millianism, then the precise details of any analysis of these sorts of cases would vary depending on the alternative preferred semantic theory.

involves the recognition that those particular words share some exactly or non-exactly resembling properties.⁷

It also should be stressed that this does not mean that 'anything goes'. It is perfectly possible for the nominalist to hold that some collections of tokens are more natural than others, or that some are more important than others are. For example, the nominalist can hold that semantic resemblance, in many circumstances, is thought to be more important by ordinary speakers than phonetic resemblance. Speakers generally do not mind small differences in phonetic properties so long as the semantic properties are the (exactly) resembling. In other circumstances, orthographic resemblance might be deemed more important than semantic resemblance. For example, when teaching someone how to spell, the orthographic properties are intuitively the most important as we are aiming for the person to learn how to create particular words that are partly composed of orthographic properties that exactly resemble the orthographic properties that partly compose other relevant particulars.

These variations over what ordinary speakers accept as relevant similarities and differences with respect to their communicative aims will also help the nominalist to account for the conventional and historical nature of words. Type-theorists suggest that speakers see the acceptable use of a token as derivative of its being a token of a given word, and take the historical properties of words (e.g. their changing their meaning over time) as requiring the positing of types. Types, it is suggested, can explain why words remain relatively stable despite the changing ways in which tokens of the type might be used by speakers.

The trope-nominalist, though, can explain this as reflecting that if linguistic and social conventions govern what certain words refer to and when they can be acceptably used, then ensuring that any new token we produce fit those conventions will be important to speakers. The interesting history of certain words changing their meanings or coming to be spelt in new ways is, for the nominalist, not a property of some type. Instead, to recognise the history of words is to recognise the changing importance of certain collections for ordinary speakers over time, and the relative importance of (exact and/or non-exact) resemblance relations between different properties. For example, prior to the invention of the printing press and standardised spelling, orthographic resemblance was less important than it

⁷ Admittedly the argument being used here could be reversed. Those that antecedently prefer to posit types over tropes might view the theory proposed here to be ontologically costly. However, as noted

earlier in this paper, it is unclear that types can satisfactorily solve the problem of sameness of word. This, in my view, makes exploring whether trope-based ontologies can provide a (better) solution worthwhile.

is today.

Depending on our further commitments concerning conventionalism about kinds, the nominalist can also think that these resemblance classes of tokens do not exist independently of our ways of speaking about them, or think that they do, or that some kinds are conventional but others are not (see Miller 2021b). For example, the nominalist may think that phonetic resemblance is non-conventional, but that semantic resemblance is conventional. In each case, we can explain and accommodate both ordinary and technical talk about words being the 'same' by positing only the properties that partly compose the words, a relation of (exact) resemblance, and our ability to group entities into collections based on that resemblance. Thus, the nominalist, or at least one that adopts the proposed trope-bundle theory of words, can provide a solution to the problem of sameness of words that is at least as powerful as its competitors' solutions, and more attractive given parsimony considerations (due to not positing types).

We can also see that the proposed ontology allows us to avoid the general problem raised above against the nominalist. That problem was that the nominalist implicitly appeals to some genuine type-level entity in order to explain what it is that all tokens resemble. However, by holding that resemblance holds between *properties*, not objects, we need no such type-level entity. The resemblance between tropes is explained by the intrinsic nature of those tropes, and requires no further ontological posit. If orthographic tropes O_1 and O_2 resemble, this is due to nothing more than the intrinsic nature of those tropes.

7. Conclusion

I have sketched an ontology of words that is thoroughgoing in its nominalism in that it posits no type-level entities, and yet can explain our intuitions about the sameness of words. Admittedly, this ontology explains these cases through an appeal to resemblance, and not to identity. However, that this is the case is unsurprising given that it is designed to be a nominalist account. To object that this is really only to explain *resemblance* and not identity would be to beg the question against the nominalist who, in general at least, will want to deny that any two particular words are, strictly speaking, *identical*.

I hope that this paper at the least serves to show that nominalism is not as dead as it is normally taken to be in the ontology of words. Some readers may still think that the view ends up with much more messy and unnatural renderings of some of our ordinary talk about words. I would not argue

with those readers in some cases. The nominalism I have sketched will require some alternative readings of our ordinary talk in cases where the type-realist can provide a more straightforward account. However, there are also phenomena where I think the nominalist provides a better and simpler explanation. Which theory we accept may, because of this, to some degree comes down to our differing tastes over simplicity of accounting for ordinary talk versus an aversion to additional ontological posits. I at least suggest that there is room for the latter to be the main motivation for some of us working in the metaphysics of words.

There are still many unanswered questions both for this ontology and its competitors. For example, I have not considered what adopting this trope bundle ontology means for other linguistic entities. If the ontology is plausible for words, we might think that we should extend it to letters, phonemes and morphemes. Perhaps we should, perhaps we shouldn't. Pending some argument that all linguistic entities must be ontologically similar, there is no requirement to extend the view to these other sorts of entities. That is, it could be that just words are bundles of tropes, whilst there really are abstract letter-types (though I am sceptical of this sort of mixed ontology myself).

The aim of this paper though was limited to discussing the problem of the sameness of words, taken to be a puzzle about how to account for our strong intuition that in some sense the 'same' word can be thought, uttered, or inscribed in different ways, places, and contexts, with different spellings, pronunciations, meanings and grammatical properties and yet still be the same word. I have argued that we should reconsider the benefits of nominalism as able to provide a solution to this problem. In particular, I have argued that a trope-bundle nominalist view of words can accommodate a variety of intuitions that we have about sameness of words, with respect to the semantic, orthographic, phonetic, and inferential properties of those words without the need to posit genuinely existing abstract word-types. Detailing other aspects of this new nominalist ontology of words needs more work than can be done in a single article, but this paper shows that there are significant benefits to the view when it comes to solving the problem of sameness of word.

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