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Metaphor and Contextual Coherence: It's a Match!

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Metaphor and Contextual Coherence: It's a Match!

Many sentences can be interpreted both as a metaphor and as a literal claim, depending on the context. The aim of this paper is to show that there are discourse-based systematic constraints on the identification of an utterance as metaphorical, literal, or both (as in the case of twice-apt metaphors), from a normative point of view. We claim that the key is contextual coherence. In order to substantiate this claim, we introduce a novel notion of context as a rich and heterogeneous body of information, including previous discourse, elements coming from the surroundings of the utterance, background information, and Questions Under Discussion (QUD) issued from these three sources. We then define contextual coherence as a relation between what we call the minimal paraphrase of the metaphor and the context, and argue that for an interpretation to be coherent two conditions must be met. First, the minimal paraphrase must address some question in the QUD stack. Second, it must be externally consistent, i.e., consistent with the available contextual information. Finally, we argue that an approach based on contextual coherence is better suited to deal with twice-true and twice-apt metaphors than traditional approaches based on semantic deviance or pragmatic lack of fit.

Keywords: twice-true metaphor, twice-apt metaphor, coherence, Questions Under Discussion, context, interpretation

1. Introduction

Consider the following sentence:

(1) I have to get out, I can't breathe here.[1]

This sentence, as many others, can be interpreted literally or metaphorically. On a literal reading, we would consider that the speaker suffers from dyspnoea. On a metaphorical reading, we are to suppose that the speaker feels confined, oppressed, or relentless. We follow the terminology by Cohen (1976) and call these sentences *twice-true metaphors*.

Here we ask ourselves: How should one recognise a metaphor? On what basis

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1 Cf. (Bach 2003, 5), quoted in the DWDS-Corpus, originally in German: *Ich muss raus, ich kann hier nicht atmen.*

must we identify an utterance as a metaphor rather than as a literal claim? We wish to explore this question from a normative angle, rather than a metaphysical or a psychological one. A metaphysical account would be an account of what makes an utterance a metaphor (cf. e.g. Heise 2022; Leezenberg 2001; Stern 2000; White 1996), and a psychological (or empirical) one would show how people in fact recognise or identify metaphors (cf. e.g. Gibbs, Jr. 1994; Giora 2003; Glucksberg 2001). By contrast, we try to account for how people ought to go about interpreting utterances as metaphorical or not, setting out principles that normatively constrain this interpretation.[2] What does an account like ours contribute? We believe that the different sorts of account of metaphor one can give are complementary. Purely psychological accounts of metaphor identification are hard to come by. This is so because any theory of metaphor recognition needs to operate with some sort of definition of metaphor. Providing such a definition, in turn, is a task closely aligned with the metaphysical project mentioned above. Psychological accounts are valuable in trying to identify the actual psychological processes underlying metaphor interpretation. However, as the old Humean *adagio* says, descriptive statements about what is the case cannot yield normative statements. Our account, informed by the metaphysical and the psychological endeavours, is normative in the sense of being focused on what it would be reasonable for a rational interpreter who has access to objective facts about the context to assume. One could think of our proposal as a rational reconstruction, along the lines of Soames (2008), Geurts and Rubio-Fernández (2015), Dänzer (2020). We also can associate our effort with a more or less common view of semantics, as a research programme about what linguistic agents *should* do. For instance, in dynamic semantics one characterises meaning as context change potential, by specifying rules which prescribe how a linguistic agent's information state *should* change if a sentence uttered by another agent is accepted (e.g. Groenendijk and Stokhof 1991; Veltman 1996).

To motivate our approach, we will first offer a short review of the main developments in metaphor theory from the last 50 years or so. Towards the end of this introductory section, we will turn to sketching the broad outlines of our own approach, which we will refine over the course of the remaining sections.

Until the 70s, it was assumed that metaphors involve category mistakes. This assumption would motivate a semantic answer to our question: What makes a sentence a metaphor is its semantic deviance. However, because of examples as (1), it

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2 We thank a reviewer and the journal editors for pressing us to clarify this point.

is now acknowledged that metaphor is a context-dependent phenomenon, not reducible to semantic deviance. The answer to our question, then, must look at the context in which the sentence is uttered and interpreted, and not only at its semantic properties.

In the 70s, semantic theories were replaced by pragmatic theories that understood metaphor as a type of speaker meaning. In Grice's view (1989), metaphors are treated as implicatures. More recently, Relevance Theory and contextualism see metaphor as a form of modulation, thus assimilating it to other ordinary, pervasive, pragmatic mechanisms (Carston 2002). We agree with these views which consider metaphor as a pragmatic phenomenon, if 'pragmatic' is understood in a broad way. However, we disagree on the kind of answer given to our initial question. Contrary to the Gricean focus on speaker meaning and the post-Gricean view of interpretation as a matter of abductive reasoning based on available information, we think that there are systematic constraints on metaphor, on how people ought to go about interpreting utterances as metaphorical, and that these systematic constraints have to do with discourse structure. In this, we follow Asher and Lascarides (2001) who propose constraints on metaphor interpretation in terms of linguistic structure, and move away from cognitive approaches to pragmatics (*cognitive pragmatics*). While we share a formal approach to pragmatics (*formal pragmatics)* with Asher and Lascarides, we go beyond their own conception of coherence, which is spelled out in terms of rhetorical relations, i.e. relations between sentences.[3] Such an account leaves out of the picture all those cases in which part of the reasons why one ought (not) to interpret an utterance as a metaphor are external to discourse (cf. Crespo, Heise, Picazo 2022). Our aim is to provide a systematic framework that deals with different kinds of examples, including those in which interpretation crucially depends on available information about the speaker, the genre or the setting in which the utterance takes place.

Moreover, some utterances which ought to be interpreted metaphorically have an interesting feature that we must explain: sometimes, more than one interpretation is appropriate. In particular, sometimes both the literal and the metaphorical interpretations are in order, that is, both are coherent, given the context at hand. For instance, we could imagine a scenario in which the feeling of confinement of the utterer of (1) leads to physical symptoms, including an inability to breathe in the literal sense. In such a scenario, both interpretations are coherent at once. These cases,

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3 For an overview of the tradition of cognitive pragmatics, cf. e.g. (Mazzone 2021). For a glimpse of what formal pragmatics is about, cf. (Roberts 2012).

which we will call *twice-apt metaphors* following Hills (1997), are something that theories based on pragmatic deviance, such as Grice's theory of implicatures, have trouble explaining.[4] (Unlike twice-true metaphors in which context rules out which out of many interpretations is appropriate, twice-apt metaphors are such that more than one interpretation remains available.)

Let us go back to our initial questions: How should one recognise a metaphor? On what basis must we identify an utterance as a metaphor rather than as a literal claim, or as both a metaphor and a literal claim? First of all, a clarification about the kind of investigation that we are engaged in is in order. Here we are interested in the identification or recognition of metaphor (Stern 2000, 3), from a normative point of view. This means that we try to provide an account that explains what determines that a particular utterance ought to be interpreted as a metaphor. However, we leave out how the specific metaphorical interpretation is generated (how, for instance, certain features and not others of a given domain are applied to a different domain, what determines what the metaphor says). Providing an explanation of this latter sort falls within the remit of what one might call the interpretation (Stern 2000, 1ff.), or the structure (White 1996), of metaphor, closely related to what a metaphysical account of metaphor sets out to offer. T h e larger project of explaining metaphor comprehension needs to answer not only to the former question of identification, but also to the latter question of interpretation. Our account thus is but a modest contribution to that larger project.

Our aim is to show that there are discourse-based systematic constraints on metaphor identification. More specifically, we use tools from formal pragmatics to address the problem of how one ought to identify twice-true and twice-apt metaphors, given the elements of context available to the interpreter. Although it can be considered a pragmatic account, in our view the figure of speech is constrained by discourse structure and discourse consistency, and not determined by speaker's intentions. What we try to show is that, using formal pragmatics, it is possible to provide a systematic account of metaphor identification. The systematic constraints that we identify are, in our view, (at least part of) the resources that enable speakers

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4 The trouble of explaining twice-apt metaphor is especially acute for those pragmatic accounts that assume that speakers cannot be taken to mean what they are saying literally (cf. Grice 1989; Searle 1979). This assumption in fact generates the implicature in Grice's original account. However, not all pragmatic accounts that appeal to Gricean speaker meaning make that assumption (cf. e.g. Camp 2008). Where we differ from these latter accounts is with respect to the explanation we give of the phenomenon in question, notably by relying on our particular conception of context as well as of coherence (see sections 3 and 4 further below).

and interpreters to communicate by means of metaphors. Yet we remain agnostic about the empirical reach of our proposal.

We approach metaphor identification as a problem of context-dependence. In our framework, we take coherence to be the guiding principle of interpretation (therein following Asher and Lascarides 2001) and spell out this notion relying on the QUD framework. This tool has proved useful in other cases of context-dependence, such as knowledge ascriptions (Schaffer and Szabó 2014), or incompleteness and modulation (Schoubye and Stokke 2016). Moreover, we show that the QUD framework can be used to explain the multiplicity of meaning of twice-apt metaphors. However, we also argue that the QUD stack, which in our account captures the topic under discussion for an utterance, is ultimately insufficient to identify metaphor, and we therefore introduce the notion of external consistency.

The plan is the following. In section 2, we shed light on the theoretical background against which our proposal is pitched. In section 3, we define a new notion of context that contains the elements needed to account for metaphor identification, from a normative point of view. Section 4 presents the notion of coherence and applies it to some schematic examples. Examples of different sorts of metaphors are analysed in section 5. In section 6, we share a few afterthoughts: a possible threat of overgeneration, and a rough outline of how our framework would deal with figures of speech other than metaphor.

2. Setting the stage

The aim of this section is to present the theoretical considerations that motivate our proposal, all while tying the latter to the existing literature. We start by arguing for the claim that being a metaphor is a property of utterances, that is, sentences uttered in a context, available to an interpreter. We do that by means of examples. These examples suggest that deciding whether an utterance is to be interpreted as a metaphor or not depends on whether that choice is coherent (cf. subsection 2.1). This rough idea has two implications for how our proposal relates to the literature on metaphor. First, and contrary to an influential tradition, we focus on coherence rather than on semantic deviance or pragmatic lack of fit (cf. subsection 2.2). Second, we understand coherence as a relation between the context and metaphorical meaning, thus endorsing a form of cognitivism about metaphor (cf. subsection 2.3).

2.1. Metaphor as a context-dependent phenomenon

Let us go back to (1) and its two readings:

(1) I have to get out, I can't breathe here.

(1a) The speaker has to leave the space she's in because she suffers from dyspnoea (literal reading).

(1b) The speaker feels confined (metaphorical reading).

As we mentioned, this sentence can be interpreted as a metaphor or as a literal claim. It is plausible to think that whether one or the other is to be preferred depends on the context. If (1) was uttered during a fire in a building by someone trying to get out, it would be natural to interpret it in its literal meaning. By contrast, if a teenager who we know is not at ease in her hometown uttered the sentence, we would be more inclined towards a metaphorical reading.[5]

Sentences lending themselves to both a metaphorical and a literal interpretation are well documented in the philosophical literature on metaphor: 'Moscow is a cold city' and 'There is a storm brewing' would be cases in point, discussed in section 4 and 5.2, respectively. The phenomenon is commonly referred to by the term 'twice-true metaphors',[6] which was coined by Cohen (1976) so as to draw attention to a range of cases that serve as counterexamples to deviance theories of metaphor identification.[7] Such deviance theories, popular in the 50s and 60s,[8] held that the identification of metaphor requires the interpreter to recognise the literal interpretation of the relevant sentence to be 'deviant'.[9] The deviance in question was typically

5 In absence of a conversation or discourse, the matter would be undecided. More elements of the original context for this example are offered in section 5 below.

6 Cohen (1976) spoke of 'twice-true' metaphors because he aimed to disprove the adage that 'a metaphor taken literally is false'. By contrast, we understand the term in a way that undermines the assumption that metaphors taken literally are nonsensical, i.e. lack clear truth conditions. This would be the case, e.g., if one assumed that metaphors necessarily involve some sort of category mistake (and assumed that category mistakes are meaningless). What is important for our discussion is that there are utterances deemed metaphorical, the literal interpretation of which is meaningful too. Whether or not the truth conditions that the literal reading yields are fulfilled, i.e. whether the sentence taken literally is true in a given context of utterance, does not matter for present purposes. In light of this, what we mean by 'twice-true metaphors' would more aptly be captured by something like 'doubly meaningful utterances'. We will stick, however, to the established terminology.

7 Binkley (1974) had already drawn attention to these cases some two years earlier, without however proposing a term to designate that class.

8 Cf. e.g. (Black 1954; Beardsley 1962).

9 This is the umbrella term that Stern (2000, 3-4) chooses to designate a broad family of views. The various individual views thus subsumed do not necessarily employ the terminology of 'deviance'.

exemplified by category mistakes—hence Goodman's famous gloss of metaphor as a 'calculated category mistake' (1976, 73). However, twice-true metaphors do not fit that description. They show no semantic deviance or *internal inconsistency*, that is, inconsistency internal to the semantic interpretation of the sentence, taken in isolation. By consequence, this feature cannot be a necessary ingredient when it gets to identifying metaphors.

Interestingly, semantic deviance is also not sufficient for metaphoricity. Consider an oft-quoted example of metaphor that involves a category mistake:

(2) Juliet is the sun.

Let us see in what follows how different contexts may impact whether or not an utterance of (2) should in fact count as metaphorical:

Context 1 for (2): Shakespeare, *Romeo and Juliet,* Act 2, Scene 2.
Romeo: [Juliet appears above at a window]
But, soft! what light through yonder window breaks?
It is the east, and Juliet is the sun. […]
It is my lady, O, it is my love!
O, that she knew she were!
(a) Juliet is the warmest, brightest person to me (metaphorical interpretation).

Context 2 for (2): A novel telling the story of a delirious man, Alf, who thinks people are planets and stars.
'I'm telling you that we are floating in outer space, I can see the stars passing by', said Alf.
'You see? Last week he said that Tom was Venus, Jill was Mars and Juliet was the sun. He tried to read our destiny from their positions in the room', complained a nurse.
(b) (Alf said) Juliet is the sun, with respect to others, etc. (non-metaphorical interpretation).

Context 3 for (2): A description of a school play.
All the children are on stage. Susan is elegantly playing the main character, and Tom manages to say his lines without forgetting any part. Even the youngest ones

have a role to play. Juliet is the sun, Jill is a tree, and baby Jane is a flower.

(c) Juliet is wearing a costume, impersonating the Sun (non-metaphorical interpretation).

The same sentence is interpreted differently when placed in different contexts. In the first, it is easily identified as a metaphor, in the second, it could be literal and in the third, it is not easily interpreted literally, but it is not a metaphor (let's provisionally say that it is a metonymy). As a general rule, it seems that coherence with context, rather than semantic deviance, is key to metaphor identification.

2.2. Coherence vs. deviance

Seeing metaphoricity as a contextual property rather than a semantic feature allows us to disengage from the traditional view according to which a sentence should be semantically deviant if one is to read it as a metaphor. Having said that, there is one key point on which we agree with deviance theorists, namely, that interpretations of utterances should be coherent. For this claim underlies the following argument in favour of their position: If deviance is a form of incoherence, and if interpretations should be coherent, then some interpretation being incoherent counts as a reason against that interpretation. However, from this general line of reasoning it does not follow that we have to opt for metaphorical interpretation whenever the literal interpretation of some utterance is incoherent. This would only follow if metaphorical interpretation were the only way to render coherent an interpretation of some utterance that is incoherent if taken literally. We reject this assumption with reference to other figures of speech, to which we might appeal to much the same effect, not to mention conversational implicatures. Also, as pointed out with reference to twice-apt cases, some utterances should be interpreted as metaphorical without their literal interpretation being incoherent in the first place.

In line with deviance theorists we also acknowledge that metaphor, as the figure of speech that it is, involves some kind of mismatch. This take is suggested by the conception of metaphor as a figure of speech in which two disparate subject matters are brought together in thought. However, semantic deviance theorists defend a view of mismatch which is strictly semantic. To the extent that our account appeals to the idea of mismatch, our conception thereof is, by contrast, broader: sometimes it lies at the level of the utterance under interpretation, sometimes it concerns how the

utterance relates to other elements of context, for instance, the topic under discussion.[10]

Despite our disagreement with deviance theories of metaphor identification on the count just mentioned, there is another element we converge on. For we, too, are of the view that there is a principled difference between literal interpretation, on the one hand, and metaphorical interpretation, on the other. To that extent, we disagree with what one might call continuity theorists[11] about metaphorical interpretation. Continuity theorists hold that the difference between metaphorical interpretation and literal interpretation is at most one of degree. This is to say, in particular, that metaphorical interpretation involves no principle or procedure which is not in play in literal interpretation as well.

Against continuity theorists, we endorse a multipropositionalist model for metaphor that sets it apart from literal interpretation in a distinctive way (cf. Heise 2022). We allow the sentence used metaphorically to bifurcate into (at least) two propositions that set up a comparison between corresponding states of affairs. The upshot of this comparison, in turn, is captured by what we call the minimal paraphrase (see section 2.3 below). Defending this proposal, however, is beyond the scope of the present paper. For our purposes, it suffices to point out that such views which consider metaphorical interpretation to be distinctive, discontinuous with literal interpretation, are a live theoretical option.[12]

Another framework that disengages metaphor from deviance or lack of fit is Relevance Theory, by explicitly rejecting what Sperber and Wilson (2008, 85) call the 'norm of literalness'. Sperber and Wilson contend that, in many settings, metaphor, as an instance of 'weak' communication, is more 'relevant' than precise and direct statements. In such settings, interpretation does not proceed via a detour through literal meaning. But contrary to the 'deflationary' account of metaphor that Sperber and Wilson sport, we do maintain that metaphor involves a distinctive 'mode of

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10 As compared to proposals that appeal to pragmatic lack of fit (cf. Grice 1989; Searle 1979, and especially Camp 2008), in turn, we differ with respect to our conception of context and, consequently, of coherence (cf. also footnote 4).

11 Relevance Theorists form one prominent group within this camp. But truth-conditional pragmatists and contextualists more generally are certainly drawn to such a view, if they have not outright endorsed it.

12 The distinctive, multipropositionalist model for metaphorical interpretation that Heise (2022) defends capitalises on an idea that Ofra Magidor (2020, §3.2.2) recently floated with respect to category mistakes: 'in category mistakes such as "Two is green", each word succeeds in picking out a content but these contents fail to compose together to form a unified proposition'. Rather, on the multipropositionalist model in question, the respective contents provide the propositional templates from which to build the bifurcated propositions that enable the comparison metaphorical interpretation sets up.

interpretation' that sets it apart from literal interpretation.[13] And while our conception resembles relevance theoretic-one in many respects, we crucially add QUD to the picture and place metaphor identification in the tradition of formal pragmatics, instead of cognitive pragmatics.

2.3. Cognitive content

Finally, in our proposal, we assume that metaphors carry cognitive content.[14] We submit that metaphorical interpretation delivers an output or result that is propositional in nature. Endorsing cognitivism about metaphorical content is a necessary requirement for assessing coherence with context, given that we conceive of the latter in terms of bodies of information, as we shall see. Even if non-cognitivism about metaphor has solid supporters, there are reasons to endorse the kind of cognitivism our proposal assumes. For one thing, metaphors can be used to communicate information, they feature in speech acts such as assertions and may serve as 'springboards' (Bezuidenhout 2001) or 'vehicles' (Camp 2006) for implicature. For another, we deem it reasonable to think that understanding a metaphor involves being able to explain, roughly, what the metaphor says, using other words. Consider the practice of explaining metaphor to novices by means of a 'School Comprehension Test' (White 1996, 199-201). To illustrate, let us take the following order issued by King Lear in Shakespeare's eponymous play: 'Come not between the dragon and his wrath'. It seems uncontroversial to assume, given relevant knowledge of background and previous discourse, that King Lear is ordering Kent not to interfere in the quarrel with his daughter Cordelia. Of course, the comparison between the situation of Lear and Cordelia and that of a dragon and its prey goes beyond the similarity captured by a paraphrase such as 'Come not between me and Cordelia'. We will turn to this point presently. Before doing so, however, we lay bare that we comport with tradition in the broad assumption that interpreting metaphor involves setting up a comparison, with the aim of identifying relevant points of similarity (cf. Hills 2017, §2). The details of how precisely this is done need not concern us here (but cf. 2.2 above for some hints).

As indicated above, we do not think that the content we may attribute to metaphors exhausts their expressive power. Rather, we propose to conceive of

13 Cf. (Leezenberg 2001). Incidentally, this is in line with more recent developments within Relevance Theory, cf. (Carston 2010; Carston and Wearing 2011; Wearing 2014).

14 In support of this position, cf. e.g. (Searle 1979; Bergmann 1982; Stern 2000; Bezuidenhout 2001; Carston 2002; Camp 2006; Wearing 2006; González de Prado Salas 2016). Davidson (1978) and Reimer (2001), among others, argue against this position.

metaphorical content in terms of minimal paraphrases. A minimal paraphrase is a partial rendering of what the metaphor expresses. In examples (1)-(2), we can consider the options (1b) and (2a) as examples of such partial renderings. These renderings are minimal in the sense of not being exhaustive. The full significance of a metaphor may contain non-propositional effects such as mental imagery, and hence go beyond the content that enters into assessment for contextual coherence. The minimal paraphrase is minimal, partial, in the sense that it doesn't capture the whole gamut of the metaphor's expressive power, and therein lies the interest of trying to produce metaphors instead of simply enunciating their paraphrases. We maintain, however, that there typically is such a minimal paraphrase and that the format of this minimal paraphrase is propositional. A minimal paraphrase, by itself, captures just enough to be able to reason on the basis of a metaphor.

Note that we are not endorsing a very constraining notion of minimal paraphrases. First, we admit that metaphors can usually be paraphrased in multiple correct ways. Second, people can have a hard time at formulating a minimal paraphrase for a given metaphor. Some metaphors are easy to paraphrase, some are not.[15] Third, it is likely that people don't consciously formulate minimal paraphrases in their interpretation of discourse. Someone produces a minimal paraphrase explicitly only if asked. For us, a minimal paraphrase is required to say that the interpreter has understood the utterance.

3. A rich and heterogeneous context

We have argued that being a metaphor is a property of utterances, which are sentences i n *context*. Following the Stalnakerian tradition (Stalnaker 2014), we conceive contexts as bodies of information and, following Roberts (2012), we think of these bodies as structured around a set of Questions Under Discussion (QUD). In Stalnaker's view, these bodies of information comprise the common ground among the interlocutors. However, this quality of *being shared* is not very relevant for our current purposes, as we shall argue below. One reason for this is that, when it comes to metaphor, not all the relevant information is presumed to be shared. Imagine a child uttering (3) in the middle of a university campus, standing next to the Law Faculty.

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15 Stotts (2021) notes that some metaphors might have paraphrases that fully capture their expressive power and distinguishes them from more complex metaphors whose paraphrase would be a command to associate two things in one's mind. We deem it plausible to think that most metaphors are in-between: they can be paraphrased roughly, but not exhaustively.

(3) I can't see the university.

Most of us would not be inclined to interpret the child as expressing a metaphor. According to a plausible interpretation, the child has made some kind of category mistake. Perhaps she has seen several faculty buildings and thinks that the university is another building, one she has not seen yet. The reason why we are not inclined to interpret the child as putting forward a metaphor is that we know that children very often make category mistakes. We don't presume this information to be shared with the child.[16]

Another reason for bracketing the requirement that the information be shared is that we consider some examples coming from literary texts where the interpreter often has no chance to actually exchange with the author. In such a setting, the resulting interpretation is based on a common ground only in an attenuated sense. The reader is 'on her own', as it were, when confronted with the task of interpreting a passage.

Contexts can be conceived as *rich and heterogeneous bodies of information*. In our account, we pay attention to three sources of information (but do not exclude that other aspects can be important). First and foremost, a context includes the information given by *previous discourse.* This can include two subtypes of information: (the interpretation of) what has been explicitly stated and worked-out presuppositions and implicatures. It is difficult to decide what is considered previous discourse. The most straightforward solution would consist in including all the words exchanged among the relevant interlocutors before the sentence we are interested in. However, in real-life cases we do arguably restrict this vast set in some way. Again, we will not discuss this issue here and simply note that in some instances we might need to include previous conversations as part of the previous discourse, or entire epistolary threads, etc.

Second, and especially important for interpretation in oral exchanges, the context of interpretation includes *perceptual information* about the conversational setting or about the support on which a written sentence is presented. That cognition, and particularly our linguistic behaviour, is a situated phenomenon is not a novel claim. Philosophers of language and linguists have made room for the roles of perceptually

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16 There are contexts where the same sentence could be given a metaphorical interpretation. Imagine that it is uttered by a professor who complains to one of her colleagues about the budget cuts the university has recently suffered and the consequent low quality of the research done at the university. She says things like: 'We have become an educational centre, but this is not what the university was supposed to be. We are a research centre. But nobody is doing research anymore, there is no money for it. Where is the university now? I can't see it'. The child example is inspired by an example by Ryle (1949).

gathered information in the resolution of indexicals and other referential expressions. Lately, the cursor has moved even further, with proposals capturing perception of iconic gestures and of nonlinguistic events as having specific roles to play in the structure and dynamics of discourse context.[17] We will not make specific commitments here as to how specific the perceptual information gathered by the interpreter should be (aspects of objects, relative position, events, etc.), but simply claim that some such information may be gathered in the form of propositions the interpreter could express.[18]

Third, interpreters often have recourse to what we will call *background information*, that is, general knowledge they rely on when interpreting an utterance. That children often make category mistakes is a piece of background information, for example. We would also consider under this heading information about the speaker or writer—who she is, what kind of work she writes, and so on, that is, information concerning the identity of our interlocutor and the sort of discourse she is proposing to engage in. More specific information can be used in the interpretation of literary texts. Imagine, for instance, a student in a library reading the two opening verses of Garcilaso de la Vega's Sonnet XXIII:

(4) While rose and lily / the colour is shown in your gesture.

The student could use the knowledge acquired during a lesson on Renaissance poetry in order to interpret Garcilaso's poem. Moreover, she will probably combine that background information with information obtained in the library (that the book was on the 'Renaissance poetry' shelf) and with previous discourse.

Let us add a word here about our interest in a variety of settings in which utterances can be produced.[19] Metaphor identification takes place in a myriad of different settings: ordinary conversations, novels, published correspondence, poetry,

17 Cf. e.g. (Lascarides and Stone 2006; Stone, Stojnic and Lepore 2013; Hunter, Asher and Lascarides 2018).

18 Why should we require that perceptual information be gathered in propositional form? The requirement about perceptual information being gathered in the form of propositions is a methodological choice which facilitates handling this information in the framework we develop below. Granted, not all perceptual information is readily available in propositional form. However, we make the assumption that perceptual information that counts in the interpretation of an utterance can, if necessary, be formulated in propositional form by the interpreter, in particular in case she is asked to explain or justify her interpretation. (We thank one of the journal's reviewers for raising this issue.)

19 We thank one of the journal's reviewers for pushing us to clarify our position with regard to this point.

etc. Does metaphor identification work the same, or differently, in these various settings? Our claim is that although these different settings have their specificities—in that, for instance, the contours of oral exchanges are harder to determine than the context of utterances appearing in written form, and that in oral exchanges we are unable to hear in advance forthcoming utterances, while we can flip a few pages of a book in case we wonder how to interpret a line we are reading—the decision whether an utterance is to count as metaphorical, literal, or both, works along the same lines, via contextual coherence. Previous discourse, perceptual information about conversational setting, and background information are three types of information that co-exist, so to speak. However, different kinds of discourse might impose different hierarchies on them. For instance, in online exchanges, perceptual information about the speaker might take priority over information coming from other sources. While we acknowledge that such differences might be important, we do not examine them in detail in this paper.

Moreover, contexts can't simply be unstructured sets of propositions. Discourses generally have a structure, utterances are organised around a topic under discussion. A tool at our disposal to make this notion more precise is that of Questions Under Discussion (QUD). QUD was created as a framework to model discourse structure.[20] The idea is that the utterances in a conversation are interpreted by the interlocutors relative to the question being addressed. We think of QUD as a partially ordered set of questions, questions that constitute a 'live issue'. Prominence, generality, or chronological order (or a combination of these) are different ways in which one can fix the ordering of the questions in the QUD stack. With the idea of QUD as a partially ordered set, one can for instance define a maximal question in the QUD stack (Max-QUD), which represents the most prominent issue currently under discussion.

The questions in the QUD stack, we claim, may be raised by information coming from the three sources that make up context. Let us consider first questions introduced by previous discourse. An easy way to add the polar question *whether p* to the QUD stack is to assert *p*. Even easier, one can explicitly ask a question, *p?*. In many cases, questions can be introduced indirectly. Besides directly adding questions to the QUD

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20 The QUD framework was originally proposed by von Stutterheim and Klein (1989) and van Kuppevelt (1995) as a general approach to the analysis of discourse structure, in particular regarding topicality. Van Kuppevelt's hypothesis is that 'a discourse derives its structural coherence from an internal, mostly hierarchical topic-comment structure.' The relation of subquestionhood is introduced as a technical notion allowing to obtain a formal model of the topic-comment discourse relation. Later elaborations can be found among others in (Ginzburg 1996, 2012; Roberts 2012; van Rooij 2013). Details about how questions get introduced and removed from the QUD stack can be found in Ginzburg (2012, 4.3).

stack, assertions, as well as other speech acts, can invite certain questions. Take as an example the opening line of Kafka's *The Trial*: 'Someone must have been spreading lies about Josef K, for without having done anything wrong he was arrested one morning'. This sentence invites, at least, the following questions: Who is Josef K? What is he being accused of? Why has someone been telling lies about him? Together with previous discourse, questions can be introduced non-linguistically, i.e. via perception. Imagine two friends chatting about their plans for summer when one of them points to Russia on a map. This can be a way of introducing the question 'Would you like to go to Russia?'. Questions of different channels get interleaved in the ordering. Thus, they come together as an encompassing (though not exhaustive) record of our rich notion of context. Finally, background information can play a role in downdating some of the questions that could be raised. For instance, a student who reads *The Trial* after a course on Kafka might already have an idea about who Josef K is, and so on.

In this section, we have laid down a rich and heterogeneous notion of context, and we have suggested that it includes a topic under discussion shaped by the QUD stack that is fed by propositions coming from the different sources of information encompassed by context. In the next section, we will introduce the notion of contextual coherence based on what we have presented here.

4. Contextual coherence as a two-step assessment

We defend the following principle of coherence:

> *Principle of Contextual Coherence*: The output of an interpretation must be contextually coherent.

The key notion in our framework is that of *contextual coherence*. For an interpretation to be contextually coherent two conditions must be met. First, it must address the topic under discussion. For an interpretation to be coherent it must be on-topic, which we achieve by requiring that it be an answer to a question in the QUD stack, possibly but not necessarily the Max-QUD. Second, it must be externally consistent, that is, the interpretation must tie in with the propositions coming from different sources of information which constitute context. Interpretations must not contradict contextually available information.

Contextual coherence, as we conceive of it, is a relation between contents. When we consider the QUD as a first constraint on coherence, we have a relation between a stack of questions and an answer: Does a candidate interpretation constitute an answer to Max-QUD or to another unanswered question in the QUD stack? When we consider the consistency of the candidate interpretation with the information contained in our heterogeneous context as a second constraint, we have a relation between one content and other contents available to the interpreter. In order to capture the content expressed by a metaphor we have introduced the notion of a minimal paraphrase (section 2.3). Recall that a minimal paraphrase is a partial rendering of what the metaphor expresses. It is minimal in the sense of not being exhaustive. Importantly, it has propositional format, and so can constitute an answer to questions in the QUD stack and be assessed for consistency with the available information in the context.

Let us start with the first condition. Typically,[21] utterances in a conversation, as well as sentences in written texts, are contributions to the topic under discussion. Thus, assuming that we have no reason to suspend this general rule, a candidate interpretation is coherent only if it contributes to the topic under discussion. (Note the 'only if': as we show below, this first requirement might not be sufficient.) Let us suppose that we have two candidate interpretations for a given sentence, (a) and (b), such that (a) is a contribution to the topic whereas (b) is not. In this case, (a) is potentially coherent and (b) is not. Going back to QUD, we can say that for an interpretation to be appropriate it must be an answer to a question in the QUD stack. This would sometimes involve Max-QUD, the maximally relevant question in the stack, but this is not a hard constraint. Sometimes (perhaps more in literature than in dialogue), a question only gets addressed, and hence resolved, after several moves in the conversational exchange.

In order to illustrate the basics of the notion of coherence, we will work with simplified contexts containing a QUD stack with only one question. Consider (5) and two contexts of use:

(5) Moscow is a cold city.

Context 1 for (5):

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21 We write 'typically' because information about the speaker or the genre might motivate a rejection of this requirement. As an example, think of exquisite corpses. Because of what we know about these texts, we don't take the contributors to intentionally address a unified topic.

A: What is the weather like in Moscow?

B: Moscow is a cold city.

An utterance of (5) can be interpreted in (at least) two different ways:

(5a) Temperatures in Moscow are low (literal interpretation).

(5b) People in Moscow are unfriendly (metaphorical interpretation).

Here, in the first context, the literal interpretation of (5) answers the explicit question. By contrast, a metaphorical interpretation of (5) with minimal paraphrase (5b) would be off-topic. It is easy to imagine a context in which the situation is reversed:

Context 2 for (5):

A: Are people in Moscow friendly?

B: Moscow is a cold city.

In this second context, a metaphorical reading with minimal paraphrase (5b) is preferable.

But whether an interpretation gives an answer to a live question in the QUD stack is not the whole story about contextual coherence. A sentence might be on topic, at a given point of the conversation, when interpreted literally or metaphorically. For an interpretation to be coherent, it must also be embeddable in the broader context in which the conversation occurs. QUD is the formal counterpart of the topic under discussion, and topics under discussion are not syntheses of all the information on the basis of which utterances are interpreted. Much background information, as well as some information about the conversational setting, is usually irrelevant to the determination of the QUD. However, it may play a role in assessing the coherence of an interpretation.

This second aspect of coherence is what we call *external consistency*, that is, consistency with previous discourse, perceptual information about the utterance setting and background information. Here we have in mind a broad notion of how an interpretation relates to those pieces of information. An interpretation is externally *in*consistent in case of logical inconsistency, material incompatibility,[22] or

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22 Material incompatibility designates a particular sort of mutual exclusiveness exemplified by the way in which, e.g., colour predicates such as, say, 'blue' and 'green' may not

presupposition failure.

One may want to further complexify this notion. What is important for us is that in requiring external consistency, we override internal consistency. Demanding internal consistency would require that the sentence is free of category mistakes, and this is not, according to us, a requirement for an interpretation to be contextually coherent. We are trying to accommodate here cases in which contextual information can explain why an utterance had better be interpreted as featuring a category mistake, witness example (3) above in which the speaker is a child. Here, the interpretation of (3) involves a category mistake which is externally consistent with the contextual information one has about the speaker.

Consider as well a new context for (5):

Context 3 for (5):
A: Why didn't you enjoy your trip to Moscow?
B: Moscow is a cold city.

Both the literal and the metaphorical interpretation of B's utterance (indirectly) answer the question raised by A. But suppose that A knows that B comes from the Russian Taiga, where temperatures are far lower than in Moscow. In this case, A would have reasons not to favour the literal interpretation, and instead be inclined to the metaphorical one. Although the proposition *that B comes from the Russian Taiga* is not inconsistent with the proposition *that temperatures in Moscow are low*, these two propositions plus some background information lead to an inconsistency (in our broad sense). One could reason as follows: A comes from the Russian Taiga, in the Russian Taiga temperatures are very low, people from the Russian Taiga wouldn't think that temperatures in Moscow are low. Here is where we reach an inconsistency: that people from the Russian Taiga wouldn't think that temperatures in Moscow are low is inconsistent with taking B, who comes from the Russian Taiga, to think that temperatures in Moscow are low.[23]

Because of cases like this, we think that coherence involves more than what is encoded in the QUD stack.[24] Interpretations that contradict accepted pieces of

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simultaneously apply to a clearly delineated patch of fabric.

23 This kind of reasoning is, of course, fallible, in the sense that it can lead to a wrong interpretation of what the speaker means. Actual speakers can fail to be contextually coherent. And background information can turn out to be false.

24 Here our account differs from other theories that use QUD to explain context-dependence, such as the one found in Schoubye and Stokke (2016). For the identification of the figure of

information are externally *in*consistent, and by consequence incoherent.[25]

External inconsistency explains why semantic deviance, or internal inconsistency —paradigmatically in the form of a category mistake—is usually used as a sign or cue that the utterance is to be interpreted as a metaphor. The reason is that it is standardly assumed—thus a piece of background information—that when competent speakers of a language make a blatant category mistake, they do not mean their words to be interpreted in the literal sense.[26] This piece of information makes a literal interpretation of (3) in the context of Shakespeare's play externally inconsistent and thus incoherent. For all we know, when we reach the scene where the sentence appears, Romeo is a competent, cooperative speaker, and so it would be odd to interpret the scene as one in which he puts forward a plain category mistake. Similar considerations apply, more so, to Shakespeare himself. Thus, category mistakes provide a reason not to interpret adult, competent, cooperative speakers literally.

In this sense, our proposal sees semantic deviance as one of the elements that play a role in interpretation. However, in contrast with deviance theories, in our view it is coherence rather than deviance that plays the primary role. The presence of a category mistake might make the literal interpretation incoherent, but it does not, of itself, warrant a metaphorical interpretation. It could be the case that the metaphorical interpretation is also incoherent. In the end, whether a metaphorical interpretation is admissible depends on whether it is coherent with the context. Although we might take the category mistake as a sign that an utterance is not literal, further evidence is needed to decide whether it ought to be identified as a metaphor.

Given that external consistency is consistency with the information that the interpreter has, coherence is relative to informational states. We take an interpretation to be coherent relative to a context. Thus, an interpretation might be coherent for one interpreter (given the information that she has) and not for another, in case the

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speech, QUD are sometimes insufficient. Other arguments against QUD being the sole foundation to work out discourse coherence are offered by Hunter and Abrusán (2017).

25 In practice, the contextual dynamics can be more complex. An otherwise coherent interpretation which is in conflict with a piece of background information might provide the grounds to reject a piece of background information. To deal with these cases we might need to consider degrees of coherence, a topic that goes beyond the aim of this paper.

26 We have already argued that this assumption is not always in place. Sometimes what seems to be a category mistake is indeed one. For instance, it is also a piece of background information that some people's utterances, e.g. young children's, can simply be internally inconsistent, as seen in example (3). This is also the kind of possibility that one should seriously take into account in scenario 2 for example (2), which challenges our background assumption that (grown-up) speakers are competent and cooperative. Even if cases that defy this assumption may seem rare, there are such situations, and the corresponding awareness partly guides our interpretations.

informational state of this second interpreter differs in some respect. Also, it is important to note that coherence is non-monotonic: adding new information might turn a coherent interpretation into an incoherent one.

How do the two conditions on coherence add up? Condition 1 is necessary but not sufficient; condition 2 is also necessary but not sufficient, and it is secondary to condition 1. This means that an interpretation might be incoherent either when it does not address at all an issue in the QUD, or when it does but when it is not externally consistent. The two conditions are jointly sufficient.

We have stated above a Principle of Contextual Coherence. It is important to note that this principle has two corollaries. The first is that contextually incoherent interpretations must be avoided. The second is that more than one interpretation can be coherent. When this happens, there are multiple admissible (or correct, or appropriate) interpretations. In section 5.2, we show that this feature of our framework plays a key role in explaining twice-apt metaphors.

So far, we have introduced the basic framework. In what follows we sketch a potential extension. Simple as our conception might seem, it can be used to make sense of an idea of comparative coherence. Any two available interpretations for an utterance can be compared with respect to the coherence they afford. The basic notion that we have introduced can be further developed so as to make room for comparisons.

Regarding the first condition, two interpretations might be on-topic, but one might be a better fit on the QUD than the other. Questions in the QUD stack may be answered in different ways. After all, the QUD stack is a partially ordered set of questions. Thus, other things being equal, for any two competing interpretations of an utterance, the interpretation which answers a question in the QUD fully (instead of partially) and/or which answers the more prominent question will be judged more coherent.

Concerning the second condition on coherence, let's suppose that two interpretations are equally coherent with regard to their relation to the topic under discussion. We could find that, for instance, the interpretation that is couched in a broader, better informed reconstruction of previous discourse, would be more coherent. This idea of a varying robustness of contexts of interpretation gives some footing for comparisons.[27] As regards perceptual information, it seems that in oral exchanges, interpretations which accommodate features of the interlocutors or about

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27 We borrow the term 'robust' as well as the idea that contexts of interpretation vary in robustness from Stotts (2021).

their proximal environment will be deemed more coherent than interpretations which do not accommodate such information. Finally, all other things being equal, an interpretation might be deemed more coherent than another in case the former accommodates more background information than the other.

Our indications about comparing interpretations as regards their coherence are, needless to say, only preliminary. We do not explore complex cases in which one would compare interpretations with a complex balance of the different aspects which constitute coherence. For instance, the case of two interpretations, one of which is a partial answer to a question in the QUD stack, the other one being a full answer, but the partial answer being better attuned to the background information about the goal of the conversation. For another thing, we have assumed that all bits of contextual information have equal weight. However, different kinds of discourse might impose different criteria. Perhaps online conversations admit some inconsistencies with respect to what has been previously uttered, and information about the setting takes priority over previous discourse. As for literary works, the opposite is possibly true. Moreover, disagreements about how to weigh the elements in the context are possible. We believe that such differences should be studied in detail, but this goes beyond the aims of the present paper.

5. Analysis of examples

5.1. A 'classical', semantically deviant example

We put our framework to work by analysing an example of an utterance (6), which is rendered coherent via a metaphorical interpretation, where the literal one seems not to go through.

(6) Ambassadors of desire.

Previous discourse. The immediate context is a letter:

October 1991, Haute Savoie
Kut,
All that you say about fur makes me think of his dogs. Was the old man by any chance accompanied by a dog?
I think he loved dogs. Perhaps they calmed or encouraged him. Were they

witnesses? Witnesses he could trust. Dumb, dumb witnesses. Perhaps it sometimes happened that whilst painting with his right hand, with his left he ferociously stroked one of his dogs. The fur as company for his fingers, and the dog shifting its weight as his arm moved!

At that time, it was something of a fashion to put dogs into paintings. One finds them in Rubens, Velázquez, Veronese, Cranach, Van Dyck … Amongst other things they were a kind of go-between between men and women. <u>Ambassadors of desire</u>. [Our underlining.] They represented (according to their breed and size) both feminity and virility. They were almost human—or they shared the privacy of humans—and yet they were guileless. They were also randy. Randy and nobody could raise their eyebrows—because, after all, they were dogs! (…)

(Berger 2015, 71)

Perceptual information about the support on which this written utterance is presented to us. In this excerpt of a letter, John Berger writes to his daughter Katya (nicknamed 'Kut' by her father) 'about looking at the paintings of Titian today' (Berger 2015, 67). We learn this, since we have access to the relevant book (Berger 2015) and we can flip the pages preceding the one featuring our quotation. Excerpts of the correspondence between John Berger and his daughter were first published by Berger and Andreadakis (1993) and then published *in extenso* in (Berger and Berger Andreadakis 1996, 2003), as we learn in (Berger 2015, 504), in the 'Acknowledgements' section at the end of the book. A small selection of their correspondence was included in (Berger 2015, 12, 67-80) from which the quotation above was taken (page 71), the heading of chapter 12 of the book is 'Titian (? 1485/90-1576)'.

Background information. Here is information that we, the authors of this paper, have access to. From the heading of chapter 12 in (Berger 2015), 'Titian (?1485/90-1576)', and from the format of the rest of the chapter headings of this book, we gather that we have here an indication of Titian's lifespan. We know that Titian was a Venetian artist, a painter of the Renaissance, who worked in Italy and elsewhere in continental Europe. We can situate Rubens, Velázquez, Veronese, Cranach, Van Dyck roughly along those lines, as painters who were active in continental Europe in the XVI-XVII centuries. We have a general idea of the sexual mores of that time, and

about the moral taboos dominating pictorial representation back then.[28]

Working out the QUD for sentence (6) given the context as specified above. The first step in our framework requires that we pin down the QUD shaping the topic under discussion with respect to which sentence (6) appears, based on the context available to us as interpreters.

The sentence in (6) appears in the third paragraph of the letter. The first sentence in the first paragraph indicates this letter is not the first in the thread, the possessive adjective 'his' raises a first question for our QUD stack: Whose dogs are being referred to? A question is explicitly asked in the second sentence which makes the first question in the QUD stack more precise: Who is the old man who was perhaps accompanied by a dog? Even though previous discourse as such does not settle this question, we can relate it to the title of the chapter in which the letter is printed, and suppose that the old man is Titian.

New pieces of information show up in the second paragraph. We will focus on the phrase 'Perhaps it sometimes happened that whilst painting'. This seems to address the issue raised by the question explicitly asked before this phrase 'Were they witnesses?', and it tells us more about the identity of the old man: dogs may have been witnesses of the old man while he painted. It is suggested, then, that the old man was a painter. This reinforces our assumption that the old man in the first sentences of this letter might be Titian.

From the first sentence in the third paragraph, we learn that at a certain point in history, the time during which the old man painted, dogs featured in paintings. A new question is raised: Why did dogs feature in paintings at that time? In the second sentence we get a list of proper names. Even if the interpreter does not have background knowledge about these people, he can interpret the second sentence as simply saying: One finds dogs in paintings by Rubens, Velázquez, Veronese, Cranach, Van Dyck … With background knowledge like the one we have, we can situate Titian, if he is the old man, as belonging to the time when Rubens, Velázquez, Veronese, Cranach, Van Dyck were active as painters.

Now we get to the third sentence in the paragraph. It relates to the question: Why did dogs feature in paintings at the time when Rubens, Velázquez, Veronese, Cranach,

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28 Note that not every interpreter would have access to such background information: Consider a young teenager, a native English speaker, who is being given the excerpt of the letter. Although she could read the letter and even work out a minimal paraphrase of sentence (6), she might have little background information about the sexual mores and moral taboos in continental Europe during the XVI-XVII centuries.

Van Dyck and possibly also the old man, Titian, painted? We see a partial answer: at least sometimes, they are there as a 'go-between between men and women'. This introduces new questions to the QUD stack, such as: Why was such a 'go-between' necessary? What kind of 'go-between' were dogs? What were they the vehicle of? With background knowledge like the one we have, we can think of the sexual mores of that time, and the moral taboos dominating pictorial representation back then.

We get to (6), 'Ambassadors of desire'. To interpret this sentence, a first operation is to retrieve the implicit subject and verb. We already found elements in the previous discourse to complete this phrase to say: Dogs are ambassadors of desire. Let's briefly look at the terms appearing in the predicate: 'ambassadors', 'of', 'desire'. How to interpret 'ambassadors'? An ambassador is a public official who represents the interests of a country and its citizens in foreign land. How about 'desire'? It stands for attraction of some sort, sexual or other. Given the sentence right before the underlined one, where we hear about a go-between between men and women, we have reason to think that desire here is sexual.

Can a dog be an ambassador? Are there ambassadors of desire, literally speaking? Well, given that desire is not a country or a territory, at least not from the point of view of sociopolitical organisation, external consistency seems to exclude this possibility. A literal interpretation would attribute an implausible category mistake to the writer, who we know to be John Berger, an art critic, novelist, painter and poet. It seems that we will be better off, coherence-wise, with a reading of 'Ambassadors of desire' which escapes the unappealing picture of barking diplomats.

In 'Dogs are the ambassadors of desire', we first need to figure out 'ambassadors of desire' and then ask ourselves how we can predicate that of dogs. An ambassador represents the interests of a foreign country in a different territory. So, if desire requires an ambassador, that must be because sexual desire doesn't belong in the paintings of Titian, Rubens, Velázquez, Veronese, Cranach, Van Dyck, background knowledge we have as interpreters of this letter. An ambassador represents countries, not desire, so what we need is the representing character of an ambassador, something that acts like a delegate of sexual attraction. Then we get to the implicit subject of (6): 'dogs'. Dogs might act as delegates of sexual attraction because of their character (ferociousness) and/or because of their physical features (fur) as described in the preceding discourse. So, if sexual attraction could not be depicted in paintings at that time, dogs were there to act as impersonators or deputies of desire in the foreign land of pictorial representation, shaped by the sexual mores of that time. Putting things

together, this sentence says more or less that dogs are representatives of sexual attraction in the paintings of XVI-XVII continental Europe.

Suppose that the minimal paraphrase of a metaphorical interpretation of (6) is:

(6a) Dogs are pictorial representatives of sexual attraction between men and women in XVI-XVII European paintings.

Contextual coherence, Cond. 1. Does (6a) say why a 'go-between between men and women' was necessary? No, not really. (This is an element we can elaborate on given our background information but it is not given by the minimal paraphrase we arrive at.) But it does seem to address the other two questions proposed above: What kind of 'go-between' were dogs? What were they the vehicle of? And also: Why did dogs feature in such paintings?

Contextual coherence, Cond. 2. (6a) is externally consistent. It is consistent with previous discourse, with our perceptual information, and with our background knowledge.

As a conclusion, the metaphorical reading is coherent: it answers some questions in the QUD and fits previous discourse and background information. We get a reading that gives more sense to the presence of dogs in Titian's paintings and those his contemporaries, the history of their production, the depictions and sociopolitical circumstances of that time and that region. These elements have to do with background information, not provided by the discourse as such, but possibly available to a somewhat educated reader.[29]

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29 A reviewer's concerns lead us to note here that we do not claim that this somewhat educated reader's interpretation would be the same as, or a better interpretation than, the one that Katya Berger Andreadakis, the addressee of this letter would work out. Although we cannot possibly provide such an interpretation ourselves, we can suppose that it might differ from ours given that their correspondence is initiated by Katya, who sends a postcard to John Berger featuring a reproduction of a painting by Titian, to which she writes 'What do I think about Titian? In one word on a postcard: flesh.' She has access to specific perceptual information we do not have access to, since we do not know which painting by Titian was reproduced on the postcard. The flesh she refers to, is it an animal's? Is it human? Plus, she ends the letter previous to the one in which our example (6) appears with a piece of day-dreaming where she sees herself 'naked on a canvas in the exhibition', with 'a dog at [her] side'. Could this contribute to produce a more specific reading, one where dogs are the ambassadors of her desire? We do not know this, and yet, this does not run against our working out of example (6) above.

5.2. A twice-true case

The following is an example of a twice-true metaphor (in our sense, cf. fn. 6 above):

(1) I have to get out, I can't breathe here.

Our discussion below will lead us to see whether both of these readings are right, given the evidence available:

(1a) The speaker has to leave the space she's in because she suffers from dyspnoea (literal reading).
(1b) The speaker feels confined (metaphorical reading).

Previous discourse. Let us put (1) back into the context of the book *Marsmädchen* by Tamara Bach (2003) where it originally appeared, in the first paragraph of section 5, to be precise:

I have to get out. I have to do something, now, immediately. The room is too small, it's afternoon again, and it's always the same: too similar, too small. Not just my room, heck, the whole house, this city. I have to get out, <u>I can't breathe here</u>. [Our underlining.]

Here is a gist of what comes before section 5: The novel is about a teenager, Miriam, who falls in love with her friend Laura. One topic under discussion concerns Miriam's feelings in reaction to an oppressive environment.

Perceptual information. Let us incorporate information available in our perceptual surroundings, such as the one available on a retailer's website showing a description of the book (the procedure may take different shapes, depending on such things as whether or not you have a physical copy of the book in front of you):

Novel

Fiction

Manuscript was awarded the Oldenburger Kinder- und Jugendbuchpreis

Background information. Let us bring general knowledge into the picture such as: 'Children and youngsters are likely to identify with a book's main character or

narrator.'

Working out the QUD for sentence (1), given the context as specified above. The first sentence raises the question: Where is the character at hand? Why does she have to get out? The third and fourth sentences seem to address the first of these two issues. Note that three spaces, one contained in the other, are qualified as small. A city, unlike a room, is normally an open (albeit possibly crowded, polluted) space. We cannot say whether 'here' in (1) refers to the city, rather than the room, but if it refers to the city, then oxygen in such a space is available. Thus, when sentence (1) is uttered, previous discourse rules out a situation like the one we envisaged in our introductory remarks. The sentence is not uttered during a fire in a building by someone trying to get out. A literal reading seems to be off-topic. The live issue is, then: 'Why does the character of the novel have difficulty breathing in those spaces?'

Previous discourse in the book enlarges the setting: Miriam's feelings for Laura raise the question: How does it feel to be a teenage girl in love with another girl in an oppressive environment? Perceptual information situates this novel as addressed to young readers, which seems to confirm this last question as the live issue. Thus, the metaphorical reading looks like the coherent option here; it is on-topic and it is consistent, not only with previous discourse, but also with the other elements from context we have specified.

(1b) The speaker feels confined.

Thus, once again, QUD and external consistency impose constraints on the identification of figures of speech, such as, in the case at hand, metaphor.

5.3. Twice-apt cases

Let us have a look at an example by Lynne Tirrell:

(7) There's a storm brewing.

Here is the paragraph where this utterance features:

Consider, for example, the case of the company president who looks out
the boardroom window at a sky full of stratus clouds just before meeting

with the company's union labor leader. The company president says to her assistant, <u>'There's a storm brewing'</u>. [Our underlining.] There is no incongruity between a literal interpretation of 'storm brewing' and this context […]. But the figurative interpretation of 'storm brewing' is appropriate as well. (Tirrell 1991, 355-6)

The notion of coherence introduced in section 4 can be used to account for cases in which two interpretations (one literal, one metaphorical) are appropriate. In our view, there are at least two kinds of scenarios that give rise to twice-apt metaphors.

First, the QUD of the context might contain several questions, with the literal and the metaphorical interpretations addressing different ones. Assuming that none of the interpretations is inconsistent with the previous discourse, perceptual information, or background information, both of them will be coherent. This is precisely what happens in Tirrell's example. As it is described, the conversation between the company president and her assistant plausibly involves two questions. On the one hand, since they're about to have a meeting with the union labour leader, a first topic under discussion arguably involves that meeting ('Will the meeting go smoothly?' or perhaps 'Should we be prepared for a hard meeting?'). On the other hand, when the president looks out the window a new topic is introduced ('Will there be a storm?').

Second, the two interpretations might address the same topic and be externally consistent. To illustrate this, consider the following excerpt from Chimamanda Ngozi Adichie's novel *Americanah* (2013, 1):

Princeton, in the summer, smelled of nothing, and although Ifemelu liked the tranquil greenness of the many trees, the clean streets and stately homes, the delicately overpriced shops, and the quiet, abiding air of earned grace, it was this, the lack of a smell, that most appealed to her, perhaps because the other American cities she knew well had all smelled distinctly. Philadelphia had the musty scent of history. New Haven smelled of neglect. Baltimore smelled of brine, and Brooklyn of sun-warmed garbage. But <u>Princeton had no smell</u>. [Our underlining.] She liked taking deep breaths here.

The utterance we will focus on is (8):

(8) Princeton had no smell.

This sentence, in the quoted context, can be interpreted as a literal claim or as a metaphor:

(8a) Princeton was devoid of any odour, it lacked a quality that human beings perceive with their noses (literal interpretation).

(8b) Princeton evoked no particular thought (metaphorical interpretation).

Although we admit that this might be controversial, we deem it reasonable to interpret (8) in the excerpt quoted as a twice-apt metaphor. In particular, we have here two interpretations addressing the same question in the QUD and that are externally consistent. As for the topic, the paragraph is about Princeton and Ifemelu's perception of it. The first sentence introduces a question to the QUD ('What was Princeton like?'). Both (8a) and (8b) address this question, and give different answers. Second, both interpretations are externally consistent and, in particular, consistent with previous discourse. The forthcoming discourse could speak against one of them.[30] Imagine, for instance, that the next paragraph explains that Princeton reminded Ifemelu of the town where she grew up. This piece of information would be inconsistent with the metaphorical interpretation. However, taking only into account the paragraph where the sentence appears, both interpretations seem coherent.

6. Afterthoughts

Let us mention two potential overgeneration problems. It could be objected that our account faces a threat of overgeneration in the sense that it predicts that some interpretations, that should not be counted as appropriate, are contextually coherent. First, it could be argued that we run the risk of conflating the presence of a metaphor whose literal meaning does not lead to pragmatic mismatch with the presence of a twice-apt metaphor. Take as an example a non-semantically deviant sentence S in

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30 Decisions about how to interpret an utterance are defeasible. Forthcoming discourse can lead to revising our decisions, both in oral and written settings. Granted, access to forthcoming discourse is radically different in oral vs. written settings, as already suggested in section 3 above. One can flip the pages of a book to search for hints on how to interpret the current utterance, one cannot do the same in oral exchanges. However, in both written and oral exchanges, information obtained as we move along may lead us to modify our prior decisions on how to interpret an utterance.

context c. Suppose that S is best seen (pre-theoretically) as a metaphor. Suppose, further, that it is externally consistent not only in its metaphorical sense, but also as a literal claim. The problem is that in our framework S (in c) could also count as a literal claim. The reason is that in the standard QUD framework it is very easy to introduce questions to the QUD stack, and so the literal interpretation could easily meet condition 1 as well. For instance, questions in the QUD stack can be introduced by accommodation (Roberts 2012). The question *p?* can be introduced by asserting *p*. Thus, one could assume that S introduces, let's say, a literal question corresponding to its literal meaning and our account would thus wrongly take S (in c) to be a twice-apt metaphor. This could be what is going on in example (7). When the director says 'There's a storm brewing', she thereby accommodates the literal question 'Will there be a storm?'. But, the thought goes, should we really take that utterance as literal, merely because it happens not to be pragmatically deviant? Note that there are more dramatic examples. When someone utters 'Moscow is a cold city' in an obviously metaphorical sense, nothing prevents the interpreter from accommodating as well a literal question ('Is Moscow a city where temperatures are low?'). This worry is reminiscent of Grindrod and Borg's (2019) circularity threat.[31] Our reply is that, in our framework, questions are not simply introduced by accommodation. They are inferred from contextual information, and this contextual information is not limited to previous discourse. Thus, in order to introduce a question to the QUD stack, the questions must 'fit' the available information, so to speak. In example (7), the director looks through the window. Without this piece of perceptual information, it wouldn't make much sense to 'accommodate' the literal question. Moreover, information added later can cancel a previously coherent interpretation.

Second, there may be worries about the opposite kind of overgeneration.[32] It could be objected that our account predicts the identification of metaphor in cases where the speaker is just speaking literally. However, in our account it isn't that easy to identify an utterance as a metaphor. The reason is that the metaphorical reading must not only be externally consistent, but also be on-topic, that is, it must answer some question in the QUD stack. Now, the potential metaphorical interpretations of a given utterance aren't likely to fulfil this requirement. Consider an example. Imagine that the president of a company utters the sentence in example (7) addressing it to her assistant while looking through the window, on a day in which there isn't scheduled any

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31 See also (Picazo 2022) for a discussion of the problems of introducing questions to the QUD via accommodation.

32 We thank an anonymous reviewer for pointing this out.

meeting:

(7) There's a storm brewing.

Imagine, further, that the company is doing well financially, that salary raises have recently been approved and that there aren't any conflicts with the unions. The president means (7) literally, not as a metaphor, and this is also the most natural interpretation. And this is precisely what our account predicts. The reason is that the metaphorical reading is off-topic and hence discarded. It doesn't answer any question in the QUD stack (first condition for contextual coherence). Although (7) can be interpreted metaphorically, and this metaphorical reading is relevant in some contexts (as we have shown in the previous section), our account doesn't predict that it will, in fact, bear the metaphorical reading in any potential context.

What our account does predict is that utterances whose metaphorical interpretation are on-topic and externally consistent can be identified as metaphors, even though the speaker didn't intend them as such. But note, first, that competent speakers are typically aware of the topic under discussion and choose words that make speaker meaning available. This includes being on-topic. And, second, distinguishing speaker meaning from utterance content isn't necessarily a bad result. The reason is that speaker meaning can, under certain circumstances, depart from utterance content. Consider the case in which a speaker says 'Yes' in answer to her interlocutor's question 'Are you coming to my party?'. Intuitively, the speaker has said that she would come to her interlocutor's party. Now, it could very well happen that the speaker was distracted, didn't hear the question well, thought it was about Mary's party, and meant that she was going to Mary's party. In this kind of case, it would be odd to privilege the speaker's meaning over the interpretation one can extract given the Question-Answer discourse structure. Moreover, remember that our account is normative. It is focused on how idealised speakers and audiences should proceed, not on the speaker's current psychological state, and especially not when the speaker is unreasonable or wrong about contextual information.

Let us finish with some remarks about how our proposal might stand with respect to other figures of speech. Although in this paper we have focused on metaphor identification, we believe that our take on this problem could be adapted to deal with the identification of other figures of speech. For instance, in the case of metonymy—or perhaps more specifically, in the case of synecdoche—a further constraint on the

minimal paraphrase would require that there is a mereological relation between (the extension of) a term in the utterance at hand, and (the extension of) a term in the minimal paraphrase, where the candidate term in the utterance yields a category mistake repaired in the minimal paraphrase, and where both terms play a role in a live question in the QUD stack.

Another simple example would be to see the identification of litotes as requiring that a minimal paraphrase is obtained by negating or formulating the contrary of the utterance at hand; without this operation, the utterance answers a question in the QUD stack but is externally *inconsistent* with the context. With the operation of negation or finding the contrary, it still answers the same question in the QUD stack and it becomes externally consistent.

These rough examples suggest as well that metaphor identification might impose lighter constraints on interpretation than other figures of speech, such as synecdoche or litotes. Developing this in detail would, of course, merit separate articles to study, among other aspects, the relative importance of different sources of information— previous discourse, perceptual information, and background information—which are needed in each of these identification tasks.

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