How to Misspell 'Paris'

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Abstract: One feature of language is that we are able to make mistakes in our use of language. Amongst other sorts of mistakes, we can misspeak, misspell, missign, or misunderstand. Given this, it seems that our metaphysics of words should be flexible enough to accommodate such mistakes. It has been argued that a nominalist account of words cannot accommodate the phenomenon of misspelling. I sketch a nominalist trope-bundle view of words that can.

"Because my spelling is Wobbly. It's good spelling but it Wobbles, and the letters get in the wrong places." A.A. Milne, *Winnie-the-Pooh*

I

Within the metaphysics of words literature, most have defended some version of type-realism, wherein particular words, such as those instanced in this paper, are tokens of (abstract) types. These types are genuinely existing entities, distinct from token words.[1] One of the common reasons to posit types is to provide a way to be able to accommodate the phenomenon of misspelling (and other non-mistaken variations in spelling or pronunciation). That is, type-realists hold that types must exist (in part) because we recognize misspelt instances as (deviant) tokens of a type, and to be able to accommodate other variations such as our intuition that 'color' and 'colour' are instances of the same word despite their difference in spelling. These instances are the same word in virtue of being tokens of the same type. Similar considerations motivate types with respect to pronunciation too. 'vase' has very different

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[1] See, inter alia, Wetzel (2009), Katz (1981), Hawthorne and Lepore (2011).

pronunciations in US and UK English despite instances expressed either side of the Atlantic being instances of the same word.[2]

Wetzel (2000: 364; 2009), though, goes beyond saying that these are phenomena that type-realism can explain, arguing that misspelling *cannot* be explained by nominalists about words who reject the need to posit types. Nominalists reject the existence of 'universal' or 'type-level' entities, positing only instances (or particulars) instead.[3]

Wetzel argues that, for nominalists, any type-talk should be paraphrased into talk of sets of particular words.[4] For example, to say that the word 'table' is spelt 't-a-b-l-e', is to say that all members of some set, that we can call 'table', are spelt 't-a-b-l-e'. Given this, according to Wetzel, the nominalist therefore holds that (1) can be rephrased as (2):

1) 'Paris' consists of five letters.

2) Every 'Paris'-inscription consists of five letter-inscriptions.

And if (2) is a paraphrase of (1), then (1) should (at least) entail (2). However, Wetzel argues that this leads to a problem for the nominalist. This is because the term 'Paris' in (1) can only be understood as picking out a set that contains instances composed of the same arrangement of letters, but there are, intuitively, instances, such as 'Pariess', that are an instance of the word-type 'Paris', despite not being spelt 'P-a-r-i-s'. Hence, the nominalist is wrongly committed to the entailment relation between (1) and (2), and cannot explain misspellings. The same argument would also mean that the nominalist cannot explain alternative spellings. That is, 'Pariess' may not be a misspelling, but just an alternative way to spell Paris, and Wetzel argues that this too cannot be accommodated by the nominalist.

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[2] This variation in how tokens of the same type are spelt and pronounced explains why types cannot be individuated by their spellings or pronunciation, though how we should individuate word-types instead is an open and much debated topic; see Miller (2020b).

[3] I use 'particular' and 'instance' interchangeably here.

[4] Of course, such 'set' talk should not be taken to be ontologically committing within nominalist views, and we should take 'set' as the nominalistically acceptable translation of the type-realist notion of a 'type'. Later, I will use the term 'collection' instead of 'set' in order to avoid any appearance of positing sets as distinct entities.

Putting this more generally, what Wetzel is arguing is that if the nominalist about words thinks that there are no types then since we seem to talk about word-types all the time, the nominalist must analyse such talk away. The existence of accepted alternative spellings (and of misspellings) means that (2) is not, for Wetzel, an adequate paraphrase of (1), therefore nominalism about words fails.[5]

The objection is certainly troubling for some forms of nominalism, such as 'shape-theoretic nominalism' which is normally attributed to Goodman and Quine (1947), and Bloomfield (1936). For them, words can only be individuated by their spelling or pronunciation, and the possible sets of instances are only those sets whose members share the same spelling or pronunciation. Put another way, sets of instances can only be determined by the orthographic or phonetic properties of the instances that are members of the set. This clearly restricts what we want to say about language, leading to the struggle for this sort of nominalist to explain the phenomena of misspelling.[6]

For this reason and more (see also Kaplan 2000, 2011; Hawthorne and Lepore 2011; Miller 2020a), the shape-theoretic view is deeply problematic, and I will not try to defend it here. Rather my aim in this paper is to sketch an alternative form of nominalism that can adequately account for misspellings and other cases of alternative spellings. I argue that this view can not only account for misspellings, but does so in a way that explains the mistakes in language use made by speakers in an intuitive way.

The nominalist view that I will outline builds upon previous defence of a bundle theory of words (Miller 2021). In that work, I argue that a token of the word 'table' can be identified with a bundle of phonetic, orthographic, semantic, syntactic, pragmatic, inferential, and other properties that we might want to attribute to words.[7] However, I did not take a position on whether the properties that compose words

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[5] Note that it is important for Wetzel's argument that 'Paris' in (1) is referring to a type (if we are type-realists) or a set or class (if we are nominalists). This is needed as if 'Paris' in (1) was merely a token or instance, then (1) would be trivially true for all views. Rather, (1) only seems to be paraphrasable as (2) if we take 'Paris' in (1) to be referring to a type or set.

[6] Note that I will use 'orthographic property' and 'spelling' as synonymous in this paper as orthographic property relates to the shape of a (written) instance of a word, and a particular word's 'shape' (in the sense of ink pattern) determines its spelling.

[7] This is only an indicative, strictly non-exhaustive, list of the sorts of properties words have. Maybe some (or even all) instances do not have some or all of these properties, or have some not on this list. For example, it might

are universals or tropes. Given this, it was not clear how 'nominalist' my view was. Prima facie, of these two possibilities, only one could be thought to be nominalist in the sense of that term being used in this paper – i.e., views that do not posit universal entities. Positing universal properties would allow us to explain misspelling, but it would not be a *nominalist* account. As I am interested in nominalist views, I will therefore focus on exploring whether a *trope*-bundle view of words can accommodate misspelling and avoid Wetzel's objection.[8] Before we can do that, though, we need to outline the specifics of a *trope*-bundle view of words.

II

Naturally, the trope-bundle view of words holds that properties are tropes. Therefore, following Maurin (2018), we can hold that:

> Tropes are things like the particular shape, weight, and texture of an individual object.
> Because tropes are particular, for two objects to 'share' a property (for them both to
> exemplify, say, a particular shade of green) is for each to contain (instantiate,
> exemplify) a greenness-trope, where those greenness-tropes, although numerically
> distinct, nevertheless exactly resemble each other.

Applying this to words, the relevant tropes are particular spelling, meaning, pronunciation, and grammatical properties.

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be that physical tokens like those on this page do not (strictly speaking) have semantic properties as these are rather had by our internal representations of the ink patterns on the page (or, as I'd prefer to say, our internal word-tokens). For more on this see Collins (2023) and Miller (Ms.). I also intend here to be neutral about what the right semantic theory is. Nothing in this paper depends on any particular semantic theory, nor on the claim that externalized word tokens have semantic properties. If readers have a preferred semantic theory, or think that only mental word-tokens can have semantic properties, then the discussion can be adjusted to capture those views.

[8] Throughout I will draw upon various nominalist bundle theories already outlined in the wider metaphysics literature. Given space limits, and in order to focus solely on words, I will not respond to objections to the underlying metaphysics in this paper, and will simply assume that trope-bundle theories are a live ontological option. For more on bundle theories, including some objections, see Casullo (1988), Curtis (2014), Ehring (2001), Gyekye (1973), O'Leary-Hawthorne (1995), O'Leary-Hawthorne & Cover (1998), Lafrance (2015), Losonsky (1987), Paul (2002, 2012, 2017), Simons (1994), Van Cleve (1985), Williams (1953).

The view also holds that objects are bundles of tropes. Therefore, each instance of a word can be identified with a bundle of property-tropes (e.g., phonetic, orthographic, semantic, syntactic, pragmatic, and inferential property-tropes). To say that a particular word qua object possesses or instantiates a property is to say that that instance is partly composed of that property. For example, the instance 'bottle' can be taken to be partly composed of the orthographic trope property 'being spelt 'b-o-t-t-l-e'', the semantic trope property 'container for liquid', and so on.[9]

In line with other theories that take properties to be tropes, although tropes are particulars and hence are numerically distinct, tropes may exactly resemble each other. We can use this exact resemblance to explain what it means to say that two objects 'share' a property: for two objects to share a property is for both objects to instantiate (or be partly composed of) numerically distinct but exactly resembling tropes.

Applying this to words, the bundle view of words holds that for two words to 'share' phonetic, orthographic, semantic, syntactic, etc., properties is for those words to instantiate (or be partly composed of) numerically distinct but exactly resembling phonetic, orthographic, semantic, syntactic, etc., tropes. Two instances 'bank' (financial institution) and 'bank' (riverside) thus might exactly be partly composed of exactly resembling orthographic and phonetic tropes, but be composed of non-exactly resembling semantic tropes. I assume here, in line with many other trope theorists (see Maurin 2018), that resemblance is an equivalence relation, and is an internal relation. Given this, the existence of the tropes is sufficient for the existence of the resemblance relation. Non-exact resemblance may also be posited and will be used to analyse some cases later in this paper.

Some may object to positing exact resemblance relations as being mysterious, especially as they will play an important role in later in this paper. There are a couple of responses that I would give to this concern, neither of which will be knockdown responses, but I hope will ease concerns about the possible

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[9] For ease of exposition, I will talk of 'instantiating' and 'partly composing' interchangeably. There is an ongoing debate amongst bundle theorists as to how to analyse in more detail the instantiation relation within a one-category ontology, including some that reject the 'composition' phrasing that I have used here. However, nothing in this paper turns on those more fine-grained details within the metaphysics of objects.

mysterious nature of exact resemblance relations. First, exact resemblance relations are common within broader trope ontologies and metaphysics. To reject them here as mysterious would force us to also reject a well-defended and supported set of ontological views that also invoke tropes and exact resemblance relations. I would also suggest that invoking exact resemblance relations is, at least to myself and other trope theorists, no more mysterious (and likely less mysterious) than the unperceivable instantiation relation that type-realists posit between a word type and its tokens.[10]

Second, the exact resemblance relations that I am positing are relations that hold between *properties*, not between objects, and specifically properties that token words possess or instantiate. This is important to stress as type-realist views of words will also posit token words and, presumably, will also think that those token words have certain properties. Now, the type-realist may be inclined, given they are already committed to abstract word types, to hold that the properties of token words are instances of certain property types (or universals). But even if this is the case, it is common in the literature on the metaphysics of properties for those that posit universal properties to say that instances of a property universal resemble each other. And in so far that (at least I assume) the type-realists will want to hold that claims like 'The word tokens 'table' and 'table' resemble each other' is true, some notion of resemblance is going to be invoked by all in this debate. It is true that the nominalist will make more ontological use of these resemblance relations, but this difference is unsurprising given that these are competing metaphysical views about the nature of words. None of this will likely persuade someone fully committed to type-realism about words, but I hope it is enough to justify why although positing exact resemblance relations between tropes is a theoretical cost, it is not an unreasonable cost for the trope theorist to incur.

Next, following Simons, we can take types to be 'concrete collections of concrete individuals' (2013: 281-282), and replace talk of sets with talk of concrete collections of concrete individuals – or just 'collections' for ease of exposition. These collections have as their members particulars, and membership of a given collection is determined by the properties that partly compose the particular

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[10] For more on this see the discussion in Miller (2022).

objects. Those particulars are concrete in the sense that they are not 'abstract', and have spatiotemporal properties.

This means, in the case of words, we can hold that there are collections of particular words whose members resemble in virtue of any of the properties that partly compose the particular words, not only those collections whose members resemble in virtue of their phonetic and orthographic properties. Thus, collections can be such that their members instantiate exactly resembling semantic property, or instantiate exactly resembling syntactic property, and so on.

An example will help here. Consider two sentences: 'I am sat at the table.', and 'That is a nice table.'. Each contain a number of particular words, but I want to focus only on the last word in each sentence. Let us call the last particular word the first 'table'$_1$. It is distinct from the particular word that ends the second sentence, which we can call 'table'$_2$. Under this ontology, 'table'$_1$ is a bundle of tropes, and hence is partly composed of the trope 'being spelt 't-a-b-l-e'$_1$. 'table'$_2$ is also a bundle of tropes, and is partly composed of the exactly resembling trope 'being spelt 't-a-b-l-e'$_2$. These are distinct, but exactly resembling, tropes.

Now we can hold that there is a collection such that all of its members are the particular words that are partly composed of exactly resembling orthographic tropes – in this case, those particulars that are partly composed of the exactly resembling tropes 'being spelt 't-a-b-l-e'$_1$, and 'being spelt 't-a-b-l-e'$_2$. Let us call this collection 'table$_{ORTH}$'. The particular words 'table'$_1$, and 'table'$_2$, are therefore members of 'table$_{ORTH}$'. There of course could be any number of other particulars that are partly composed of other exactly resembling tropes also, and hence the membership of 'table$_{ORTH}$' will be far larger than just 'table'$_1$ and 'table'$_2$. 'table'$_3$ is also a member of the collection 'table$_{ORTH}$'.

We can also talk about other collections, such as 'table$_{SEM}$' – the collection of particulars who are partly composed of exactly resembling semantic tropes. Or 'table$_{PHON}$' – the collection of particulars that are partly composed of exactly resembling phonetic tropes. These are collections that are individuated relative to a single property that partly compose the particular words, but this need not always be the case. For example, we can talk about the collection whose members are partly composed of exactly resembling semantic *and* phonetic tropes, or exactly resembling orthographic *and* grammatical tropes,

etc. As I discuss below, some collections may also be individuated disjunctively – 'x' is a member of the collection if 'x' is partly composed of either trope a or b, where a and b are tropes that are of the same class (phonetic, orthographic, semantic, syntactic, etc.).[11]

Importantly, as this is a nominalist view, these collections are not additional existents. They are not abstract types or kinds. Rather, we build the collections ourselves, and all collections are metaphysically equal. It is not the case that any one collection is *metaphysically* prior to, or more 'real' than, another. Collections merely reflect the pre-existing resemblance relations holding between the tropes that partly compose particular words (qua bundles of tropes). As will be discussed below, some collections may be more important for our purposes as speakers/hearers than others. 'table$_{ORTH}$' may be useful in some cases, but other gerrymandered collections may never be useful for us to consider. For example, the disjunctive collection whose members are partly composed of either the property of 'beginning with the letter P', or 'being spoken in a Cornish accent' is just as real as the collection whose members all instantiate exactly resembling orthographic properties, but is likely not very useful in our theorizing about language.[12]

Of course, it might be the case that an instance does not have some property of a certain sort. We might think that a written instance has no phonetic properties, or that a spoken instance has no orthographic properties, or that inner speech has neither phonetic nor orthographic properties. Whether this is the case will depend on more fine-grained metaphysical analysis in each of these cases. But assuming there are cases like this, such instances will simply not be part of any phonetic, or orthographic, or phonetic and

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[11] Note that this means that collections are not defined extensionally. A collection is defined by its membership conditions, not by what its members are. This is why we can talk about collections that have no members (yet), and distinguish two collections that both lack any members (yet). Being able to talk about collections with no members is of course not to commit ourselves to the existence of uninstantiated words, as collections are not themselves 'entities'.

[12] This, again, mirrors claims in the metaphysics of ordinary objects. There nominalists may say that there are various collections, including, say, the collection whose members are either a table or an ear. This collection is clearly highly gerrymandered and not useful for our purposes. But, for the nominalist about kinds, it is just as real as other more commonly accepted kinds, just so long as the properties of 'being a table' and 'being an ear' are genuine properties.

orthographic determined collection respectively. For example, assuming that a written instance 'table' has no phonetic property, the instance will be part of a semantically determined collection, an orthographically determined collection, and perhaps other collections, but will *not* be part of any collection determined phonetically. This is not a problem for the view. There is no requirement that every instance is a member of a collection that is determined by every sort of property.[13]

III

We now have the ontological framework we need. Particular words are analysed as bundles of tropes. Particular words are also members of collections, where the membership of a given collection is determined by those particulars being partly composed of exactly resembling tropes.

Let us now return to Wetzel's objection to nominalism. As the nominalist wishes to avoid positing types, 'Paris' is not some word-type, but is a collection of instances. To assess Wetzel's objection, we need to determine which collection is being discussed, and which members comprise that collection. Depending on our answer, the truth value of (1) might change, and hence the acceptable nominalist paraphrase of (1) will change.

For shape-theoretic nominalists, the only collection that we could mean is the collection whose members resemble orthographically or phonetically. This is because for shape-theoretic nominalists, only these properties are relevant when determining whether some token is a member of some collection. This is what leads to Wetzel's objection that nominalists are committed to (1) being paraphrasable as (2), and hence, wrong as (2) is false. However, under trope-bundle view, there are many possible candidate collections for 'Paris' – far more than is possible within the confines of shape-theoretic nominalism. It is this that allows the trope-bundle nominalist to respond to Wetzel's argument.

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[13] Perhaps every instance must be part of some collection in order to genuinely count as an instance of a word. But this will depend on what sorts of properties we think an instance must have to count as a word. The most natural claim is that an instance must have semantic properties to be a word, but nonsense words might be a counterexample if we hold (as some do) that nonsense words lack semantic properties. It is not clear what the correct answer is, and I will not try to provide a solution to this issue here, though I talk more about this in Miller (Ms.).

My argument will be that whether (1) entails (2) depends on what members comprise the collection 'Paris'. For some possible collections, (1) will entail (2). But for other possible collections, (1) will not entail (2), and this will provide a way for the nominalist to account for misspelling. To reach this conclusion, we need to consider those different possible collections, and what changing the collection means for the relation between (1) and (2).

As misspelling concerns the orthographic properties of words – spelling is about patterns of letters, not about meaning or pronunciation – the most obvious collection of particulars to consider is that which is determined orthographically. That is, we could take 'Paris' in (1) to be the collection whose members possess the orthographic property of 'being spelt 'P-a-r-i-s'. This collection, call it 'Paris$_{ORTH}$', would then have as its members all instances that instantiate exactly resembling orthographic tropes of 'being spelt 'P-a-r-i-s'. If 'Paris' in (1) is the same collection (has the same members) as 'Paris$_{ORTH}$', then (1) *does* entail (2), and the particular 'Pariess' would not be a member of the collection. The instance 'Pariess' does not instantiate a resembling orthographic trope to other members of the collection, and thus the instance 'Pariess' is not a member of the collection 'Paris$_{ORTH}$'.

Putting this more carefully, if we were to hold that 'Paris' in (1) has the same members as 'Paris$_{ORTH}$' then we get (1*) and (2*):

    1*) 'Paris$_{ORTH}$' consists of five letters.

    2*) Every 'Paris$_{ORTH}$'-inscription consists of five letter-inscriptions.

But (2*) is a perfectly acceptable paraphrase of (1*) for the nominalist about words, and, within the nominalist ontology, both are true. So understood, the instance 'Pariess' does not raise problems as it simply is not a member of the orthographically determined collection 'Paris$_{ORTH}$'.

This, however, cannot be enough. Though it solves the puzzle about paraphrasing, it leaves open the issue that intuitively 'Pariess' *is* a misspelling (or an alternative spelling) of the word 'Paris'. What is also needed is that we can see that there is some connection between the instance 'Pariess' and another instance, 'Paris'. To account for this, we need to consider the other collections of members that might be taken to comprise 'Paris' in (1).

'Paris' could be comprised of the collection whose members resemble semantically. 'Pariess', as the instance is introduced by Wetzel, is certainly a member of the semantically determined collection 'Paris$_{SEM}$'. That is, the trope-bundle theorist can hold that the instances 'Pariess' and 'Paris' are partly composed of an exactly resembling semantic tropes. 'Pariess' is also plausibly a member of the phonetically determined collection 'Paris$_{PHON}$', whose members resemble each other relative to their phonetic properties. 'Pariess' is likely to also be a member of the inferentially determined collection 'Paris$_{INF}$' (assuming words have inferential properties), and the pragmatically determined collection 'Paris$_{PRAG}$' (assuming words have pragmatic properties distinct from their semantic properties).

The trope-bundle nominalist could take the collection 'Paris' to be any of these collections, and, importantly, within the trope-bundle nominalist view, all of these collections can be posited simultaneously, without additional ontological cost. Furthermore, there is nothing that requires these collections have the same members. Indeed, 'Pariess' is a member of 'Paris$_{SEM}$', but is not a member of 'Paris$_{ORTH}$'.

What does this mean for understanding what happens when there is a misspelling? I suggest that a misspelling, such as that of me writing 'Pariess', is a case wherein I have failed to express an instance that is a member of the orthographically determined collection 'Paris$_{ORTH}$', but have succeeded in expressing an instance that is a member of some other collection, such as 'Paris$_{SEM}$', or 'Paris$_{PRAG}$'. Failing to express an instance that is a member of the relevant orthographically determined collection is not enough for something to count as a case of misspelling. What is also needed is that the instance is a member of another collection determined by its members instantiating (or being partly composed of) resembling semantic, phonetic, inferential, or pragmatic properties.

This means that whether some instance counts as a misspelling depends on what collection(s) the token is a member of. We misspell a word by producing (or expressing) a particular that is not a member of the collection whose members (exactly) resemble orthographically, but is a member of some other relevant collection. In most cases, the relevant collection will likely be the semantically determined collection - a misspelt instance fails to be a member of the orthographically determined collection, but is a member of the semantically determined collection. But this need not always be the case, and that

we typically take it to be so is more due to facts about what collections are recognized and thought important by the relevant community of speakers than about the underlying metaphysics of words.

This restriction rules out any random string of letters as being a misspelling of Paris as it ensures that the misspelt word must be a member of some other collection. It also explains why misspelt words still have a close connection to non-misspelt instances of the word. That is, we have a principled reason as to why 'Pariess' is (highly likely to be) interpreted by readers as a misspelling of 'Paris', but 'table' will not be. Neither are members of the orthographically determined collection, but only 'Pariess' is a member of some other collection that is relevant to the community of speakers/readers.

There will be some boundary cases. Is 'Apris' a misspelling of 'Paris'? Written out of context, it is more likely to be thought of as a misspelling of 'April', but if it occurred in the sentence 'Apris is the capital of France', then readers will recognize that the instance 'Apris' is a member of the semantically determined collection 'Paris$_{SEM}$', and not a member of 'April$_{SEM}$'. Other boundary cases may be harder to adjudicate, and may involve inquiring as to the intentions of the person who expressed the instance.

For example, recognizing whether the token 'Pariess' is a misspelling *may* require us to know that I intended to write the token as 'Paris'. But it also may not. I wish to remain neutral in this paper about the relevance of intentions to whether something counts as a word or not. Some have argued that intentions are central, others have stressed the role of communities and conventions.[14] I am not defending the view that what counts a misspelling is determined by intentions of the speaker or by the community of speakers. The role of communities of speakers here is not to decide which collections are *metaphysically* important. The nominalist should, I think, hold that all collections, even those that seem strange, are metaphysically equal in status. The relevance of a community of speakers is only to highlight which collections we typically use in our explanations.

For the nominalist there are any number of collections that could be important. The token 'Pariess' is, for example, a member of the collection whose members all instantiate the property of starting with the letter 'P', and is a member of the collection whose members all instantiate the property of 'being

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[14] For a good discussion of views on the role of intentions in the metaphysics of semantic tokens, see O'Madagain (2014).

included in a philosophy paper'. These collections are just as 'real' for the nominalist as 'Paris$_{ORTH}$',
'Paris$_{SEM}$', or 'Paris$_{PRAG}$'. So long as the properties are genuine properties, there are collections whose
members (exactly) resemble relative to those properties. The difference between collections is that we
as speakers care about some collections, but rarely, if ever, care about others.

One consequence of this is that it makes whether some token is a misspelling dependent on which
collections we are considering. Whether we think of something as being a misspelling may change over
time, in line with which collections we, as a community of speakers or as individuals, care about as to
say that something is a misspelling requires us to recognize that the token fails to resemble some other
tokens orthographically, but does resemble those tokens in some other way that we think significant.
Different groups of speakers, and different individual speakers, will think important different collections
of particulars at different times. There may even be disputes about which collections are important.[15]

This variability, though, is not a problem. It is actually a positive consequence, for we see evidence that
misspelling is treated as variable by speakers in three sorts of cases. First, consider disputes between
different dialects of the same language. Is 'colour' a misspelling? This will depend on the
orthographically determined collection that you as the reader think important. Assuming that all readers
will grant that the instances 'color' and 'colour' are both member of the same semantically determined
collection, the question as to which is a misspelling will depend on whether we think the related
collection is 'color$_{ORTH}$' or 'colour$_{ORTH}$'.

The nominalist can also allow that the relevant collection is disjunctively determined. For example, in
the above case, my intuition is that *neither* 'color' or 'colour' are misspelt instances. This is because the
relevant collection for me is one that is such that instances are members of it if they instantiate an
orthographic (trope) property that exactly resembles either the trope 'being spelt 'c-o-l-o-r'' or 'being
spelt 'c-o-l-o-u-r''.

Second, the theory can explain cases where the orthographically relevant collection is not deemed
important at all. Many cases like this exist in the history of language use, especially prior to the adoption

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of standardized spellings of words. For example, take the fact that the spelling of William Shakespeare's name varied throughout his life, and that Shakespeare himself instanced many different variations. Under the nominalist account suggested here, this is because the orthographically determined collection was not important to language users at that time, including to Shakespeare himself. Upon the widespread adoption of more standardized spellings, instances that at one time would not have been thought to be misspellings come to be viewed as misspellings, leading to the (false) claim that Shakespeare did not know how to spell his own name (a claim used to support the theory that someone other than Shakespeare wrote those plays, poems, and sonnets; see Churchill 1958).

Thirdly, the variability in misspelling implied by the nominalist theory allows us to reconsider possible arguments about spelling that turn on different intuitions amongst speakers as to which orthographically determined collection should be accepted as the most important. Take a debate about whether the instances 'email' and 'e-mail' are misspellings. Whether or not to include a hyphen is a debated issue.[16] This is debated because neither of the two orthographically determined collections 'email$_{ORTH}$' and 'e-mail$_{ORTH}$' have gained widespread recognition within the community of speakers as being the most relevant.

IV

As a brief aside, let us continue to consider the variability in assessments of misspelling over time, and between and within communities of speakers. I suggest that not only can the trope nominalist account for this, but that this phenomenon presents some underappreciated prima facie difficulties for type-realist views. To be clear, my point here is not that type-realist views cannot explain changes in assessments of misspelling over time. Rather, it is to suggest that type-realism is not without its problems, and that type-realists end up appealing to similar mechanisms as the nominalist to account for these cases.

Beginning with Platonic views, if we follow Wetzel and Katz and think that word-types are eternal unchanging abstract entities, then what accounts for something to be misspelling at one time, but not

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[16] Marco Ticak, *How to Spell Email (or E-mail)*, https://www.grammarly.com/blog/spelling-e-mail-email/

another? What stops all tokens of a type that all English speakers have ever expressed from being misspelt? Clearly, changing assessments of misspelling are a problem for Platonist views such as these.

Of course, not all type-realists are Platonists. We now need to ask what individuates word-types. Views on this vary widely, but it is common that all type-realists (Platonic and non-Platonic) are explicit in ruling out that types should be individuated via their spellings. The reason for this is partly due to the fact that some words will not even have spellings, and because of the very variability we are discussing here.

But if word-types are not individuated by their spelling, why is it that 'Pariess' a misspelling and not 'Paris'? Is this a result of some property had by the type-level entity or is it explained by the properties of the tokens themselves? I argue that both responses are troublesome for the type-realist. It would appear to be difficult to maintain that a property of the type-level entity explains why 'Pariess' without denying the variability of misspelling over time. Perhaps in one hundred years time, 'Pariess' will not be the misspelling, and 'Paris' will be. On the other hand, if it is not explained by a property of the type-level entity, then the type-realist seems forced to appeal to patterns of usage of instances by speakers to explain misspelling, which therefore means that the type-level entity actually plays no role in explaining misspellings. And, if it plays no role in explaining misspellings, then it is unclear (at least when discussing misspellings) why we should posit any type-level entity at all.

Approaching this point another way, we can ask the type-realist whether Shakespeare repeatedly misspelt his own name. To answer yes goes against plausible principles of charity to native speakers of their own language. To say no suggests that accepted spellings can change. This then leaves two options. Either the type has changed its properties. Or the properties of the type-level entity were irrelevant to explaining cases of misspelling as what is relevant to trying to understand a particular word is a misspelling is a consideration of the properties of the instances only. Either way, whether Shakespeare misspelt his name would have nothing to do with the word-*type*, and would instead only depend on whether the instances he expressed were spelt in line with the accepted rules at the time. Types end up playing no explanatory role in explaining when misspellings occur, and, if only on ontological parsimony grounds, nominalism should be preferred.

V

As noted at the beginning of this paper, there are many more sorts of mistakes that we can make in language than just misspelling. The nominalist view outlined here is able to accommodate the variety of possible mistakes in similar ways to that of misspelling. In each case, the mistakes in language use arise due to individuals failing to express an instance that is a member of a collection individuated semantically, or phonetically, or inferentially, etc., or they arise when a hearer misidentifies the relevant collection. There are too many possible categories of language mistakes to run through them all here, but an analysis of a couple of cases will help illustrate how this framework can be extended and applied to other phenomena.

To misunderstand a word is to misidentify the relevant semantically determined collection that the expressed instance was a member of. If I misunderstand the instance 'bank', I have mistakenly thought that that instance was a member of the semantically determined collection whose members share the resembling semantic property that denotes a side of a river, when in fact the instance was a member of the semantically determined collection whose members share the resembling semantic property that denotes a financial institution.

To mispronounce a word is to express an instance that is not a member of a phonetically determined collection, but is a member of some other collection, such as a collection which is determined semantically or orthographically. For example. I have always struggled to pronounce 'epiphenomenalism', making giving certain lectures to students in the philosophy of mind somewhat difficult. Spoken instances of this word, ignoring accents for one moment, have an accepted phonetics within the community of English speakers. However, when I express an instance, because I struggle to pronounce it, I do not express an instance that shares the same phonetic properties – it is not a member of the phonetically determined collection 'epiphenomenalism$_{PHON}$'. From context, most of my students, though, are able to recognize that the instance I express is a member of the collection 'epiphenomenalism$_{SEM}$'. This is why it is correct to say that I have mispronounced the word. To mispronounce a word is to express an instance that fails to be a member of a phonetically determined collection, but that is recognized to be a member of some other collection by the community of speakers.

The case with mispronunciation does get a little more complex once we consider accents. That we accept different accented expressions of words as not being mispronunciations shows that we are less strict than in the case of misspellings about what we as a community of speakers accept as the criteria for some instance to be a member of the relevant phonetically determined collection.[17] 'table', expressed in my accent, and 'table' expressed in a New York accent can both be correctly pronounced as the community of English speakers accept that the relevant phonetically determined collection is disjunctive: instances that instantiate either the property 'phon$_1$' or 'phon$_2$' are members of the collection 'table$_{PHON}$'.

Of course, this may not always be the case. Some communities of speakers, perhaps in certain circumstances where pronunciation is viewed as critical, may restrict the phonetically acceptable members of a relevant collection as strictly as we tend to for spellings. It may also be different for other languages within their community of speakers. We also have extensive evidence of accepted pronunciation shifting over time. The nominalist account, as it relies only on collections of instances that speakers within a community think important, either explicitly or implicitly, can accommodate this. It may be the case that there are two instances, partly composed of exactly resembling phonetic properties, but expressed at different times, and yet one is thought to be a mispronunciation whilst the other is not. This is entirely consistent with the nominalist account, as which collections are thought to be important will depend on the community of speakers at a given time.

To stress, this does not commit us to the view that collections are purely conventional. Some may be, such as those that are determined by properties that are themselves conventional. If meaning is given by use, then perhaps it is best to think of semantic properties as being conventional, and hence a collection of instances whose members share resembling semantic properties will also be conventional. However, others, such as those determined by phonetic or orthographic properties may be objective as it is a matter of fact as to whether two instances possess *exactly* resembling phonetic or orthographic properties. This is consistent with holding that it is the interests of the speakers or community of speakers that determine whether we *care* about whether two instances are members of the same objectively determined

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[17] Or, again, we are now less strict since the invention of the printing press and the impact that had on standardising spelling. Prior to this, how to spell words, or even names, was far less strictly defined.

collection. Sometimes it will simply not matter if I misspell a word, but which collections we care about is distinct from whether an instance is a member of a given collection.

This also leaves entirely open the possibility that an individual (or all individuals) might not be very good at recognizing which are the relevant collections. Failures to individuate collections in the same way as other speakers could account for various further phenomena. My inability to suitably differentiate distinct words in a language that I do not speak may be explained through my inability to recognize adequately members of certain phonetically determined collections. Verbal disputes or talking past each other might, at first pass, be cases where we have not correctly identified the relevant semantically determined collection. Semantic change might, at first pass, be cases where the community of speakers come to care about a different semantically determined collection as the most important. I leave an exploration of other phenomena to further work – this is intended only to illustrate the potential of this account to explain a wide range of linguistic phenomena.

This, admittedly, has some consequences for an intuition that some might have about the nature of disagreements about things like misspelling. The intuition is that there is some objectively correct spelling. That there is some objective norm which tracks a fact of the matter. What is the status of this intuition on the proposed nominalist view?

There are a few comments to make on this. First, it is not so intuitive (to me at least) that there is some objectively correct spelling. While we often *talk* as if there is, this is not the same as there metaphysically being a 'correct' spelling. Consider, for example, the nature of words before the development of written language. Presumably there was no objective spelling at that time, thus it certainly cannot be the case that words *always* have a correct spelling. Furthermore, as has already been talked about, spellings are more standardized now than they were in the past. Does this mean that Shakespeare was simply wrong about how to spell his name on some occasions? I suggest it is better to think that this suggests that there is no objectively correct spelling in the sense implied by our initial intuition.[18]

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[18] The case for this conclusion is also strengthened when we look at other linguistic mistakes. Spellings are, metaphysically, no more significant than pronunciations, and yet we have much weaker intuitions about there being an objectively correct pronunciation of a word.

All that said, the view I propose can accommodate that there is an objective disagreement even without types and that on some occasions we care about such objective criteria. Such occasions happen when it is the case that we specifically care about one narrowly-determined collection rather than another. Take spelling tests at school for example, and imagine that a teacher asks us to spell 'Paris'. In such a case, the teacher only cares about 'Paris$_{ORTH}$'. Instances that are not a member of 'Paris$_{ORTH}$' will be marked as incorrect.

Importantly, on my account, because properties and (exact) resemblance relations are real, whether some orthographic property of a token resembles another is a fact based in the real properties in the world. Thus, there is some objective fact that the teacher can appeal to here: whether the instance produced by the student a member of 'Paris$_{ORTH}$'. In such a case, it is clear that only exact resemblance matters and only orthographic properties. Other properties possessed by the instances do not matter. This is why it does not matter if I produce an instance with the semantic property of referring to the capital of France or the semantic property of referring to the brother of Hector. Either way, the instance 'Paris' will be marked as correct, and the instance 'Pareiss' will be marked incorrect (as it is not a member of 'Paris$_{ORTH}$').

This all suggests that disputes about whether some instance is a misspelling (or a mispronunciation or a misuse of a word) will vary depending on the situation and practice of the relevant speakers (or communities of speakers). But this is not to claim that 'anything goes' or to adopt an error theory concerning this issue. There are objective facts about whether some instance is a member of a particular collection or not, depending on how that collection is determined. Speakers can thus be *objectively* wrong about whether some particular token word is a member of a given collection or not.

What does vary is what collection we care about at a given time. Sometimes we care about collections that are narrowly determined (as in the case of the spelling test where semantic properties do not matter). On other occasions we care about disjunctive collections (e.g. the collection whose members possess the property of 'being spelt 'c-o-l-o-u-r'' or 'being spelt 'c-o-l-o-r''), or conjunctive collections (e.g. the collection whose members possess the property of 'being spelt 'P-a-r-i-s'' *and* possess the semantic

property of referring to the capital of France). How narrowly (or broadly) the collections we care about are determined will depend on the particular circumstances and the communicative aims of that utterance.

There is a lot more to be said about what collections we care about and why. There are vast amounts of social, political, and even economic influences on why some collections are taken to be more important than others. For example, there are complex social reasons why we force children to pay attention to collections determined by the orthographic properties while in school, manifesting in the multitude of spelling tests we require children to take.

Furthermore, these complex influences inform other aspects of our lives. Various algorithms are now impressively accurate when it comes to determining when a person has mistyped a word. This is based on programmed and machine-learnt knowledge concerning what patterns of use speakers are likely to use. It is *not*, I suggest, that Google knows that if I type 'Pariess' I have tried to token an instance of the type 'PARIS'. The algorithm does not have knowledge of word-types any more than ordinary humans do. Rather, it is that Google has predicted, based on millions of previously collected data points that if someone types 'Pariess' then they are *likely* to be interested in information about the capital city of France. And Google predicts this because previous people that have made that (or similar) typos before have subsequently clicked on links that relate to the capital city of France. This situation is the same as if I type 'Paris' and the algorithm returns only links relating to the capital of France and none about the brother of Hector. The algorithm does not know what type the token I have produced is an instance of. Instead, it merely has predicted that most people, when they type 'Paris' into a search engine are interested in links that contain tokens that have certain semantic properties over orthographically identical tokens that have different semantic properties. That is, that most that search for 'Paris' are interested in the place, and not in the person.

Investigating these norms that govern the decision of whether two similar tokens count as the same word or not is clearly an important issue, and one that deserves its own dedicated treatment that draws upon the linguistic data that exists on varying intuitions of speakers in this regard and considers how algorithms are written to reflect (and even guide) our interests. My aim here is, more modestly, to make

the case that nominalism is able to provide a metaphysical account of misspelling, contra the assumption in the metaphysical literature where misspelling is often used to dismiss nominalist accounts of words.

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VI

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What, under this view, can we say about the word 'Paris'? That is, what can we say about the entity that Wetzel has in mind when she talks of 'the word 'Paris'', and that ordinary people may think about when they say the 'the word 'Paris''?

The view as I have outlined it holds that word instances are bundles of properties, and that there are various collections of those instances that compose collections such as '$Paris_{ORTH}$', '$Paris_{SEM}$', '$Paris_{PHON}$', '$Paris_{INF}$', '$Paris_{PRAG}$', and other collections in line with the properties that we take word-instances to possess. I suggest that 'the word 'Paris'' refers to the collection that has its members all of the members of the other more specific collections. We can call this collection '$Paris_{ALL}$'.

Note that '$Paris_{ALL}$', due to how it has been specified, is a collection that is composed of many instances that are very different from each other. For example, it includes 'Pariess', as although this instance is not a member of '$Paris_{ORTH}$', we have assumed that it is a member of '$Paris_{SEM}$'. All members of '$Paris_{ORTH}$', '$Paris_{SEM}$', '$Paris_{PHON}$', '$Paris_{INF}$', and '$Paris_{PRAG}$' are members also of '$Paris_{ALL}$'. When we talk about 'Paris' in ordinary conversation, I argue that the nominalist should think that it is some collection like '$Paris_{ALL}$' that the ordinary speaker is really referring to, not some genuinely existing type-level entity.

This is supported by the observation that in ordinary speech, the collections that speakers take to be important are much vaguer than we might initially suppose. Suppose I say something in an ordinary context about 'the word 'Paris''. In that utterance I will sometimes intend to convey something about a wide range of instances that are similar and differ in a variety of ways. I intend to say something about instances that are spelt the same, pronounced the same, and mean the same, even though those that are spelt the same may not be pronounced the same, and those that mean the same may not be spelt the same, and so on. This is a highly disunited group of instances, and yet if I talk about 'the word 'Paris'', ordinary speakers would be able to grasp that I do not, without further specification, intend to limit my discussion to only those instances spelt 'P-a-r-i-s', or those that are spoken in a French accent.

Rather, speakers recognize that there are more and less coarse- and fine-grained collections, allowing for the flexibility with which speakers approach their own language. Speakers are able (in most contexts) to recognize what collection is relevant.[19] That is, in more technical terms, speakers are able from context able to recognize whether 'the word 'Paris'' refers to a highly specific collection such as 'Paris$_{ORTH}$' or the more general collection 'Paris$_{ALL}$'. Speakers are able to recognize that what collections we care about changes over time in line with the communicative and explanatory aims of the speakers of a given language. The phrase 'the word 'Paris'' should not then be taken to pick out some abstract, eternal, unchanging entity as (at least some) type-realist suggest. 'the word 'Paris'' instead refers to a (potentially) ever-changing collection of instances reflecting the myriad and flexible ways that words are used by speakers.

VII

A common argumentative move against nominalist accounts is to say that they have implicitly appealed to types. Indeed, this is part of Wetzel's claims against the nominalist about words. I have tried to avoid this counter in my nominalism about words, but there is one way in which an objection of this sort might be attempted.

The issue concerns my use of letters. Specifically, I argued that "spelling is about patterns of letters", and that "we could take 'Paris' to be the collection whose members possess the orthographic property of 'being spelt 'P-a-r-i-s'.". But does this make use of types? Are letters themselves not types? My opponent will argue that 'P', 'a', 'r', 'i', and 's' are themselves types, and hence I have appealed to types

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[19] Precisely what it is to 'recognise' or know a collection will depend on some further claims that we might make about ourselves and the nature of our mental lexicon. My suggestion would be that we know a collection in the sense that we know the membership conditions of a collection, and we are then able to recognise if a new token is a member of that collection. In simple cases, like the spelling test case, this will be quite clear. A new token will clearly instantiate (exact or non-exactly) orthographic properties. In ordinary language, the collections we care about are likely more complex patterns of orthographic and/or phonetic properties that are regularly co-instantiated with certain semantic properties. To know a collection would be to be able to recognise if a new token is a member of a collection by being able to recognise certain patterns of co-instantiation. A fuller account of this will depend on a longer discussion about the nature of the mental lexicon which cannot be provided here for space reasons, but I discuss it more in Miller (Ms.). My thanks to an anonymous reviewer for raising this point.

still. There are two responses available here I think, depending on how thoroughgoing our nominalism is.

First, we could simply accept the charge, after all this was an argument in favour of accepting nominalism about *words*, not about accepting nominalism tout court. We could then accept that there are letter-types, and maybe even other sorts of types, including other linguistic-types, but there are not word-types. We might think that this gives a disunited ontology in that we accept some types but not others, but there is nothing to say that we need be nominalists about every type-level object that we might consider positing. I have said nothing here, for instance, about sentences. Perhaps those are types. In the same way that a rejection of the existence of one particular sort of abstract entity does not commit us to denying the existence of all abstract entities, denying the existence of one type-level entity, does not commit us to denying the existence of all type-level entities.

Now, Wetzel's argument is admittedly about both the specific and the general. She wants to show the need for a particular sort of type-level entity, and then generalize that claim for other sorts of type-level entity. However, if my arguments here are correct, it might be that the situation is different for the type Grizzly Bear than the type 'Paris'. We might need to accept species qua types, but not words qua types.[20]

Alternatively, we might be more thoroughgoing in our nominalism, and argue that letters too are not types. We could do this in a number of ways, but assuming consistency with the ontology offered in this paper, we might hold that particular letters are also bundles of tropes. These would presumably include 'shape' (or topological or geometrical) properties. They might also include phonetic properties if we talk seriously the way that we teach children that there are certain sounds connected with the letters of the alphabet.[21] Once we have identified the properties that particular letters are composed of, we can

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[20] I am not convinced that this mix and match approach will, when considered more extensively, be workable. But there are some that do suggest similar views, albeit not specifically about letters. Kaplan (1990; 2011), for instance, wants to reject word-types (or at least in the Platonic word-types), but accepts the existence of sentence types.

[21] This of course would get complicated if we wanted to hold that letters can have multiple pronunciations depending on what other letters they are combined with to create words, but this can be explained by letters instantiating more phonetic properties than we might pre-theoretically think.

create similar collections of particular letters that exactly resemble with respect to those properties in place of positing types, as I have suggested above.

The immediate concern will be about different fonts. The letter 'A' has different 'shape' properties in different fonts, so what would make them all instances of the letter 'A'? I think that if we want to maintain thoroughgoing nominalism, then the answer here will be found in non-exact resemblance between the properties of particular letters. There are in the literature on the metaphysics of tropes various attempts to explain non-exact resemblance, standardly in terms of tropes falling under a determinable resembling "in different degrees", or in terms of non-exactly resembling tropes falling under the same determinable.[22] Such approaches would allow us to construct collections of particular letters, albeit where those collections are determined by the non-exactly resembling tropes that compose the members. Collections of particular letters might be determined by 'shape' properties, or by any other properties that we conclude particular letters to have (e.g., we might think that letters have certain 'sound' properties), and they might be disjunctive. Therefore, in a similar way to words, collections of particular letters can be determined by the (exact or non-exact) resemblance of any properties that letters instantiate. There are many possible collections, some of which may overlap in members, and all are as 'real' as each other.

As in the case of words, an important consideration will then be about which collections we care about, or which collections are important given the communicative aims of the community of speakers. In most cases, it is plausible that the collections of letters we care about are determined by the non-exact resemblance of the shape properties instantiated by the particular letters. Thus, the collection that most speakers care about might be the collection which is determined by its members instantiating either the shape-property 'g' or 'G' or '**g**' or '𝔊' or 'G' and so on for other fonts and for both capital and lower-case letters. This collection is disjunctive, and new disjuncts may be added when new fonts are created, but as discussed above, this is not a problem for the nominalist. We can call this collection 'G$_{ORTH}$', and

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[22] See Campbell (1990) and Maurin (2002). See Keinänen, Hakkarainen and Keskinen (2018) for an alternative account of how to explain non-exactly resembling tropes.

similar collections will exist for other letters (e.g., 'R$_{\text{ORTH}}$', 'S$_{\text{ORTH}}$', etc.) which likely be the collections that speakers (or readers) care about in most situations.

We do not regularly fail to recognize what collection a particular letter is a member of, or which collection is important. This is not because some collection is metaphysical privileged, but because, relative to our communicative interests, we have developed abilities that can track which exact and/or non-exact resemblances between instances are important to us. When faced with a new font, because I know that 'G$_{\text{ORTH}}$' is an important collection, I can assess a new instance to see if it is a member of that collection (or if it should be one). That is, I can assess whether some new instance, 'G', is a member of 'G$_{\text{ORTH}}$' based on my prior experience of what is important to the community of speakers.

However, there is, as in the case of words, the possibility of mistakes. Some letters in one font might resemble some other letter in a different font. For example, in some cursive fonts, capital 'A' resembles quasi-exactly non-cursive 'g'. I might, therefore, seemingly misidentify a cursive capital 'A' as being a 'g'.

The nominalist can account for this, in a similar way as they handled mistakes concerning words. In this case, I suggest that it is not the case that I have failed to recognize that the cursive capital 'A' is a token of some abstract type. Rather, I have mistakenly taken the particular letter – the particular instance – to be a member of the disjunctive collection whose members instantiate either the shape-property 'g' or 'G' or 'g' or 'G' and so on for other fonts and for both capital and lower-case letters. That is, likely due to my unfamiliarity with cursive fonts, I mistakenly think that the particular letter is a member of 'G$_{\text{ORTH}}$', when it is in fact a member of 'A$_{\text{ORTH}}$'.

None of this will likely persuade the type-realist, particular if the initial problem is phrased in terms of what makes them the 'same' where 'same' implies some notion of identity. For the nominalist, there is no strict identity between the tokens. Instead, there are exact or non-exact resemblances between the instances, which allow us to create collections whose members are determined by those exact or non-exact resemblances. The instance '**A**' non-exactly resembles the instance 'A' such that we can talk about the collection of instances that we normally call 'the letter 'A''. Contra the suggestion in the literature

on words that the nominalist must appeal to letter-types, there is a trope-bundle, nominalist-friendly, solution to this issue.

VIII

To conclude, Wetzel's objection to nominalism was based on the entailment relation, or lack thereof, between (1) and (2):

1) 'Paris' consists of five letters.

2) Every 'Paris'-inscription consists of five letter-inscriptions.

Under the view outlined here, whether (2) is a paraphrase of (1), and whether they entail each other, will depend on what collection 'Paris' in (1) is. Or, put another way, what members comprise the collection 'Paris'. If 'Paris' is the same collection (i.e., has the same members) as 'Paris$_{ORTH}$', then (2) is a paraphrase of (1), (1) entails (2), and both claims are true. An instance like 'Pariess' is not a problem for the nominalist because it is not a member of the collection Paris$_{ORTH}$' (even if it is a member of Paris$_{ALL}$'). If it is 'Paris$_{ALL}$', then (2) is not a paraphrase of (1), and indeed both (1) and (2) are false.

More generally, I have argued that for the nominalist, mistakes in language use occur due to the failure to express, or failure to recognize the expression of, an instance of some relevant collection. What makes 'Pariess' a misspelling it that it is a member of the collection 'Paris$_{SEM}$', but not a member of 'Paris$_{ORTH}$'. There is no need to posit types to explain misspellings.

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