## Against Truth-Conditional Theories of Meaning: Three Lessons from the Language(s) of Fiction

#### Abstract

Fictional discourse and fictional languages provide useful test cases for theories of meaning. In this paper, we argue against truth-conditional accounts of meaning on the basis of problems posed by language(s) of fiction. It is well-known how fictional discourse — discourse about non-existent objects — poses a problem for truth-conditional theories of meaning. Less well-considered, however, are the problems posed by fictional languages, which can be created to either be meaningful or not to be meaningful; both of these ultimately also provide problems for a truth-conditional account of meaning, because it cannot account for the ways in which we use and evaluate such fictional languages. Instead, a pragmatic or use-based account provides a better explanation for some of the phenomena we discuss.

### **1** Introduction

The value of a philosophical theory is measured by how well it accounts for edge cases, the tricky problems at the limits of the scope. It is one thing to be able to provide a grounded account of central, uncontroversial phenomena — for example, what the meaning of a simple declarative English sentence such as "Snow is white" is, and how we know this meaning — and yet another thing completely to be able to account for the slippery, problematic sentences that cannot be analysed in a straightforward fashion. It may be easy to give an account of simple declarative sentences which are grammatically correct and whose terms refer to existing, uncontroversial objects, and yet still stumble at the hurdle of giving an account of the meaningfulness (or non-meaningfulness!) of the non-simple, the nondeclarative, the non-grammatically-correct utterances, and the sentences which have non-referring terms. Many theories of meaning which are able to account for the straightforward cases give results which are counter-intuitive in the problematic cases. Now, counter-intuitive results alone are not sufficient grounds for rejecting a particular philosophical theory, since in many cases our naïve pretheoretic intuitions are misguided or simply wrong, but when faced with a large body of phenomenological evidence that is contradicted by theoretical conclusions, we are entitled to ask the philosophical theory to explain why there is this discrepancy and where it comes from. That is, it is not enough to provide a set of normative principles to guide one's behavior, it is also licit to ask for an explanation of why these principles are so often violated.

For theories of meaning, fiction, and in particular fictional language(s), provide excellent edge cases against which a theory of meaning can be evaluated and perhaps re-evaluated. In this paper, we investigate language(s) of fiction and what they can tell us about the range of possible values a theory of meaning can take. Our ultimate conclusion is that these cases provide us with strong reason to reject truth-conditional theories of meaning as being inadequate to explain the phenomena, and that use-conditional or pragmatic accounts may be better suited, at least in some cases. We will argue for this conclusion by considering three cases: the language of fiction<sup>1</sup>; fictional languages (that is, non-natural

<sup>1</sup> That is, ordinary, every day natural language used in the context of fiction, understood as a literary genre. (That the boundaries of this genre may perhaps not be crisply defined [10] does not harm our present approach: For our purposes, it is more important that the distinction between what Crane calls 'error' discourse and 'fiction' discourse [5, p. 15] can be made. Both types of discourse involve non-referring terms, or fictional/non-existent objects, but are distinguished by our epistemic attitudes towards these terms or objects: When we discuss fiction, we know that what we are talking about is

languages that have been developed in the context of the development of a fictional world) that are intended to be meaningful; and fictional languages that are not intended to be meaningful. Each of these highlights different ways in which standard truth-conditional accounts of meaning fall short. We begin in the next section by re-capping the central points of truth-conditional theories of meaning, and how it is problematic to account for the meaning of fictional discourse on such theories; this challenge to truth-conditional theories has been well-discussed in previous literature and do not spend much time on it, instead focusing on the cases of fictional languages, meaningful (§3) and not (§4). After presenting negative evidence against truth-conditional accounts of meaning, in §5 we determine the necessary components of a theory of meaning in order for it to be adequate to the phenomena we've identified. We conclude in §6.

# 2 The problem of fictional discourse

In order to show how fictional language(s) cause challenges for truth-conditional theories of meaning, we first make precise the general criteria that such theories subscribe to. A standard minimal argument for a truth-conditional theory of meaning goes something like this:<sup>2</sup>

1. A sentence's meaning along with the totality of all the facts determines the truth value of that sentence.

- 2. A sentence's meaning is *at least* a function from possible worlds to truth values.
- 3. Such a function is a truth condition.<sup>3</sup>
- 4. Therefore, a sentence's meaning is *at least* a truth condition.

An argument of this type is ontological in nature: It talks about what meanings *are*, or what they have to be at the very least. Such arguments have parallel epistemic arguments, which make claims about our access to these ontological features:<sup>4</sup>

1. If you know a sentence's meaning and the totality of all the facts, then you know the truth value of that sentence.

2. Knowing a sentence's meaning is *at least* knowing enough to assign a truth value given the totality of all the facts.

3. To know enough to assign a truth value given the totality of all the facts is to know a truthcondition.

4. Therefore, knowing a sentence's meaning is *at least* knowing its truth condition.

Epistemic versions are liable to a fairly straightforward objection, in that often we appear to know the meaning of a sentence without knowing its truth conditions, and hence knowledge of meaning cannot be the same as knowledge of truth conditions (cf. [25]). However, these replies are often question-begging, for they do not grant the proponent of a truth-conditional account the option of replying skeptically, that such arguments show by *reductio* that in fact, we often may think that we know the meaning of a sentence when in fact we don't. Nevertheless, because ontological versions of the theory are better able to withstand potential objections, we will give them priority over epistemic versions.

The problem of fictional discourse-how to assign meaning to or evaluate the truth-values or

not, strictly speaking, true.)

<sup>2</sup> This version is adapted from [18, p. 101].

<sup>3</sup> Leaving aside problematic cases such as the Liar Paradox.

<sup>4</sup> Also adapted from [18, p. 101].

truth-conditions of sentences containing non-referring terms—has a long history.<sup>5</sup> Frege famously argued that sentences with non-referring names have no truth value. This conclusion follows from his adoption of the principle of compositionality and his thesis that the reference of an indicative sentence is its truth-value [9, pp. 202–03]. If the reference of a sentence, its truth value, is a function of the references of its parts, then if one of its parts has no reference, the whole itself can have no reference either. Thus, while "in listening to an epic, for example, we are fascinated by the euphony of the language and also by the sense of the sentences and the images and emotions evoked" [9, p. 203], when we utter a sentence such as "Odysseus's wife is Penelope", we cannot be interested in the truth-value of that sentence: Beyond the artistic and poetic properties and effects it might have, the sentence can have no further interest "as soon as we recognize that one of its parts is lacking a nominatum" [9, p. 202]. Thus:

Sherlock Holmes lives on Baker Street. (1)

is, since it has a non-referring term in it, neither true nor false. Thus, a consequence of adopting a Fregean account of fictional discourse is the admittance of truth value gaps.

An alternative account of the truth values of sentences with non-referring terms can be adopted if one adopts a correspondence theory of truth; then, sentences like (1) turn out to be simply false, rather than neither true nor false, because there is no fact in the actual world which (1) could correspond to. But this route comes with its own difficulties; we might be happy to say that (1) is false, but contrast this with:

Sherlock Holmes is a better detective than Sir Ian Blair. (2)

Like (1), (2) also has a non-referring term in it. And yet, it seems wrong to say that (2) is false; but further than that, there is a problem with how to account for the negation of (2). There are two possibilities for:

Sherlock Holmes is not a a better detective than Sir Ian Blair. (3)

One option would be to say that (3) is true, since it is the negation of (2). But then we are forced into maintaining that the truth values of these two sentences are in fact the precise opposite of what we might have thought in our pre-theoretic state. The other option would be to say that (3) is false, since it also contains a non-referring term; in that case, one would have to either give up the principle of non-contradiction for sentences with non-referring terms, or to admit truth-value gluts, and say that (3) is both true and false. In the end, neither of these options is terribly palatable.

Crane offers an alternative: That fictional statements do have facts in the world that they correspond to, they just aren't the sort that you might expect on a naïve view. They are not facts about objects, but rather facts about properties. Following McGinn, he distinguishes properties into those which are 'representation-dependent' and those which are not. A property is representation-dependent if it depends "upon the fact that the object is being represented in some way: in thought, language, pictures, and so on" [5, p. 68]. Examples of such properties include "being a mythical horse" or "being a fictional character". All properties of non-existent objects, with the exception of the property of non-existence itself, are, he argues, representation-dependent [5, p. 68]. Because such properties depend on the existence of a particular representation, e.g., in Greek mythology, in 19th C literature, in a painting,

<sup>5</sup> We do not give the history in detail here, but rather sketch some of the relevant points along the way. For a full account, see [5].

etc., there are facts in the world which can be used to ground the correspondence necessary in order to obtain truth. That is, truths about Pegasus can be rewritten to be truths about horses (ordinary non-fictional items), winged items (likewise), and being born from the blood of Medusa (which property itself involves reference to a fictional object and so is apt to be re-written into representational dependent terms). But while this may seem like a promising route to take, in the next section we show that it cannot adequately account for the phenomena of meaningful fictional languages.

# **3** Meaningful fictional languages

In this section, we consider the case of meaningful fictional languages—that is, languages which are neither natural languages nor formal languages, but rather have been developed by a single person or a single small group of people in a context closely related to some fictional genre, and which were developed (either from the outset or after a definitive turning point) with the intent that they be meaningful.<sup>6</sup> By comparing and contrasting them with natural (i.e., non-created) languages, we will provide evidence for treating these languages as meaningful, and thus that we must give an account of how they are meaningful.

Our focus in this section are the languages invented by J.R.R. Tolkien, Quenya, Sindaran, and Adûnaic, though we appeal to those languages as typifying a relevant phenomenon, rather than as sole exemplars. Tolkien's invented languages are well-known for the attention to detail and realistic grammatical and phonological structures that they have, and as a result they are unlike many other fictional languages which are made up in a piecemeal fashion without any attempt at a systematic foundation underpinning them, or any attempt to make them mirror non-fictional languages in structure or complexity. The level of sophistication which these languages bear has the consequence that these languages are treated as potential objects of serious study; in fact, one thing that is remarkable about Tolkien's constructed fictional languages is the level and amount of academic scholarship that they have generated. The Elvish Linguistic Fellowship (a special interest group of the Mythopoeic Society, devoted to the scholarly study of the invented languages of J.R.R. Tolkien), publishes two print journals, *Vinyar Tengwar* and *Parma Eldalamberon*, and an online journal, *Tengwestë*; and the journal *Tolkien Studies*, while not specifically devoted to his constructed languages, publishes articles on them, such as [12].

Tolkien's languages can be contrasted with natural languages such as English and Welsh because of their origins as developed by a single person rather than as part of a linguistic community. Quenya, Sindaran, and Adûnaic, as a constructed rather than natural languages, each had a definitive moment of creation or inception. Even though each of these languages evolved as they were developed, this development was still governed by the arbitration of a single person. Now that that person is dead, that standard of arbitration is gone: There are questions concerning the vocabulary, grammar, and pronunciation of Adûnaic, for example, that are left essentially unanswerable. Natural languages such as English and Welsh, on the other hand, did not have their birth at the hands of a single person, and as a result, it can be argued that there is a normative standard that can be appealed to.<sup>7</sup> No one single person has the authority to say what is meaningful and correct and what is not, and yet these questions can still be answered, unlike the case of Tolkien's languages.

<sup>6</sup> In terms of content and the arguments we'll make, we could in much of what follows also discuss constructed *non*-fictional languages, such as Esperanto. However, in order to keep the focus narrow, we do not do so in the present paper.

<sup>7</sup> What this standard is will differ according to your views concerning the ontology of natural languages; it could be the sum of its uses during a particular period, the intersection of all the idiolects within a certain range of similarity, or the proclamations of some canonical language academy, as is the case with, e.g., French.

One might be tempted to use this contrast between Tolkien's constructed languages and natural languages as reason for excluding the former from the scope of a theory of meaning, and say that fictional languages are simply not the sort of phenomena that an ordinary theory of meaning is intended to account for. But making this move on the basis of the existence of this contrast would be too swift. For despite the fact that Tolkien's languages can be contrasted with natural languages when compared on this dimension, on another dimension it is possible for them to be grouped with languages like Welsh and English as being meaningful in opposition to other natural languages whose meaningfulness can be doubted.

Let us consider the issue of translation and how it is connected to meaningfulness. It is possible to translate Adûnaic and Welsh, for example, into meaningful English sentences which can be understood even by people who perhaps could not understand the untranslated quotes. In this respect, then, we might wish to group Adûnaic with non-constructed, natural languages as being 'meaningful', because translateable. But not all natural languages are meaningful on this account. Take, for example, Linear A, one of the last remaining undeciphered writing systems of ancient Greece.<sup>8</sup> Linear A inscriptions occur in two contexts: About two-thirds are inscriptions on clay tablets which represent accounts lists of goods and commodities and their values, while the other one-third are inscriptions on movable objects, usually of votive origin [4, p. 144–145]. The meaning of only a handful of words has been established [4, p. 147], and these words are all isolated and independent, meaning that no more complex phrases can be deciphered. As a result, there is no way to translate from the language of Linear  $A^9$  into any other language, as there is no one left alive who understands the language. Given these circumstances, it is unclear what the status of the meaningfulness of Linear A is. There are two different conclusions that could be argued for: (1) It could be argued that it is meaningful, even in the absence of anyone who can understand that meaning, and thus meaning is something which is intrinsic to a language itself, and not dependent on the people who use the language. Alternatively, (2) it could be argued that Linear A, given that there is no one presently who can decipher it, is currently meaningless. If it were to be deciphered in the future, then it would become meaningful again, but there would then be a period in between in which it was not meaningful. Such an option would deny that meaning is inherent in a language in isolation, but is only present in a language in use. While we do not adjudicate this issue here, it should be clear by the end of this paper that an account of meaning which is at least partially grounded in pragmatics would provide a way for an option of type (2) to be realized. We do not decide the issue here because we need not: It is sufficient for our purposes that there be natural languages whose meaningfulness can be questioned. As a result, we cannot simply discriminate between natural languages and constructed, fictional languages and say that the former are meaningful and the latter are not on the basis of this distinction alone.

We now look at the corpora of these languages, which themselves cause problems for applying standard theories of meaning – even theories of meaning in fictional contexts – to them. Adûnaic is distinguished from the more well-known Tolkienian languages of Quenya and Sindarin by the paucity of examples that we have in it (the most full account of it occurs in [26]). As Fauskanger notes, "There are no coherent Adûnaic texts. Except single words scattered around in Lowdham's Report, most of the corpus consists of a number of fragmentary sentences given in SD:247, with Lowdham's interlinear translation" [8]. In contrast, there exist relatively large bodies of text in Quenya and Sindarin, not only those composed by Tolkien himself in the original context of development and construction — that is, internal to his mythology — but also texts written in a context external to the mythology, for example,

<sup>8</sup> Linguists are generally agreed that Linear A is a script encoding a natural language, though an alternative explanation is offered in passing at [4, p. 143].

<sup>9</sup> There is uncertainty whether the script in both contexts represents the same underlying language.

the post-Tolkien Quenya original compositions by Velasco and Bican, and Fauskanger's translation into Quenya of parts of Genesis, Luke, and John.<sup>10</sup> Even in external contexts, it is clear that the content which is expressed in the majority of these texts<sup>11</sup> is intended to be fictional. The extant fragments are not intended to be read literally as expressing statements about the actual world: Almost no one writes lesson plans in Quenya, composes a shopping list in Adûnaic, or submits meeting minutes in Sindarin. Even if one wanted to, the circumscribed nature of the vocabulary in these languages provides a significant barrier.<sup>12</sup>

Thus, the majority of the data that we have in these languages is fictional in nature, which returns us to the problem we encountered in the previous section, of how to ascribe meaning to fictional discourse. When we consider natural languages, the corpora that we have include both fictional and non-fictional discourse, and by adopting a strategy like Crane's, we can use our non-fictional discourse to ground our fictional discourse, by reducing the fictional content to representation-dependent content, and these representations are meaningful because they are being used outside of a fictional discourse context. If, however, we try to give a similar story for fictional, as opposed to natural, languages, then we are stymied by the fact that it is unclear how to make the move from discourse about non-existent objects to discourse about representation-dependent properties within the constraints of that fictional languages. If these languages are only ever used in fictional contexts, then the languages may simply not have sufficient expressivity for such a reduction. Representation-dependent properties are, after all, dependent upon the particular mode of representation, and thus we can distinguish between representation-dependent properties which depend upon a mode of presentation in English and representation-dependent properties which depend upon a mode of presentation in Adûnaic. We may be able to sufficiently describe the island of Anadûnê in English to know that it is an Adûnaic translation of Quenya "Númenor"; but this one might argue that this makes "Anadûnê" a meaningful word in English, not one in Adûnaic. On Crane's account, in order for "Anadûnê" to be meaningful in Adûnaic, we would need to be able to reduce "Anadûnê" to a collection of Adûnaic-representationdependent properties. The problem is that Adûnaic clearly does not have the vocabulary necessary to perform such a reduction and yet, the word is clearly meaningful in Adûnaic, not just in English. It must be the case that words in Adûnaic are meaningful in that language before we can perform any sort of translations from Adûnaic into English. The fact that not only did Tolkien (via the character Lowdham) provided translations from Adûnaic into English but also because it is possible to augment and correct Lowdham's translations via other information that Tolkien provided about the language in other contexts shows that Adûnaic's meaningfulness is prior to the representation of its nonexistant objects via English-representation-dependent properties. The evaluation of translations as better or worse is not the only way that we treat these languages as meaningful; scholars also engage in literary criticism (cf. the above mentioned journals), and practitioners, despite the paucity of examples in the original context of the language, are able to develop and generate new examples, such as original poetry written in Adûnaic found at [8]. Thus, if we consider our behavior with respect to these languages, we treat them as if they are meaningful, and this activity must be accounted for and explained.

Of course, it is always possible to stick to one's philosophical guns, and take the stance that we are mistaken when we think we know what the sentences mean. But this is a rather sharp horn on which to impale oneself, because it doesn't provide any account for our behavior with respect to these sentences. One might alternatively adopt an epistemic rather than ontological truth-conditional account

12 Note that this is the case even if we allow for the coinage of new words on the basis of the morphological principles that Tolkien has detailed; the original linguistic stock is too impoverished to construct all the words necessary.

<sup>10</sup> All of these are available from Fauskanger's website "Ardalambion", http://folk.uib.no/hnohf/, accessed 26 Feb 15.

<sup>11</sup> Leaving aside the Biblical translations.

of meaning, and say that there are truth conditions governing sentences in these languages, we merely do not know them, and hence we do not know the meaning of these sentences (even though they would on this account be meaningful). But this sceptical position also does not adequately take into account our behavior. There is clearly some factor that guides our behavior — there must be something in which referees evaluating prospective articles for *Tengwestië* ground their reports. If this is not the meaning of the sentences, then whatever it is, it certainly seems to be something which is functionally equivalent to meaning.

### **4** Nonsense languages

The languages we saw in the previous section were marked out by the level of sophistication in their creation; this sophistication is part of what allows for behavior with respect to these languages that put pressure on us to say that what is expressed by these languages is meaningful. If that is (part of) what makes the language meaningful, then perhaps one would think that to create a meaningless language, one which is simply gibberish, would be to give it no identifiable vocabulary, grammar, or phonology, and provide no rules for it to follow. Such a task would be, it seems, quite easy since it requires a complete lack of sophistication, and provides a complete freedom. On a truth-conditional theory of meaning, it is even easier to create a meaningless language: One simply needs to ensure that there are no truth conditions for any sentence. It is interesting, then, to consider languages which were specifically designed to be nonsense languages or not to have any meaning. We show that it is not as easy to create a meaningless language as one might think.

People have a remarkable tendency to find meaning and patterns where in fact none exists. This tendency — called pareidolia — to find significant or significative patterns in what is in fact vague or random stimulus is often exemplified visually, for example, seeing animals in clouds, a face on Mars, or Jesus on a piece of toast, and it is argued that the ability that humans have from a very early age of distinguishing faces from non-faces is an evolutionarily beneficial survival technique [17, 24]. But this tendency is not restricted to the visual; humans have also shown a remarkable ability to impute sense to supposedly nonsensical auditory stimulus. When presented with a language which is intended to be meaningless, people are remarkably good at imposing meaning onto the gibberish. We give two examples of this phenomenon. The first is a short sketch entitled "Skwerl" [7]. The sketch lasts about three and a half minutes and opens with domestic scenes in a kitchen, of a meal being prepared. The scene then shifts to another room with the entrance of a second person, and a dialogue between a man and a woman, clearly a couple, who speak to each other while eating. The dialogue begins pleasant at first, but then devolves into an argument, resulting in the woman storming out of the room, to return bearing a birthday cake and crying. In the dialogue, there are isolated phrases which are identifiable at one point the woman says "I mean", at another, the man says "Yeah, sure" and a bit later "a long way", and the dialogue breaks off with a clearly distinguishable expletive — but the majority of the dialogue is gibberish to the hearer. Inspection of the screenplay itself<sup>13</sup> shows that many of the words — perhaps upwards of 75% — are identical with ordinary English words, including pronouns, indexicals, question words, prepositions, fillers such as 'oh', 'okay', 'so', and nouns such as gate', 'frown', and verbs such as 'chase', 'can', 'raise'. These words are, for the most part, used according to their syntactic categories; that is, pronouns are used as pronouns, question words as question words, etc. It is even possible to determine the semantic categories of some of the nonsense words; 'gring' is a noun, as are 'chosik' and 'pribadium'. Nevertheless, it is difficult to determine the grammatical structure of many of the sentences.

In an interview, the authors of the sketch explain how they came up with the speech: "We sort of had these sentences and then kind of garbled them and kind of wrote down. . . the garble as it came

<sup>13</sup> Our thanks to Eccleston and Fairbairn for sending us a copy.

out" [11]. Thus, in the creation of this language there was no attempt at systematicity, rule-following, or any other constrained type of behavior. In the same interview, the question of sense or meaning was posed:

Stephen Fry: Did you imagine that there was sense behind it? He thinks she's forgotten his birthday, is that what...

Karl Eccleston: That's one interpretation. I'm not an actor but Fiona in the film is an actress so she needed to know what this was about, she needed the intentions, but I think it was important to kind of have sort of a sense behind what we were saying [11].

Nevertheless, after watching the sketch, one comes away with a strong feeling of knowing what just occurred; we can construct a story of what went on in the dialogue as a result of the couple's behavior, their tones of voice, inflection, etc., as well as from other contextual cues such as the birthday cake and candles.<sup>14</sup> Popular media accounts of the sketch comment on this phenomenon; for example, Huffington Post journalist Rao says "The couple in 'Skwerl' speak a combination of mixed-up English and nonsense words, but their meaning is eminently clear " [23] (emphasis added). Of course, Rao is not speaking as a philosopher, but rather reporting on ordinary, every day experiences, but this phenomenological side of things should not be discounted. If part of our argument for why we should accord Quenya, Sindarin, etc., the status of meaningful languages is because of the way we use and interact with them, that is, because we act as if they are meaningful, then we need to apply a similar standard to the supposedly nonsense language. If people watch this sketch and come away from it with a general agreement about what just happened, even if they disagree on the particulars, then by a principle of parity we should also be prepared to accord this gibberish the status of meaningful, too.

This same phenomenon, of attributing meaning to something that was intended to be meaningless, can also be found in the so-called Minionese, the Minion language spoken by the little yellow characters in the movies "Despicable Me" (2010) and "Despicable Me 2" (2013). In the production notes for the latter, director Chris Renaud says of this language:

Their language sounds silly, but when you believe that they're actually communicating that's what makes it funnier. What's great about the Minion language, while it is gibberish, it sounds real [22, p. 15].

Minionese was not intended to have any grammatical structure, but merely be random words that nevertheless still appeared to convey content and be meaningful, and somehow it has succeeded.<sup>15</sup> One reason for its success is that Minionese sounds real, because individual words or sounds from different languages such as Spanish, Italian, and French were used. For example, we can pick out single words such as 'gelato' as meaning 'ice cream', from a scene where the minions run towards an ice cream van shouting 'gelato!'. In another scene, the minions see a banana and kept saying 'banana' in a funny accent; from this, we can determine that 'banana'-in-a-funny-accent means the normal banana that we know in daily life. Because the phonetics and some of the vocabulary are familiar to us, we recognize Minionese as some form of communication, and because we recognize some of the words as familiar, there is a strong impetus to try to attribute meaning to the other parts of the language. The question

<sup>14</sup> This sort of phenomenon can occur in any context where the participants are speaking a language the observer doesn't known, whether that language is made-up or not. This shows that the problems raised here for the truth-conditional account arise not merely from consideration of fictional languages. Thanks to one of the referees for raising this point.

<sup>15</sup> In this respect, then, it isn't *really* 'gibberish', which contains no meaning whatsoever.

also arises here of what it means for the language to have been intended to be meaningless: Meaningless *for whom*? Certainly the Minions do not find the language meaningless, since they successfully communicate to each other. This successful communication is part of what drives our desire to attribute meaning to the language, even if we have been told that it is supposed to be meaningless, at least to us.

The strength of this force pushing people to create meaning out of something even when they know it was intended to be nonsense it witnessed by the developments of English to Minion Language dictionaries, such as [2], and the fact that Minion Language has been translated into various languages in subtitled versions of the movies, and these subtitles are not merely the substitution of meaningless words for other meaningless words, but are often into grammatical, meaningful English (or other language). This fact is particularly indicative: If Minionese were truly meaningless, then it would be impossible to translate. The fact that it can be translated means that there is something to translate, and there are grounds on which translations can be evaluated as better or worse (cf. the discussion of translation in the previous section).

Nevertheless, even if we are able to translate some, or even all, of Minionese speech fragments, it is clear that it cannot be a real or genuine language because no syntactic structure or grammatical rules can be established. There is thus no rule for the generation of new written or spoken strings which will count as genuinely Minionese. Thus, even if we are able to function adequately as a hearer of Minionese, in that we can listen to two Minions speaking to each other and come away with some understanding of what transpired, we cannot become a Minionese speaker because there is no principle by which we can evaluate whether the string we have generated is Minionese or not. But let us set this issue aside, and focus on the fact that it is apparently possible to become an adequate hearer. In the next section, we explore further how this can be, and why a truth-conditional theory of meaning will not be sufficient.

#### **5** Understanding nonsense

How do we manage to understand gibberish conversations? We cannot explain this in terms of syntactic theories because there is no, or insufficient, syntactic structure. We cannot give a truth-conditional account of the semantics because of the problems of assigning truth-values in fictional discourse discussed above. A truth-conditional account of meaning cannot suffice because underlying this approach to semantics there is a requirement that the syntax be robust enough to produce truth-evaluable content (be it sentences, propositions, or what have you). We argue that in order to explain the phenomena discussed in the previous sections, a pragmatic, or use-based, account of meaning must be provided, relating the understanding of the language to its being usage- and context-based.

Let us give another example. In the trailer for the Despicable Me spin-off "Minions", coming out in summer 2015, three minions, Bob, Stuart, and Kevin, are on a boat. Bob is curled up, rubbing his stomach and whimpering; Kevin sees this and says something ending with a raised tone of voice, and Bob replies. Stuart joins the conversation, moaning and saying something, then seeing his friends becoming two bananas in front of him. He then frantically tries to eat one of the bananas, which was in fact Kevin, who looks distressed and then says something, after which the three engage in a fight. All three say something during the fight, and eventually Kevin says something loudly and everyone stops. The 'somethings' here are symbolic units of Minionese. In describing the scene, we remained as neutral as possible before trying to decipher the phenomenon of understanding step by step, which goes something like this: After acknowledging some alien words, in almost a split second we establish that the first something was a question uttered by Kevin asking Bob something along the lines of 'what is the matter'. Bob then replied saying that he was hungry or that he wanted food. Stuart joined in saying 'I want food too' or some such, and then went into a hunger induced hallucination. In response to being attacked, Kevin said something along the lines of 'what are you doing?', and eventually got fed up and shouted 'timeout'. We cannot be sure exactly what the equivalent English expressions might be<sup>16</sup> but the scene was easily comprehensible: Many people independently watching this trailer, with no prior exposure to the Minions or their language, would explain the scene in a similar fashion. We argue that this is only possible through extra-truth-conditional constraints, and, primarily, that it is through pragmatic features of conversations.

We think that the conversation went a certain way based on our knowledge on normal conversation, and thus now we turn to features of normal conversations in languages that we do understand. Grice's account of conversation invoked the so-called Cooperative Principle, which is manifest in terms of four types of conversational maxims [14]:<sup>17</sup>

- 1. Quantity: One should contribute the right amount of information required in a conversation.
- 2. Quality: One should aim to say what is true, not to say what is believed to be not true and should not make claims that lacks evidence.
- 3. Relation: One should contribute relevant information in a conversation.
- 4. **Manner**: One should shape utterances in such a way that they are brief, well structured and avoid ambiguity or obscurity.

The essence of engaging in a communicative exchange is determining whether the participants are being appropriately cooperative. Successful cooperation depends on many factors; to engage in a successful communicative exchange, the conversation is dependent on the speaker, the hearer, the context of the situation, background knowledge of participants, and the conventional meaning of linguistic symbols. In particular, conventions are closely associated to social groups, communities, and, hence, culture. The culture-relativity of conventions plays a significant role in interpreting scenes such as the scene from the trailer described above. For example, in some cultures, because of the significant correlation between social movements and emotions, there is a strong convention that emotions ought to be repressed [13]. If someone from such a cultural setting was watching the Minions scene Kevin's response to Bob's moaning could have been understood as 'Can you please stop moaning?' instead of a concerned inquiry. This emphasizes how variation of interpretation is interdependent on all aspects concerning the situation and context.

Often, Grice's theory of conversational implicatures is invoked as a secondary step in the determination of meaning: That is, first we identify the sentence meaning (or semantic meaning) and then recover from this and from features about utterance context, etc., what the speaker's meaning (or pragmatic meaning) must be. But this division of labor only works if there is a well-defined process wherein we can determine the first step, that is, the sentence meaning. No such process exists for languages like Minionese: It appears that all of the work goes on at the pragmatic level. We cannot explain how we understand exchanges in Minion in terms of first understanding the semantic values of the sentences and then interpreting them in the conversational exchange, rather it is much the other way around: We take what we know of ordinary conversational exchanges, and use this to understand the interplay, and only after that could we attempt to assign individual sentence meanings.

One remarkable aspect of 'interpreting' nonsense languages is the ease with which we, apparently, do it: There is no extra cognitive time or effort that is involved in imputing meaning to the couples' exchange in "Skwerl" or to dialogues between Minions. We now turn to considering this fact, how quickly and without difficulty we managed to understand the scenes. The process seems

<sup>16</sup> Although, contra, see our comments about subtitling above; at some point, someone had to make a decision about what these phrases mean, in order to translate them for the subtitles.

<sup>17</sup> These four are not the only maxims; there are other maxims such as being polite and making sure each conversation receives its appropriate closure, etc. However, these are less universal. For instance, when two people are quarreling, they do not necessarily have to be polite to be cooperative. They may be acting cooperatively simply by keeping up the agonistic nature of the conversation during the argument [16].

almosteffortless. Truth-conditional accounts of meaning have difficulty accounting for this phenomenon; under a use-based theory, language is taken as a complex adaptive system where the cognition interacts with usage events, particularly when we are presented with linguistic inputs [15]. The adaptive system contains a few main processing abilities [15, p. 2]:

- 1. Categorizing involves recognizing certain language tokens as certain types. In the case of Minionese, we recognize some form of linguistic tokens which is beyond our scope of knowledge.
- 2. *Chunking* is the ability to form sequential units through repetition and practice. Evidence from child language acquisition confirms that when an individual frequently encounters certain items of input which have a role in a use-based process, there is a better chance for those input to beentrenched. Entrenchment simply means that certain linguistic routines, such as how certain words are grouped, become established firmly in the cognition in a way that is difficult to reverse. Input items can become entrenched through repeatedly encountering certain formation of sentences and frequent successful usage in context. Therefore, it is possible to be trained to improve language skills.
- 3. *Rich memory* is the ability to store detailed information from experience. For instance, a nonnative speaker of English may not immediately recognize that "I'd be more than happy to join the meal if you like" can convey a reluctance to join the group if context made it sound like "I am only going because I want to be seen as a committed friend instead of because I enjoy the company of my friends". But after some situations where this leads to misunderstanding, the speaker will learn to bear this in mind, not make that mistake in the future.
- 4. Analogy is the feature which allows us to expand the initial information we have stored in our heads. We are considerably capable of expanding our understanding of the structure and meaning of language based on prototypical stimuli. Understanding analogies is what makes it possible for us to make sense of metaphors. For example, saying that I am going to 'drop him a line' does not mean I am going to physically perform an action that would result in the dropping of a line [20, p. 209], but through analogy, we can make sense of a metaphorical extension that 'drop him a line' means something like leaving someone a written message.
- 5. *Cross-modal association* is the ability of linking form and meaning, where here meaning is taken as "the sum total of how the form is used in a communicative context" [15, p. 10]. This is the ability to relate and map two structurally different stimuli.

Use-based theories rely heavily on learning generalizations through experience and accumulating knowledge about language through active use. The key concept is that our brains possess these abilities that allow us to engage in linguistic activities, and the system works interdependently like a complex web of network, committed to process language. Such a view is consistent with a modular view of cognition, where the focus is in "function-specific cognitive mechanisms" [1]. Arguably, if each module is responsible for a domain-specific function, then the process can be deemed incomplete if any of the above abilities fail to work. For instance, autism is sometimes associated with so-called semantic-pragmatic disorder [3]. Autistic people may have considerably excellent cognitive potential in memory, normal use of grammar and phonology, however, they may also show considerable inabilities in comprehension within conversational context and abnormal use of expressions. They have no problem in using language to express what they want; however, they face difficulties in reading beyond the literal meanings of words in specific situations. It can be seen that they have no difficulties in categorizing, chunking, and memorizing but they show inabilities in analogy and cross-modal association.

This leads us to our final consideration: How did we come to understand the nonsense conversation? Let us consider not merely use-based theories of meaning, but use-based theories of cognition more generally. Such theories account for how our brain tends to process language-related inputs, and can be paired with a theory of pragmatics explaining how we expect a linguistic experience

of conversation to proceed. In [6], Dornelles and Garcez attempt to explain the phenomenon of understanding nonsense with a scenario of a telephone conversation within a fabricated frame. The telephone conversation involved three participants, A, B and C. A called B thinking he was ordering beer from a beverage company for a party and they engaged in a short conversation. Then B suddenly passed the phone to C, who did not know what was going on. A and C then became active participants in the conversation, trying to figure out what is happening. After a slightly prolonged period of confused silences and question asking, they found out C was in fact the co-planner of the said party with A. A thought he was phoning the beverage company but he in fact phoned C at his house by mistake; B had picked up the phone and played a practical joke on A and C.

The main focus of this experiment was on that prolonged period of confusion, when A and C were trying to make sense of what they were both dealing with. The confusion was prolonged because there appears a so-called one-dimensional frame of interpretation dependent on what we expect. When an interactive structure is established, participants will focus on staying in that frame even in the presence of strong signals of deception. When the conversation became too incomprehensible in the original frame, due to ambiguities or errors, the frame broke or shifted. During the interpretative episode, the conversation depended heavily on the basis of the participants' own view of what is going on. If they did not depend on their own views, they would not be reluctant to shift the frame and the prolonged period could have been avoided. However, that was not the case. The key point here relates to our function as a spectator or receiver in Minionese exchange. In understanding that gibberish dialogue, we depended heavily on what we already know and expect from our own languages and cultures; we understood the minions because they shared little gestures, facial expressions, and tone of voice that we normally associate with our usual language exchange. However, the more prolonged the exchange that we are trying to interpret, the more difficulty we will have, and eventually our frame may break.

# **6** Conclusion

The problems posed by fictional discourse for truth-conditional theories of meaning are well known, and there is a long history of attempted solutions. Less well investigated are the problems that fictional languages pose. We have considered the case of meaningful fictional languages whose meaningfulness is demonstrated through composition, translation, and literary criticism and evaluation. That is, we act as if languages like Quenya, Sindarin, and Adûnaic are meaningful, and if this meaningfulness cannot be cashed out in terms of truth-conditions, we must find an alternative way of accounting for our actions.

We also considered the case of languages intended by their creators to be meaningless which nevertheless have meaning imposed upon them by people exposed to them. That is, we also act with respect to those languages intended to be meaningless as if they are in fact meaningful. Both examples demonstrate the difficulty of creating a language that is truly meaningless; people will always seek to attribute patterns — that is, meaningfulness — in apparently random data. Sometimes this shift from meaninglessness to meaningfulness happens deliberately; for example, the Klingon language of the TV-series "Star Trek" first appeared as a few sentences of gibberish made up by James Doohan for the first movie, but a decision was made, for the third movie, to build those gibberish sentences into a full-grown language by the development of a grammar for an enlarged lexicon [21].<sup>18</sup> But both trajectories demonstrate the overweening desire of humans to impose meaning onto language-like vocalizations<sup>19</sup>,

<sup>18</sup> From then, the language has grown to include at least two dialects [19, p. 272] and a project to translate the Bible and Shakespeare into Klingon; see the Klingon Language Institute's projects, http://klv.mrklingon.org/.

<sup>19</sup> This same phenomenon can be seen amongst pet owners who insist that they have identified

a desire which can be better explained by a use-based theory of meaning rather than a truth-conditional account. While it is certainly possible to maintain a truth-conditional account and insist that all of these languages are in principle meaningless, then we are faced with the problem of accounting for our behavior; if these languages are meaningless, what is it that is guiding our behavior in treating them as meaningful? Surely that is what we should turn our attention to and give a philosophical account of instead.<sup>20</sup>

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avocabulary, or even a grammar, in their pets — but the study of animal language and of human-animal communication brings us too far afield from our central focus of inquiry to pursue in this paper.

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