Metonymy, reflexive hyperbole and broadly reflexive relationships

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I explore some relationships between metonymy and a special type of hyperbole that I call reflexive hyperbole. Reflexive hyperbole provides a unified, simple explanation of certain natural meanings of statements such as the following: *Sailing is Mary’s life*, *The undersea sculptures became the ocean*, *When Sally watched the film she became James Bond, I am Charlie Hebdo, John is Hitler, The internet is cocaine* and *I am Amsterdam*. The meanings, while of seemingly disparate types, are deeply united: they are all hyperbolic about some contextually salient relationship that has a special property that I call “broad reflexivity.” Although a few of the types of meaning of interest have metonymic aspects (or metaphorical aspects), reflexive hyperbole cannot just be explained by a straightforward application of metonymy theory (or metaphor theory). Indeed, I argue instead for a dependency in the converse direction: that much and perhaps even all metonymy is rooted – if sometimes slightly indirectly – in broadly reflexive relationships, though not usually in a hyperbolic way.

**Keywords:** metonymy, hyperbole, reflexivity in relationships

1. **Introduction**

In this article I continue an exploration of a phenomenon I call reflexive hyperbole (Barnden, 2018a), but with intensified focus on how it is and is not related to metonymy. Reflexive hyperbole is a form of hyperbole about relationships that have a very special quality, one that most relationships in the world do not have. I call this quality broad reflexivity. I here set out a previously unexplored connection of broadly reflexive relationships to metonymy, namely that the metonymy is at least typically rooted in such relationships (though not typically being hyperbolic about them). This connection may help to clarify the fundamental nature of metonymy.
Another purpose of the article is to argue that a possible claim in the other direction does not hold – it is not the case that, typically, reflexive hyperbole arises automatically out of metonymy theory. I explore this point because (i) part/whole relationships, which are central in metonymy theory, are the basis of one type of reflexive hyperbole, (ii) in a small number of special cases metonymy does automatically deliver reflexive hyperbole, and also (iii) it has been claimed that all hyperbole is a type of metonymy.

At least one type of reflexive hyperbole can be seen as an especially intense sort of metaphor. This particular sort of reflexive hyperbole arises in utterances like *The internet is crack cocaine* and *John is Hitler*, taken to mean respectively that the internet is remarkably like crack cocaine and that John is remarkably like Hitler. This connection to metaphor is explored in detail in Barnden (2015, 2017a, 2018a). There I argue that existing metaphor theory does not automatically provide a “remarkably like” meaning, and reflexive hyperbole concerning likeness counts as a specially intense type of metaphor, requiring special explanation. Because of the present article’s focus on the metonymic ramifications of reflexive hyperbole, it does not go into that already explored, occasional connection to metaphor.

Other types of reflexive hyperbole arise in, for instance, *Peregrine is the department*, taken to mean that Peregrine makes a remarkably large (perhaps overwhelming) contribution to the department, and *When Sally watches James Bond film, she becomes James Bond*, taken to mean that in watching such films Sally mentally identifies with James Bond remarkably intensely. These utterances are thereby being taken to have intense meanings concerning certain relationships between two mentioned things. The relationships in these particular examples are, respectively, *Contributing-to as a Part* and *Mental Identification-with*. Similarly, the examples in the previous paragraph were taken to have intense meanings concerning the relationship of *Likeness*. Further relationships that can feature in types of reflexive hyperbole are studied below.

I claim that the intense meanings that have been mentioned are hyperbolic, in a special way that arises because the relationships in question have the special quality of being broadly reflexive. A relationship is broadly reflexive when (at least) most relevant things bear the relationship to *themselves* to an extremely high degree on the relevant scale, at least under normal circumstances. For instance, *Likeness* is broadly reflexive because anything (of any sort) is like itself to the maximum possible degree of 100%, whatever the particular sort of likeness that might be involved (a matter that is governed by specific discourse circumstances and context).

Sections 2 and 3 below illustrate the phenomenon of intense meanings such as above, and explain the attendant theory, called *Reflexive Hyperbole Theory*.
These sections summarize parts of Barnden (2018a), but clarify some matters and make some detailed analytical adjustments and extensions. Section 4 extends a line of argument started in Barnden (2018a), about whether reflexive hyperbole is simply an application of existing metonymy theory, without the need for special additional theory. I refute this possibility. Section 5 proposes the entirely new claim mentioned at the start of this Introduction, namely that metonymy is, at least typically, rooted in broadly reflexive relationships. It is just that reflexive hyperbole exploits these relationships very intensely, whereas metonymy does not do so, typically.

In mentioning metonymic patterns (schemata) below, such as part for whole, I cite a number of sources, but saliently a database of patterns and examples being developed by the Cognitive and Functional Linguistics research group headed by Antonio Barcelona at the University of Córdoba (Barcelona 2018, 2019). I am very grateful to him for arranging pre-public-release access for me to this valuable resource. With his permission, and noble tolerance of punning, I cite the database as CórDaBa for brevity (DaBa for DataBase, but also Ba for Barcelona).

A point about style: To avoid cumbersome expressions I often use the new general-neutral pronouns ze [nominative], hir [accusative and genitive], and hir-self.¹ I hope this is not too jolting at the present stage of pronoun evolution.

2. The phenomenon: Equations and heightened relational meaning

2.1 Examples of equative sentences

Consider the following examples. (When attesting references are not given, items are invented instances of common usages.)

(1) John is Hitler. [Abstracted from comments submitted to a quiz website.]²
(2) Sailing is Mike’s life (OR equivalently: Mike’s life is sailing).
(3) “[The mentioned underwater sculptures] literally become the ocean. They wear away, erode into liquid, and plant life spreads itself across them.” [Elder 2009]
(4) “[Fans] are money, literally, in [the celebrities’] pockets [through buying their books etc.]”... [AllAboutTRH Newsletter, 2013]

¹. https://wou.edu/wp/safezone/pronouns/
². http://www.gotoquiz.com/how_much_like_hitler_are_you/comments.html (accessed on 23 March 2012). The original example is no longer present, but (1) reflects a common way of talking.

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Daniel Craig is James Bond.

"[For people of my generation] Kingsley Martin, in a certain sense, was the New Statesman." [From the Oxford English Dictionary at www.oed.com]

Gothic architecture is tall pointy arches.

Whenever Sally watches a Batman film, she turns into Batman.

“I am Charlie.” [Said by many³ after the terrorist attack on the Charlie Hebdo magazine]

“I am Amsterdam.” [Displayed extensively in Amsterdam]⁴

The first or only sentence in each example is “equative” – it has two noun phrases equated by the verb to be, or by dynamic versions to become or to turn into.⁵

2.2 Assumed meanings of the examples

In suitable contexts, one plausible meaning for each of (1–9) is as follows. I defer (10) until Section 2.6.

Sentence (1): John has [at least] a remarkably high degree of likeness to Hitler.
Sentence (2): Sailing makes an [at least] remarkably important contribution to Mike’s life as a part of it.
First sentence of (3): The sculptures attain [at least] a remarkably high degree of integration with [=enmeshment with] the ocean. [See comments below on the particular context.]
First sentence of (4): The activities of the fans, in [at least] a remarkably strong way, lead to money for the celebrities. [See contextual comments below.]
Sentence (5): Daniel Craig is [at least] remarkably effective when acting the character James Bond.
Sentence (6): The editorials etc. by Kingsley Martin [a former editor of the New Statesman magazine] were an [at least] remarkably important expression of the spirit of the magazine.

3. Said in various languages, but from the original French Je suis Charlie. But note Volokh (2015) on an ambiguity in the French original, which can also mean that I follow Charlie.

4. Also discussed in Stamp (2012) and Travel Guide (n.d.).

5. Barnden (2015) discuss the way equative sentences or clauses can appear in “corrective juxtapositions,” as in John isn’t simply like Hitler, he is Hitler and Sailing isn’t just a part of Mike’s life – it is his life. Also, the emphasizing of copulas such as by capitalization (cf. “is” in some examples) often arises in discourse, but is not a generally obligatory aspect of utterances with Heightened Relational meaning.
Sentence (7): Tall pointy arches are an [at least] remarkably good *case of* Gothic architecture.
Sentence (8): When watching a Batman film, Sally adopts an [at least] remarkably high degree of *mental identification with* Batman.
Sentence (9): The speaker *feels [or: has] solidarity* with the Charlie Hebdo magazine staff, to [at least] a remarkably strong degree.

I will call such meanings *Heightened Relational* meanings. This labelling does not in itself preclude simultaneous classification as other types of meaning, such as hyperbolic, metaphorical or metonymic.

The “at least” is included in each meaning because the intensity of what is being said can often be higher than what might be suggested by the word “remarkably.” This is especially so in examples like (2), where a more accurate rendering in many contexts would be that sailing occupies an *overwhelmingly* important part of Mike’s life, leaving other interests to be of minor importance.

Some of the examples require a closer look at their contexts. A fuller version of (3) is

... Jason de Caires Taylor’s underwater sculptures literally come to life. ... To me, ... over time these works aren’t just displayed in the ocean, they literally become the ocean. They wear away, erode into liquid, and plant life spreads itself across them.

Thus, some of the material of the sculptures gets dissolved or mixed into the water, and material native to the ocean becomes joined to remaining solid material of the sculptures. That is the motivation for the interpretation in terms of “integration”, which here can also be read as “enmeshing.” The sculptures and ocean stay to some extent as separate, but to a remarkable extent as having an overlap or enmeshment. Notice that to the extent that each sculpture is by itself an internally integrated object, it is fair to say that it *as a whole* becomes integrated with the ocean, rather than insisting that only a part of it does so.

Example (4) concerns the fact that fans enrich the “celebrities” in question – self-styled “housewives” on a TV reality show – by buying their stories, etc. I assume that the intended and contextually appropriate meaning of the example captures the easiness and speed of this enrichment, as additionally emphasized by the metaphorical phrase “*in [the celebrities’] pockets*”. This expression employs the common idiom of “*X is money in your pocket*,” which means that X leads you easily and quickly to acquiring money.

Sentence (6) is given by the OED as an example of an (embodiment or) expression sense of “to be”.

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2.3 Involvement of preparatory metonymy

Several meanings in the list in Section 2.2 are logically dependent on metonymic leaps from one or both equated items. For (4) we leap from the fans to the activities of the fans. This follows a standard metonymic pattern whereby agents and other participants in actions can stand for the action. (See, e.g., Littlemore 2015, which discusses the metonymy taxonomy of Radden & Kövecses 1999.) For (6) we leap from Kingsley Martin to his writings, using a standard PRODUCER FOR PRODUCT metonymic pattern, and from the magazine to its spirit, using a POSSESSOR FOR POSSESSED pattern. (Both patterns are in, e.g., the Radden & Kövecses taxonomy and Córdoba; and see Littlemore, 2015 for discussion.)

I call such metonymy preparatory for the purposes of this article, in that my main focus is on the “equations” that are claimed after any such leaps have been effected. In the particular meaning listed for (6), the claimed equation is between Kingsley Martin’s writings and the magazine’s spirit rather than between that person and the magazine themselves. But there are other possibilities (see Section 2.6).

2.4 Relationships involved in the above heightened relational meanings

The italicized portions of the meaning explanations in Section 2.2 indicate the relationships that the meanings are about, such as Likeness in (1) and Mental Identification in (8). In all, the relationships in the particular meanings shown are as follows:

*Likeness to*

*Contributing to as Part of* [contributing in some way to a whole as part of it]

*Integration with*

*Leading to*

*Indication of* [meaning being some sort of Sign of, including Expression-of (visually, in language, etc.), Symbol-of, Representation-of, and Acting the part of (a character in a play, film, etc.)]

*Case of*

*Mental Identification with*

*Feeling Solidarity with.*

These are just common relationships that feature in instances I have encountered of Heightened Relational meaning. I have omitted a few relationships I have encountered, and there may be further, qualitatively different relationships that I have not yet encountered. Below I suggest that any “broadly reflexive” graded
relationship can in principle provide Heightened Relational meaning (though this does not mean that it commonly does so in practice).

Also, Heightened Relational meaning can arise for indefinitely many natural special cases of the relationships listed. An example is \textit{Physically Looking Like something}, as a special case of Likeness. This arises in examples like \textit{"My mother in this photo doesn’t just look like me, she is me"} [slightly edited version of an attested example in Barnden, 2018a].

2.5 Further explanation of the relationships

Some of the relationships need further explanation, including as regards how they might be graded for intensity. I do not propose any very specific gradings, but just specify grounds on which intensities depend. In any case, I do not propose that speakers and hearers assign precise intensities, rather than just having vague impressions of them.

In \textit{Contribution as Part}, both the qualitative nature of the contribution and the matter of how it is graded for “importance” are highly context-sensitive. For instance, Sentence (2) could be commenting on the proportion of Mike’s waking hours that he spends / prepares for / studies sailing, and/or the amount of emotional investment he puts into sailing, and/or how many years of his life have involved regular sailing, etc. etc. Or consider the pronouncement \textit{“L’état, c’est moi,”} attributed to King Louis XIV of France, which can be translated as \textit{“I am the State.”} The sentence arguably conveys that the king makes a remarkably large contribution to the control of the State’s internal and external operations.\textsuperscript{6}

The notion of \textit{Leading-to} is very broad, involving any sort of causation, inference, biological evolution, etc. X leading to Y means that: if X is present [or occurring, or true, etc., depending on X’s type] at some time, then Y is or will be present [or occurring, or ...]. The intensity is a matter of the definiteness and directness with which Y’s presence arises. Definiteness concerns the likelihood of Y being present (etc.) if X is/was. Directness is of any sort that is commonsensically natural for causation, inference, evolution, etc.

\textit{Case-of} includes being a \textit{member} or \textit{sub-collection} of a collection, or an \textit{instance} or \textit{subtype} of a type, an \textit{example} of a general phenomenon, etc. The label Case-of is useful because it is intuitive and is not dependent on abstruse theoretical questions whether a given generality should be considered a collection, type, spread-out substance, etc. A convenient notion of intensity for \textit{Case of} is how rep-
resentative the case is of the generality, e.g., for Sentence (8), how representative tall pointy arches are of Gothic architecture in general. What representativeness amounts to is context-sensitive. For instance, it could sometimes be a matter of the representative case being a prototypical one; or being the most striking case in some way; or simply being the most familiar case, or the most important one in some other sense.

X Indicates Y means that if you notice or think of X then you are facilitated to notice or think of Y. The proposed intensity is context-sensitive and can involve the accuracy, definiteness and/or directness involved in the transition from X to Y.

Mental Identification is a complex and somewhat obscure notion (Cohen 2001; Igartua 2010). I take X identifying with Y to include the (at-least-)temporary, (at-least-)imagined possession, by X, of the world-view, conscious goals and conscious experiences of Y. (A few further comments are made in Barnden 2018a.) The intensity can depend on the extent of this possession at a given time, how long a given possession episode is, and/or how frequently the possession occurs.

X Feeling-Solidarity-with Y is complex and variable matter involving factors such as (again) how much X shares the world-view and goals of Y, how intensely X morally supports Y, and how much X would be prepared to help X fight back against attack.

Some of the relationships have similarities, overlap or other strong links. For example, X Indicating Y could be unpacked as the noticing of X Leading-to the noticing of Y. Feeling Solidarity may involve some extent of Mental Identification, and both relationships involve Likeness by virtue of both parties in the relationship having a similar world-view (albeit more temporarily and imaginatively in the case of Mental Identification). Acting a character involves being temporarily appearing to be Like that character, and Representation more generally may involve Likeness.

I have listed Acting separately from Representing (which is a type of Indicating) as it will be highlighted in some examples, but Acting is a special case of Representing. Case-of involves representativeness, a term that chimes with “Representing”, and indeed one type of Representation is illustrated by carpet or paint samples, which both Represent and are Cases of what they are samples of.

The notion of “solidarity”, based as it is on the word “solid”, is presumably based metaphorically on physical solidity. This could conceivably be just an etymological matter with no consequences for current understanding of solidarity. But, alternatively, an X who feels solidarity for Y might metaphorically conceive or feel himself to form a solid, integrated physical object along with Y. Feeling Solidarity may thus be a metaphorical and felt version of physical forms of Integration. I leave this as an interesting topic for future research.
2.6 Meaning variability and context-sensitivity

Sentences (1–9) could obviously have interpretations other than those listed in section 2.2. There are at least three broad types of possibility here.

First, they might not have Heightened Relational meanings at all. Sentence (9) could literally mean the speaker is someone called Charlie. Sentence (5) could mean simply that Daniel Craig is the actor of James Bond in a certain film, without implying that he is acting convincingly. The sentence could, for instance, be a response to a claim that George Lazenby acted James Bond in the film. It involves a standard style of representation-based metonymic step (discussed below) from actor to character played or vice versa. The reversed version of Sentence (2), “Mike’s life is sailing,” could metaphorically mean that Mike’s life is proceeding smoothly (without any heightened implication that it is going remarkably smoothly).

Secondly, the sentences might have Heightened Relational meanings of types different from those chosen above, in appropriate contexts. Sentence (1) could have Heightened Relational meanings about John Acting Hitler in a play, or Mentally Identifying with Hitler, rather than about Likeness to Hitler. Sentence (5) could mean that Daniel Craig is, in his own real character and life, remarkably Like James Bond, rather than being especially convincing as an Actor of Bond. Sentence (6) could mean that Kingsley Martin was the magazine staff member making the biggest Contribution as a Part to its running.

Thirdly, any one sentence might have some mix of Heightened Relational meaning types. Sentence (6) could simultaneously have both the Contribution as Part meaning just mentioned and the Expression sense listed in Section 2.2. Sentence (1) could simultaneously have a Heightened Relational meaning about each of: (i) John Acting the role of Hitler in a play; (ii) Mentally Identifying with him; and (iii) being Like him. The point is well illustrated by (10), which could justifiably be taken to mean any, some, or even all of the following, given suitable preparatory metonymies and suitable contexts:

I am remarkably Alike in spirit to the people of Amsterdam.
I am a remarkably important Part of (or Member of) the people of Amsterdam.
My activities are remarkably well Integrated with those in Amsterdam.
The typical activities of Amsterdam are a remarkably large Part of my typical activities.⁷

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⁷ Or vice versa. An important matter omitted from this article is the question of which direction the relationship can go in as compared to the order of the equated noun phrases. This issue
I am a remarkably good Case of (i.e., Example of) the people of Amsterdam. I Mentally Identify remarkably strongly with Amsterdam’s inhabitants. I feel remarkably strong Solidarity with Amsterdam’s inhabitants.

Of course, (10) is not a statement by a specific real speaker. Rather, it expresses a range of possible thoughts that the Amsterdam tourism authorities etc. would like readers of (10) to have. The particular nature of the thought depends on the temperament of the reader and the particular relationship ze has to Amsterdam (tourist, business visitor, resident, etc.).

3. The Reflexive Hyperbole Theory and broadly reflexive relationships

I propose a particular account – the Reflexive Hyperbole Theory (RHT) – of how Heightened Relational meanings arise. The account is about continuously graded relationships (or just graded relationships for short), i.e., ones that can hold to varying degrees of intensity on some continuous scale. There may be different scales for different relationships, but this is inconsequential as we will never be comparing intensities between different relationships. The minimum intensity for any relationship is zero, meaning the relationship does not hold at all between the items in question. Many of the relationships in this article, such as Likeness and Contributing to as Part of, have a natural maximum of intensity that we can always designate as 100% (or, more simply, 1). However, RHT does not depend on there being such a maximum.8

I. RHT claims the following. A Heightened Relational meaning results from taking the utterance in question as hyperbolic about the intensity of some [continuously] graded relationship.

II. There is a special type of hyperbole actually operating in (I), namely reflexive hyperbole. This type of hyperbole is possible when a graded relationship has a very special quality, namely broad reflexivity.

Claim (I) may have been intuitively obvious to this article’s reader all along. So the main interest in the theory lies in claim (II).

Before discussing these claims, which I do in Sections 3.1 and 3.2, I first need to state my views concerning hyperbolic meaning in general. Hyperbole takes

is especially evident in examples where both orders are stated, as in “I am England and England is me” [said by Noel Coward (Hoare 2004)].

8. The account can easily be generalized to allow graded relationships where the scale is a finite, discrete set of points, or is partially continuous and partially discrete. But this would complicate the presentation and seems unnecessary, at least in the present article.
many forms (see, e.g., McCarthy & Carter 2004; Peña & Ruiz de Mendoza, 2017); but I will assume that a hyperbolic interpretation of an utterance involves taking it as describing an intense circumstance by overtly stating a yet higher intensity, or overtly saying something that implies a yet higher intensity. In Matt has millions of pets, the “intensity” is the largeness of the number of pets. In the situation the speaker is describing, Matt has very many pets, but the speaker is not actually claiming that this number is in the millions. “Millions” is therefore an overt amplified intensity, compared to the actual situation. The amplified intensity can be (directly) implied rather than explicitly stated, as in saying Matt has more pets than there are grains of sand on the beach or Ken is the kindest person in the world. Also, intensity can be a matter of smallness or low position on some scale rather than largeness or high position on a scale, as in This piece of cake is microscopic. This amplifies the smallness of the cake morsel.

In interpreting Matt has millions of pets hyperbolically, hearers will typically not know enough about the situation to “leap” down from millions to land on a specific number of pets, or even to land on a broad number range. I claim that they will typically only be able to get the impression that there are remarkably many pets (though fewer than millions). This point applies yet more strongly in non-numerical utterances, such as Kenneth is the kindest person in the world. When a hearer takes this hyperbolically, ze plausibly merely gets the impression that Kenneth is remarkably kind, even though not absolutely the kindest person in the world.9

What does remarkability amount to? I believe this matter can be left entirely open, and dependent on the specific context and the views of the speaker and hearer. However, in very many cases, it seems right to say that the actual intensity of the described situation is importantly higher than what normally be expected, hoped-for or desired by speaker and hearer. See for example the proposal by Popa-Wyatt (2020). However, Watling (2020) warns us that in some types of exaggeration there is no reason to suppose there is any particular scale-point that is expected, hoped-for, regarded as standard, etc.

An intensity can be remarkable not because, or not purely because, of where it is on a scale, but instead because of the type and strength of affect (i.e., emotion or subjective evaluation) that the intensity is connected to. An example would be strong astonishment about Matt’s millions of pets. Indeed, being “remarkable,” in whatever way, is already affectual, in being a matter of at least mild interestingness. I am thus in accord with authors who emphasize the affective side of hyperbole (e.g., Brdar-Szabó & Brdar, 2010; Carston & Wearing, 2015; Colston

9. I use “remarkably” instead of the “notably” I have used in other articles. The intent is the same but “remarkably” conveys it better.
My own approach to hyperbole is, in particular, partly inspired by the mapping-based approach of Peña and Ruiz de Mendoza (2017), which makes affect central to hyperbole. For instance, the point of saying *That suitcase weighs a ton!* could be to convey how frustratingly heavy it is. Any question of how heavy the suitcase is in terms of kilograms, or even in vague terms such as “very heavy”, is entirely subsidiary to the affective message. I develop the centrality of affect in the mapping-based understanding of hyperbole further in Barnden (2017b, 2020), but the matter does not explicitly feature below other than via remarkableness.10

RHT finds it useful to allow for a formally slight but conceptually weighty extension of what a hyperbolic mode of interpretation is, going beyond current tacit assumptions. Consider, as a variant of an example above, the sentence *Mike has hundreds of pets.* It would actually be possible, though difficult and unusual, for someone literally to have hundreds of pets. It would be perfectly reasonable in some contexts for a hearer to get the impression that Mike has remarkably many pets, *and possibly even (literally) hundreds.* There is no need for a theory of hyperbole to insist that the value explicitly mentioned in an utterance, such as hundreds, is excluded as one of the possibilities that *might* hold about the real situation being described. It is simply that in many, perhaps most, cases of hyperbole, the explicit value is either logically impossible (if the number of pets were said to be infinite, for instance) or extremely unrealistic (millions in the case of pets, or kindest-in-the-world in the Kenneth example). In such cases, the hearer may need to, or may be inclined to, exclude the value. But such exclusion is not particularly a result of taking a hyperbolic interpretation; it is just a matter of an additional logical or pragmatic inference about the type of situation at hand. When a hearer’s hyperbolic interpretation does allow for the explicitly stated value holding, I say it is an inclusive hyperbolic interpretation.11

While all hyperbole seems to involve language users taking some matter as being graded in intensity, this does not mean that they have coherent views about what the intensity is based on, how actually to compare two cases as regards intensity, or ever think about specific values of value ranges of intensity for the matter at

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10. I do not claim that, in the suitcase example, a hearer necessarily comes to some mental representation that could be glossed in English as *The suitcase is remarkably heavy.* Rather, the hearer merely has a mental representation that we as theoreticians can construe as giving the hearer a sense of remarkability. For instance, it would be enough for the hearer to represent the heaviness as causing frustration on the part of someone trying to lift it. However, this subtlety need not be kept in mind in this article.

11. I have previously called it a “liberal” hyperbolic interpretation, but “inclusive” is clearer.
hand. They can do this in some cases, as when the matter at hand is the number of pets someone has. But when it comes to something like kindness, there may never be any numerically specific representation of an intensity value. Equally, when I claim that a relationship between an X and a Y can hold to degree 100%, I do not mean that people can think in terms of particular numerical values for the intensity of the relationship. I merely mean that the relationship can, in fact, hold to the maximum degree possible (irrespective of how degrees for that relationship are defined) and people can (at least dimly, unconsciously or tacitly) know that it can (and in other cases have an impression or feeling that the intensity is lower). For instance, it is a trivial fact that everything is perfectly like itself, however it is that likeness might be measured.

3.1 Hyperbole arising from strict reflexivity of various relationships

In this subsection I show that many of the relationships featuring in examples above have a property I call strictly reflexive, not merely broadly reflexive. Note carefully that strict reflexivity is a special case of broad reflexivity. I first consider some individual relationships and then discuss strict reflexivity in general. In Section 3.2 I will turn to relationships that are broadly, but not strictly, reflexive.

Likeness

The crucial point is that everything has 100% likeness to itself.

Hence, if an utterance ostensibly equates X with Y – says they are the very same thing – then obviously the utterance ostensibly implies that they are 100% alike. But hearers who consider X and Y to be different things can take their ostensibly implied 100% likeness to be hyperbolic about the actual degree of likeness.

Then, given the view of hyperbole in general that is expressed above, it is immediate that the utterance can be interpreted as saying that the actual likeness is at least remarkably high.

Integration

Similarly, anything is perfectly integrated with itself. For any Y, the integratedness of Y itself with Y is 100%. So if some sculptures are ostensibly equated with the

12. This terminology is slightly awkward. The problem is that what I am calling strict reflexivity is standardly (e.g. in mathematics) just called reflexivity, so I cannot just use “reflexivity” just to mean my broader notion. I obtained my broad reflexivity merely by loosening some strictures in the standard notion, so a relationship fitting the original, standard notion also automatically fits the broader notion.
ocean (see (3)) it ostensibly follows that they are 100% integrated with the ocean. This can be taken as hyperbolic for the actual intensity of integration.

Sentence (3) talks of becoming rather than being, so what is meant is progress towards the sculptures and ocean becoming a remarkably highly Integrated. An analogous point applies to (8) as regards Mental Identification.

Contributes as part
As is standard in theories of parthood (Varzi, 2019), any whole Y is a part of itself. What about the intensity here? Consider any part P of Y. At least if we confine attention to the types of contribution considered above (e.g., how much of the person’s time it takes up), then whatever the nature and extent of the contribution of P to Y, at least any part Q that includes P contributes to Y to at least the extent that P does, and possibly to a greater extent. So Q’s contribution to Y is automatically at least as important as P’s. In particular, we can consider Q being Y itself, and conclude that Y itself makes at least as important a contribution to Y as P does. Moreover, there are obviously no parts left over. So we can take Y’s contribution to itself to be at the absolutely maximal contribution-importance level of 100%. Thus, if sailing is ostensibly equated with Mike’s whole life (=Y), we can take that 100% to be hyperbolic, and conclude that sailing makes at least a remarkably important contribution to Mike’s life.

Note that the hearer does not need to know what the particular type of contribution-importance is involved – time proportion, financial load, emotional load, or whatever.

Leading-to, case-of, and indication-of
The relationships of Leading to, Case of, and Indicating are easily seen to work much as Likeness, Integration and Contributes as Part do, and thus to provide exactly analogous opportunities for hyperbole. Anything Y Leads to itself with 100% definiteness and directness. Any generality (collection, type, etc.) Y is the perfectly representative Case of itself. Anything Indicates itself with 100% definiteness, directness and accuracy. So the intensities here are all 100%.

The pattern so far
With each relationship above, what provided the opportunities for hyperbole about its intensity was that the relationship had a certain special quality. This quality is strict reflexivity:-

Strict reflexivity
A graded relationship is strictly reflexive when the following holds:
The intensity scale for the relationship has a maximum (100%), and if you take any appropriate entity Y (see below) then Y bears the relationship to itself with 100% intensity.13

What “appropriate” means is that Y is of the right sort for it to make sense that things can bear the relationship to it. For instance, for Likeness, any Y at all will do, because we can talk about likeness when Y is of any type whatsoever; but for Case of, Y needs to be a generality such as a type or collection in order for the relationship even to make sense.

When a relationship is strictly reflexive, then an utterance that says that X “is” Y, where X and Y are in fact different, can be taken, by implication, as hyperbolically saying that X bears the relationship to Y to degree 100%. So, the utterance can be taken as in fact claiming that X bears the relation to Y to some remarkably high degree that is (in typical discourses) below 100%.

I put it the proviso “in typical discourses” because of the following. The general point is that strict reflexivity does not prevent an X different from Y bearing the relationship to Y to degree 100%. It is true that the strictly reflective relationships featuring in this article will, at least typically, have intensities below 100% when holding between distinct items. For instance, in practice no person can be as alike to a person Y as Y hirself is. But there can be exceptions. Suppose that for the purposes of a particular discourse the intensity of a life-part’s contribution to someone’s life is being defined in terms of the amount of money the part earns for the person. Then the money-earning part (or conglomerated parts) of the person’s life would not amount to the whole of the life but would nevertheless make a 100% contribution under the mentioned measure. So a sentence such as “Tutoring is Peter’s life” in a context where size of financial contribution was at issue could be taken in a way that leaves it open that tutoring garners literally all of Peter’s income. So this would count as a case where the hyperbole is “inclusive” as above.

But whether a given plausible hyperbolic reading is inclusive or not is a matter of particular circumstances, even when in principle allowable. Suppose in a discourse the contribution intensity is a matter of how much time of the person life the life-part takes up, as might be the case when “Sailing is Peter’s life” is uttered. Some parts (e.g., breathing) that are not the whole can take up the same time as the whole, so in principle “Sailing is Peter’s life” formally allows an inclusive-hyperbolic reading as to the amount of Peter’s time sailing takes up, i.e., it allows a hearer to leave it open that it takes up 100% of Peter’s time. But it will be overwhelmingly unlikely that sailing could take up literally all of Peter’s time, so for

13. See Barnden (2018a) on how strict reflexivity is based on standard notions of reflexivity in mathematics.
practical reasons a hearer will almost certainly adopt a non-inclusive hyperbolic reading.

3.2 Hyperbole arising from broad reflexivity

There are reasons to suspect that a relationship does not need fully to meet the extreme demands of strict reflexivity in order to support some form of reflexive hyperbole.

First, strict reflexivity requires the scale of intensity to have a maximum, but hyperbole in general does not require this. There is no maximum to the ordinary number scale, as used in “millions of pets”. Even when the scale does have a maximum, a given hyperbole does not have to use it. The scale of certainty has a maximum of 100%, but a lower (though still extremely high) value can be interpreted hyperbolically, as in taking *I’m 99% certain that I mailed the letter* to mean that the speaker has remarkably high certainty. This suggests that, for the purpose of obtaining reflexive hyperbole, we should not require the relationship’s intensity scale to have a maximum, and, whether or not there is a maximum, should only require that appropriate items Y bear the relationship of interest to themselves to extremely high values, which need not be as high as the scale’s maximum value if there is one.

Secondly, it would seem enough that it usually be the case that a given appropriate Y bears the relationship to itself to an extremely high value, rather than every appropriate Y should under all circumstances do so. Then, given a particular item Y, unless there is reason to think it is unusual, we can still assume it does bear the relationship to itself extremely intensely. This is enough to allow an interpretation of “X is Y” to be taken hyperbolically to mean that X bears the relationship to Y to a remarkably high degree. The point here is no different from taking a hyperbolic interpretation of *His cough was as loud as a thunderclap*. Thunderclaps are stereotypically very loud. But, exceptionally, a given one might not be very loud even when close by, or it might be heard from a large distance. Nevertheless, we can still use the stereotypical case in the hyperbolic interpretation.

We accordingly relax the notion of reflexivity to get:

**Broad reflexivity**

A graded relationship is broadly reflexive (BR) when the following holds (with the crucial differences from strict reflexivity italicized):

For (at least) *most* appropriate entities Y, Y bears the relationship to itself to (at least) an *extremely high* degree on the relevant scale, *at least under normal circumstances*. 
As noted earlier, a strictly reflexive relationship is automatically BR. The latter is a more comprehensive category, not a contrasting one. A BR relationship that isn’t strictly reflexive is “merely” BR.

The relationship of Feeling Solidarity with is merely BR. It’s reasonable to suppose that for most people Y, they feel solidarity with themselves to an extremely high degree, at least under typical circumstances. But, the scale may have no maximum, and even if it does, a given person may not feel (at some given moment, or at any moment) solidarity with hirself at the maximum degree. Further, a given person, let’s say someone suffering from deep uncertainty about the validity of hir own goals, self-hatred, and a tendency towards self-destruction, may be deemed to have a low degree of solidarity with hirself. But, nevertheless, if we are presented with a Y for whom we have no reason to think such an exceptional situation holds, we can take Y probably to mentally identify with hirself to an extremely high degree, so that we can take “X is Y” hyperbolically to mean that X feels solidarity with Y to a remarkably high degree.

Mental Identification is also merely BR, though here I take the scale to have a maximum. An appropriate entity Y is normally a (real or fictional) person, although it could be some other sort of organism. Any normally-conscious person Y operates almost all the time with a world view, conscious goals, conscious perceptions, etc. that are, obviously, 100% like hir own world-view, conscious goals, conscious perceptions, etc. But, still, such a person can exceptionally depart from this, notably when she is mentally identifying with someone else, or in a mixed state where she is partly operating as normal and partly under the influence of such an identification. Also, there could in principle be someone who is so often mentally identifying with other someone people or fictional characters that ze can only be said to be identifying with hirself for a minority of the time. So the most we can say is that most people identify with themselves to an extremely high degree, most of the time.

We saw that strict reflexivity does not prevent an X different from Y bearing the relationship in question to Y at 100% intensity, i.e., as intensely as Y bears the relationship to itself. This then led to the possibility of an inclusive reflexive hyperbolic interpretation, under which “X is Y” leaves it open that X bears the relationship to Y at 100% intensity. In the case of a merely-BR relationship, it is equally true that it is not forbidden for an X different from Y to bear the relationship to Y as intensely as Y does to itself. But, furthermore, X might even bear the relationship to Y more strongly than Y does to itself. For a practical case, it may well be that someone X feels more solidarity with someone Y than Y does with hirself – e.g., X might do so because ze is more fiercely determined to defend Y than Y is to defend hirself. So, we potentially get an “ultra-inclusive” style of reflexive hyperbolic interpretation whereby “X is Y” is taken to mean that X has a remark-
ably strong solidarity with Y that may even be as strong or stronger than Y’s solidarity with himself. I present this possibility speculatively as a matter for future research.

3.3 Relationships that are not broadly reflexive

Broad reflexivity is a very special quality. Most ordinary relationships are not broadly reflexive, let alone strictly reflexive. Consider the formal employment relationship between people, graded by how hard the employee has to work. Most people in the UK, say, do not formally employ themselves at all, though many people do. So the relationship is certainly not BR, even if it happens to be the case that some people employ themselves and do so to extremely high intensity (they ride themselves extremely hard).

However, suppose the discourse raised a world context in which most people in a particular country were self-employed to extremely high intensity. Then a restricted version of the employment relationship, applying only to people in this context, would be BR. That would be an example of a special case of a non-BR relationship being BR.

But, conversely, a special case of a BR relationship can be non-BR. This point will be very important in Section 5. Consider the relationship of causation, as commonly understood in the ordinary world. If we assume that nothing causes itself to any degree (except perhaps allowing for free will to mean people cause themselves to a degree), then causation is non-BR. This is despite the fact that, when graded in the same way as the BR relationship Leading to, it is a straightforward special case of the latter.

This raises a subtle complication as regards some cases of Heightened Relational meaning. In the case of Sentence (4), about fans “being” money, the particular sort of Leading to from the fans’ activities to the celebrities’ money-acquisition is presumably causation. But RHT’s explanation of the Heightened Relational meaning is on the basis of Leading to being BR. So, the utterance is being hyperbolic about the Leading to between the fans’ activities and the money acquisition, not directly about the causation between them. But, given that the Leading to is at a remarkably high intensity, it directly follows that the causation is also, simply because in the particular situation the Leading to is in fact the causation.
3.4 Do all and only broadly reflexive relationships afford reflexive hyperbole?

RHT proposes that all graded BR relationships afford opportunities for Heightened Relational meaning via reflexive hyperbole. But there is a complication. With some BR relationships the utterance may need to include explicit clarification. Consider

(11) Peter doesn’t just have hair like Mike’s, he is Mike.

It is not clear that this works naturally as hyperbole about, merely, the strictly-reflexive likeness-as-regards-hair relationship (confined to people). Rather, it may tend to convey that Peter and Mike are remarkably alike in appearance overall. But one could get hyperbole about mere hair-likeness with something like:

(12) Peter is Mike, as far as hair is concerned ....

I therefore conjecture\(^14\) that we need such an explicit qualification on the “equation” when a more restrictive, but sufficiently closely related, alternative BR relationship than the one being addressed can also unsurprisingly hold in the same context. When such an unsurprising, closely-related but more restrictive alternative exists, the hearer will tend to take the utterance to be hyperbolic about that relationship, not the addressed one. In (11), the addressed relationship is likeness-as-regards-hair, and the alternative, more restrictive one is likeness in appearance overall, not just hair-wise. If all we have heard so far about Peter and Mike’s likeness of appearance is that they have remarkably similar hair, there would be no reason to be surprised if it turned out that they also looked similar overall. So the hearer would tend to take (11) to be hyperbolic about overall likeness.

As regards the converse question of whether a non-BR relationship can afford reflexive hyperbole, RHT gives a qualified No. The qualification is that, as we illustrated in the last paragraph of Section 3.3, if the non-BR relationship is a special case of a BR one then Heightened Relational meaning about the former can arise indirectly. Otherwise, the reasoning behind RHT does not work. As an illustration, consider the employment relationship from Section 3.4, and the following corrective juxtaposition: “Sally doesn’t just employ Jack, she is Jack.” I do not see that this can hyperbolically mean that Sally employs Jack remarkably intensely (i.e., makes him work remarkably hard).

Notice carefully, though, that, as always, the sentence could have some other type of Heightened Relational meaning, such as that her activities are remarkably much Integrated with Jack’s, or that she looks remarkably like him, or .... In a cor-

\(^14\) The conjecture is an improvement over a preliminary version in Barnden (2018a).
rective juxtaposition, it is not uncommon for the correction (here, “she is Jack”) to involve a relationship different from the one in the corrected claim (here, the claim that Sally employs Jack), as illustrated in Barnden (2016). That is, a correction need not be a correction of the intensity of the relationship initially claimed, but rather a switch to a different relationship.

4. Heightened relational meaning as already implied by metonymy?

Several BR relationships bring to mind standard metonymic relationships, i.e., relationships used by standard metonymic patterns. Contributing as Part brings to mind parthood relationships as in PART FOR WHOLE and WHOLE FOR PART metonymy. The Representation special case of Indication brings to mind representation relationships used in representational metonymy (Warren 2006). This type of metonymy occurs, for instance, when one refers to a segment of a painting, piece of music, etc. via what it represents (Andrew is blurry in this photo), or conversely uses the segment to refer to what it represents (I live on this red bit, pointing to a red region in a map), or refers to a dramatic character via an actor playing that character (Daniel Craig killed the glamorous CIA girl by mistake, about James Bond’s actions in a film) or vice versa (King Lear fell off the stage, referring to the actor). Case of relationships bring to mind relationships as used in MEMBER FOR CATEGORY and SUBCATEGORY FOR CATEGORY metonymy.

Accordingly, it is useful to assure ourselves that a distinctive body of theory about broad reflexivity is needed, and that such hyperbole does not just arise automatically from the use of standard types of metonymy. Section 4.1 (building on Barnden, 2018a) argues that it does not do so in general, because standard metonymy does not systematically use its metonymic relationships strongly enough. Sections 4.2 and 4.3 consider other ways of possibly casting reflexive hyperbole as metonymy.

First, there is a tricky world-versus-concepts issue to mention. I follow the line in Cognitive Linguistics that metonymy is a matter of how concepts (or parts of them, such as roles or slots) relate to each other (see, e.g., Barcelona, 2011, 2019; Kövecses & Radden, 1998; Panther & Thornburg, 2007, 2018). For instance, there is a conceptual metonymic connection between the concept of a CONTROLLED thing such as car and the concept of a CONTROLLER such as a driver. This line might seem to conflict with how relationships are discussed in this article, as being between what the concepts are about in the world, e.g., cars and drivers themselves. But there is no real tension, because under the conceptual view it is still natural (and common) to talk about particular cars and drivers themselves as being related, by virtue of the concept-level relationships. Additionally, this arti-
cle’s discussion is perfectly compatible with viewing the world relationships as merely conceptually imposed on the world by us.

4.1 Does reflexive hyperbole arise automatically out of standard metonymic patterns?

No, not in general.

There are some special cases of reflexive hyperbole that do arguably just arise automatically from standard metonymy. Consider *Joe ate the banana*. This would normally mean that Joe ate the fleshy part, bypassing the skin. So there is a whole for part (W4P) metonymic leap from the whole banana to the fleshy part. And, it also seems reasonable to say, *The fleshy part is the banana*, in the everyday context of eating bananas, without any further special circumstances being in play. This equative sentence would not normally add new information – it doesn’t make the fleshy part in the current discourse context unusually important. Thus, the Heightened Relational meaning of *The fleshy part is the banana* concerning Contribution as Part might be claimed just to arise automatically from straightforward use of W4P.

But many other cases of W4P do not behave like this. Consider the W4P in *Matt washed his car*, taken (as would be normal) to mean that Matt washed the car’s visible bodywork. It would not typically be reasonable to say *[For Matt] the visible bodywork is the car* without additional, special circumstances being in play. Such an utterance would normally add new information, making the bodywork in the current discourse context unusually important (at least for Matt). So, the Heightened Relational meaning does not arise automatically from straightforward W4P usage – such usage does not imply that the part’s contribution to the whole is important enough. This is even though, in all uses of parthood-based metonymy, the part does make an important contribution.

Similar points emerge for part for whole (P4W) metonymy instead of W4P. The term “coffee break” at a conference involves P4W in that coffee-drinking is only a part of what goes on. (I am assuming also a prior metonymic leap from coffee to coffee-drinking). Generally, other comestibles are importantly available, and there are further important activities, such as conversation. The coffee(-drinking) is centrally important and highly salient, but not to the extent that it would normally be appropriate to say *Coffee(-drinking) isn’t just a part of the break, it is the break*. This would add new information, portraying an unusual circumstance. P4W does not in general imply that the part’s contribution is important enough for Heightened Relational meaning simply to arise automatically.

So, altogether, to return to our central Contribution as Part example, (2) *Sailing is Mike’s life*, we cannot assume that the Heightened Relational meaning arises
simply from parthood-based metonymy. Such metonymy is not guaranteed to use the parthood relationship intensely enough.

A similar thing happens with many other varieties of Heightened Relational meaning. Consider Acting a character, as in (6) Daniel Craig is James Bond. There is a standard metonymic pattern that goes from actor to character, no matter how convincing or unconvincing the acting is. (6) can simply mean that the character acted by Daniel Craig is James Bond, and In this film Daniel Craig kills ten people at once without messing up his hair does not require more than that Daniel Craig be the actor who acts the part of James Bond. It does not require that is particularly good at this. So the standard metonymic pattern does not use the actor/character metonymic relationship intensely enough for the Heightened Relational meaning of (6) to arise automatically.

Similar points apply to other types of Heightened Relational meaning about Representation, as in saying That messy yellow blob in the painting just is me. Representation-based metonymy does not imply a particularly intense faithfulness of representation that would account for such meaning.

Heightened Relational meaning about Case of is also interesting here. The relevant metonymic patterns are ones with labels like member for category, subcategory for category and category for member (Bierwiczzonek, 2020; Littlemore, 2015; various patterns in CórDaBa). The whole point is that the member or subcategory is conveniently representative of the nature of the overarching category, as (arguably) illustrated when one uses “Einstein” to refer to scientific geniuses in general, or “aspirin” to refer to mundane painkillers in general. Indeed, Littlemore (2015) uses the label representative member of a class for the class for one of the patterns. Degree of representativeness (in some context-sensitive sense) is the grading proposed in Section 2.5 for Case of. Nevertheless, it is not clear that the intensity of representativeness implied by the metonymies is systematically high enough to justify saying things like A scientific genius just is Einstein and Everyday painkillers are aspirins taken as having Heightened Relational meaning about Case of (as in Example (8) about Gothic architecture). I cannot definitively resolve the issue here, but even if the intensity is high enough, all that is demonstrated is that some metonymic patterns do use metonymic relationships intense enough to provide Heightened Relational meaning automatically. It does not defeat the point that many other patterns do not.

4.2 Could we exploit the hyperbole-as-metonymy view (HaM)?

Yes, but it would not make a fundamental difference.

It has been suggested that hyperbole constitutively involves a type of metonymy (Brdar-Szabó & Brdar, 2010; also Littlemore, 2015 for discussion).
The idea is that the act of leaping down a scale in hyperbole understanding, for instance from “millions” of pets to some less intense value characterization, is a particular type of metonymic leap.

This article is neutral on whether HaM is a good approach to hyperbole. If it is, it could optionally be added to RHT. Reflexive hyperbole would then be viewed as a type of metonymy along with all other hyperbole. So, Heightened Relational meaning would become just one manifestation of metonymy.

But, of course, Heightened Relational meaning still would not just arise automatically out of current metonymy theory plus HaM. HaM exploits but does not provide any particular scale for hyperbolic understanding to leap down. So HaM cannot explain the hyperbolic opportunities raised by broad reflexivity – RHT is needed for this.

4.3 A general strategy? – Tailor-made, heightened metonymic patterns

Given a particular type of Heightened Relational meaning, relying on BR relationship B, one might propose that there exists, readily available for hearers’ use, an entrenched metonymic pattern that directly captures that type of meaning. The pattern, given a source item Y, connects Y to things that bear B to Y, to a remarkably high degree. Then saying something of form “X is Y” could straightforwardly be metonymically interpreted as saying that X bears B to Y to a remarkably intense degree. If B is already used in a metonymic pattern, but not strongly enough to lead to reflexive hyperbole automatically, then the proposal would be that there is an additional, alternative, entrenched metonymic pattern that does lead to it. For instance, if B is whole for part, then we would have both the standard whole for part metonymic pattern and an entrenched heightened-intensity version of it.

But the proposal has a peripherality or superficiality like that of adding HaM to RHT. The only motivation for the additional metonymic patterns is the point made by RHT that a broadly reflexive relationship allows X-is-Y equations to be hyperbolic statements about the intensity with which X bears the relationship to Y. The patterns have no independent motivation, and therefore do not avoid RHT. It is certainly possible to propose that the patterns become entrenched in a particular person’s mind as a result of frequent experience with reflexive hyperbole, and then the person can just use the patterns rather than going through a process of (i) explicitly inferring from X-is-Y that X ostensibly bears the relationship to Y to an extremely high degree, and then (ii) treating this proposition as hyperbolic. Alternatively, individuals just learn the patterns through exposure to the language, so that the patterns are merely historically motivated by that process. But it is still the
case that the existence of the patterns in the language use is ultimately explained by RHT, not by general considerations of metonymy.

5. Broad reflexivity of metonymic relationships

A message of Section 4 is the point that general metonymical theory does not make the theory of broadly reflexive relationships redundant. The present Section now goes further by turning things around, in suggesting that broadly reflexive theory may provide a new theoretical basis for metonymy, or at least many types of metonymy. Specifically, this section provides some evidence for the following conjecture. (As before, a metonymic relationship is a relationship that a metonymic pattern uses. For example, PRODUCER FOR PRODUCT uses a production relationship).

Metonymic Reflexivity Conjecture

Many standard metonymic relationships are broadly reflexive, or are close special cases of broadly reflexive relationships. [What a “close special case” is will be suggested by example.]

But, as Section 4 suggests, the metonymic patterns do not, typically, use the relevant BR relationships intensely enough to automatically provide reflexive hyperbole.

For the Conjecture to make sense, we must equip metonymic relationships with intensity gradings. I will argue as we proceed that gradings mentioned so far (e.g., in Section 2.5) are natural to the metonymies discussed, although it is currently unclear how these gradings relate to existing ideas about the intensity of metonymic connections, in, e.g., Barcelona (2011); Peirsman and Geeraerts (2006) and Radden (2018).

When is a relationship R a “close special case” of another one, S? I do not have a precise definition, as noted above. But it at least requires that when X is related by R to Y to some positive degree, it is also related by S to Y to some positive degree. The more similar R’s intensity measure is to S’s measure, the “closer” R is to S. As an initial example, I take causation to be a close special case of Leading to. Causation fails radically to be BR (assuming nothing causes itself to any degree), while Leading to is strictly-reflexive and hence BR. We can adopt the very same intensity grading for causation as used for Leading to. That is, when X causes Y we just take the intensity to be what it is when considered as X Leading to Y.

The Conjecture only refers to many standard metonymic relationships. But, conceivably, most or even all fit the Conjecture. I tentatively believe this to be so, but there is no room to discuss more than an illustrative sample of relation-
ships. And to show that all standard metonymic relationships fit the Conjecture would require considerable further research. So, the present Section should be taken as an initial step in exploring the conjecture. We also leave aside the question of whether we could extend the Conjecture to cover *ad hoc* metonymy (non-standard metonymy).

Section 5.1 shows how a fairly wide variety of specific metonymic relationships fit the conjecture. Section 5.2 mentions a proposed pattern that does not fit, but hits back by expressing scepticism about the validity of the pattern itself.

5.1 Illustrations of the Metonymic Reflexivity Conjecture holding

5.1.1 PART FOR WHOLE AND WHOLE FOR PART
The way in Section 2.5 of grading parthood, via contribution-importance, is natural for part/whole metonymy. The part always makes at least a relatively important contribution to the whole. For instance, in "Matt washed his car," if the exterior bodywork looks clean then the car as a whole looks clean from outside. So the metonymy is based directly on *Contribution as Part*.

Another illustration arises with *organization for representative* metonymy, as in “The company announced big profits,” if we can take the metonymic relationship to be parthood. We can grade this by how big a contribution the part (the representative) makes to the organization’s communications.

5.1.2 PRODUCER FOR PRODUCT
This standard pattern arises in, for instance, using the company name Ford to refer to that company’s products, e.g., Ford cars. I include the *artist for artwork* pattern within it, as in using “a Picasso” to mean “a painting by Picasso”\textsuperscript{15}. The production relationships, themselves, radically fail to be BR. Normally, products so not produce themselves at all. (Exceptionally, some artists use themselves as artworks, e.g., by painting their own bodies, and some products dynamically develop themselves, e.g., by machine learning.)

However, production relationships, as a variety of causation, can be viewed as close special cases of the strictly reflexive *Leading To* relationship. The definiteness/directness-based grading for *Leading to* in Section 2.5 seems natural to the metonymy.

\textsuperscript{15.} This inclusion accords with CórDaBa.
5.1.3 Category-based metonymy

This was mentioned in Section 4.1. Its metonymic relationships are member-of and subcategory-of, which are special cases of Case-of. In Section 2.5 we graded Case of by representativeness, and this fits the metonymies well, because their point is precisely that the member or subcategory is (at least) fairly strongly representative of the category.

The subcategory relationship with this grading is itself strictly reflexive. By contrast, the member-of relationship radically fails even to be broadly reflexive, because categories are normally not members of themselves. But we can still take member-of to be a close special case of strictly-reflexive Case of.

5.1.4 Representation-based metonymy

This standard type of metonymy was mentioned at the start of Section 4. Representation-of is BR when graded by how accurate, definite and direct the representing is. (This is the grading used for Indication in general, in Section 2.5). I consider just the Acting special case of Representing here. Acting is BR when thus graded. But is this grading well suited to the metonymy?

Plausibly, the metonymy requires the representation (acting) to be definite and direct enough to easily usable in communication. But at first it might look as though accuracy is irrelevant. Suppose an actor called Donny Crogg is playing James Bond. One can say In this film Donny Crogg kills ten people at once without messing up his hair without implying that Donny is acting accurately. Or, in reporting on a Shakespeare’s play King Lear we might say King Lear spent too much time downstage without implying that the acting was accurate.

Nevertheless, accuracy is still relevant. The Crogg/Bond example may sound ironic or comic to those who view Donny to be a bad actor. In saying The pizza is for the king over there to a delivery person, one may rely on sufficient visual similarity between the actor and a king. Such similarity is an aspect of accuracy.

5.1.5 POSSESSOR FOR POSSESSED

This standard pattern is exemplified by “I’m at the end of this street” meaning that that’s where, say, the speaker’s car or house is. It is natural to grade the possessing on the basis of factors such as how lengthy the possessing is compared to how long the possessed item and possessor have existed, and/or how resistant to disruption the possessing is (while the possessor and possessed themselves continue undisrupted). Now, we can take any possessable entity to possess itself, and to do so to maximum or at least extremely high intensity. Then, possession is BR. A chair possesses its legs, or any arbitrarily large part of the chair, so in the limit it possesses the whole of itself. The lengthiness and robustness are guaranteed to be maximal, because as long as the chair exists without disruption it possesses itself.

But I suggest an alternative view in Section 5.1.8.
5.1.6 RESULT FOR ACTION

This metonymic pattern is exemplified by *Be rich in ten months!* in exhortations to engage in some particular activity that will allegedly result quickly in riches (Panther & Thornburg, 2007). What is actually being commanded is that activity, but the activity as such is not explicitly mentioned. Now, *result for action* is classified under *effect for cause* by Panther & Thornburg (ibid). We have already pointed out that *Causation* graded by directness and definiteness is a close special case of strictly-reflexive *Leading-To*. And indeed, directness and definiteness seem important for the metonymy. Our example would hardly work unless it were (allegedly) reasonably definite (i.e., certain) that riches resulted fairly directly from the action.

5.1.7 POTENTIALITY FOR ACTUALITY

Panther & Thornburg (2007) discuss *potentiality for actuality* and *ability for actuality* metonymies. I understand the latter to be a subtype of the former. An example is “Once Peter had finished his essay, he was able to go to the party” understood to mean he actually did go, rather than just having had the ability (potential) to go. The metonymic relationship from potential-to-act to the act itself, if measured by definiteness and directness, is again a close special case of strictly-reflexive *Leading to*. That grading is natural to the metonymy, because the potentiality (here, Peter’s stated ability) must be presumed to lead at least fairly directly and definitely to the actuality: the point of the example is that in context Peter faces no further obstacles.

5.1.8 Assignment-based metonymy

A version in CórDaBa of a frequently discussed example of metonymy is *The ham sandwich is waiting for his check*, which might be uttered by one restaurant waiter to another. This is typically analysed as involving a metonymic leap from the sandwich to the person who ordered it, or some similar sort of leap. (For instance, CórDaBa classifies it as *goods for buyer*. Barcelona 2019 mentions it as within *order for customer*, at a higher classification level.) This type of metonymy also arises when a customer says *The TV is me* to a store assistant who has just come back to the customer-service desk from the storeroom with some goods for customers to collect. The customer means that the orderer of the TV is himself.

Another everyday type of metonymy is when someone says, say, *This is Mike*, pointing to an adjacent hotel, or seat on a train, meaning that the hotel/seat is the one Mike is staying at / has been using. There is a metonymic leap from Mike to whatever hotel/seat is assigned to him. The assigning has a formal nature in the hotel case, by virtue of a reservation act, but possibly it has an informal nature.
in the seat case, if he has chosen it by sitting on it and other people can be relied upon to respect that fact politely.

These and various other types of metonymy can be viewed as resting on a metonymic relationship we can call *Assigned for Use by* (a rough converse of *Object for user of the object* discussed by Barcelona, 2019). The hotel and train seat are temporarily assigned to Mike for his use, and the TV has more permanently been assigned to the customer.

We can grade the *Assigned for Use by* relationship by, for instance, how directly and/or easily and/or definitely the item is available for use by the assigned user. The relationship is BR – most users are at least extremely highly available-for-use to themselves!

The assignment relationship is also possibly the basis of metonymies normally classed as being based on possession. Possessing something is a way of that thing being assigned to the possessor, even if only by Mother Nature in the case of things such as body parts. So we can either reanalyze those metonymies as resting on *Assigned for Use by* rather than possession, or regard possessed-by as a close special case of *Assigned for Use by*. The grading basis above for possession seems appropriate to *Assigned for Use by* as well.

5.1.9 Integration-based metonymy

A large range of metonymic patterns can be viewed as resting directly or indirectly on integration, which provides a range of particularly vivid types of *Part for part* metonymy. (I am unclear, however, whether just any sort of integration can be a basis for such metonymy.)

Consider *container for contents* (*Mary drank three bottles*) and *contents for container* (*The beer is ready for loading onto the truck*). It is natural to regard, in everyday contexts, a container and its contents as an integrated whole. They are not typically physically enmeshed or entwined with each other, but instead integrated in the sense of being commonly manipulable as a single object, as when we pass a bottle of beer over to someone. Integration is strictly reflexive when graded on the basis of unified manipulability. And the grading is natural to the metonymies. If the beer in the bottle did not wholly move with the bottle, but dripped out, the containment would be only partial. Thus, the containment metonymic relationship is treatable as a close special case of *Integration*.

Metonymy from a *location* to things normally or stereotypically within it, such as its population, government or football team (as in *The island decided to keep the media out*), arguably works somewhat similarly to *container for contents*. (And perhaps a location is just a special type of container – cf. a comment in Barcelona, 2019.) For instance, it is natural to regard the location and its population as an integrated whole. The intensity of the integration here can be
based on the extent to which it is stable. Integration thus graded is strictly reflexive – anything is 100% stably integrated with itself. The grading is natural to the metonymy – if the island example is interpreted as a matter of the population as a whole deciding, then we would naturally think that the most important deciders were the people most stably resident on the island. So, the location/population relationship is a close special case of Integration.

Finally, control-based metonymy (controlled for controller and controller for controlled in CórDaBa) is common, as when one refers to a driver by the vehicle ze is driving (“That car wants to overtake me”) or vice versa (“That guy is straddling the lanes”), or refers to a musician in an orchestra by hir instrument (“The saxophone has the flu”) or vice versa (“Peter’s out of tune”). It’s natural to regard the controller (driver, musician, ...) and controlled (car, instrument, ...) as an Integrated whole, with the intensity of the integration based on how strongly what the controlled does is determined by what the controller does. Integration thus graded is strictly reflexive—trivially, what anything does is fully determined by what it itself does. The grading is natural to the metonymy – if the car’s or instrument’s behaviour were not at least fairly strongly determined by what the driver or musician does then our examples would be odd.

5.1.10 More indication-based metonymy

Indication provides one possible view of event for time metonymy, as in We had snow three weeks after Christmas, and time for event metonymy, as in I’m not looking forward to Monday. (The latter example is similar to “to summer in Paris”, classified as time period of action for the action in CórDaBa.) Indication as graded above, i.e., by definiteness and directness, is natural to the metonymies. If Christmas did not fairly strongly Indicate a particular date then the first example would not be useful; and if Monday did not fairly strongly Indicate some specific activities (as far as the speaker is concerned) then the second would not be useful. The stronger the Indication the more useful the metonymies are.

5.1.11 Using thoroughly partonomic views of metonymy

In a certain prominent view (see notably Barcelona, 2019) most or all metonymic patterns are ultimately special cases of part for whole, whole for part of part for part metonymy. All patterns are currently classified in that way in CórDaBa. Relatedly, in the approach of Ruiz de Mendoza and colleagues (Ruiz de Mendoza, 2020; Ruiz de Mendoza & Díez, 2002; Ruiz de Mendoza & Galera Masegosa, 2014) a given metonymic leap is a matter of either domain expansion or domain reduction – going from a part of a domain to the whole domain or vice versa. There is also Panther & Thornburg’s (2018) view that all metonymy comes under part for whole in a certain way.
Given that parthood and Integration are BR when suitably graded, does such a thoroughly partonomic analysis of metonymy automatically make all metonymic relationships fit the Metonymic Reflexivity Conjecture? This is not yet clear because the partonomic approaches themselves do not systematically address intensities. I leave the matter to future research. We would need to grade the metonymic relationships in particular ways in order to conform to the Conjecture. Cases where a pattern is classed as part for whole or whole for part may perhaps already have a naturally assignable grading based on contribution-importance, but this needs examination. Also, cases of part for part would need to be examined carefully. Some might be viewable as resting on Integrated with (cf. Section 5.1.9), but this may not work across the board.

One matter needing special care is that, as Barcelona’s (2019) discussion amply conveys, a pattern is often classified as whole-for-part or part-for-whole on the basis of parthood relationships between concepts themselves, rather than between what the concepts are about. It is the latter type of parthood that is salient for the present article, even though the parthood is generally a matter of how people conceive the world. For instance, the customer concept could be taken to be a part of the order concept, and/or vice versa, but that does not mean that a customer is part of hir order or vice versa!

5.2 A problem case for metonymic reflexivity

The worst potential departure from the Metonymic Reflexivity Conjecture arises if something can stand metonymically for its opposite (Athanasiadou, 2017; Panther & Thornburg, 2012; Vosshagen, 1999; cf. concept for its opposite exemplified by the ironic You are a fine fellow in CórDaBa; the special case of friends for enemies in Littlemore 2015). No oppositeness or even strong-contrast relationship can itself be BR under any reasonable grading. Nothing, except perhaps some paradoxical imaginary things such as square circles, can be in a strong contrast relationship to itself. Also, oppositeness does not seem to be a close special case of any BR relationship.

But I remain unconvinced (since some time before the present research!) that leaping from something to its opposite is felicitously regarded as metonymic. I cannot discuss this further here,16 so will just leave it that, if oppositional leaps are metonymic, then Metonymic Reflexivity does not fit all metonymic relationships.

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16. In Barnden (2018b) I included opposition metonymy without complaint, but this was for the sake of argument in a different discussion. My scepticism about opposition metonymy arises partly from viewing oppositeness as having a dubious and overblown status in irony (Barnden 2017b, 2020; see therein for citations to other authors).
A possible way of fitting oppositional metonymy to the Conjecture, at least as regards simple, intuitive property opposition such as good/bad and friend/enemy, might be to stipulate that there is a relation called, say Directly Related to between properties, with identity and opposition as being particular ways of being directly related. This relationship would be strictly reflexive. But deep questions arise as to what other relationships between properties should be particular cases.

6. Conclusions and additional further work possibilities

This article claims that there is an important class of relationships, namely broadly-reflexive graded ones, that are both at the root of the commonly occurring phenomenon of Heightened Relational meaning, via reflexive hyperbole, and at the root of many commonly-used, standard metonymic patterns. It is not yet clear whether all metonymy (even all standard metonymy) is rooted in broadly reflexive relationships, or conversely whether all such relationships can be used metonymically, felicitously or otherwise.

Reflexive hyperbole uses the relationships in a particularly intense way, whereas standard metonymic patterns generally do not. Thus, reflexive hyperbole generally does not just arise automatically from standard metonymy.

The hyperbole-as-metonymy view (HaM), if viable, would provide a yet tighter link between reflexive hyperbole and metonymy. Its special metonymic pattern, when applied to the intensity scales of broadly reflexive relationships, would deliver reflexive hyperbole. But, still, reflexive hyperbole would not just arise from HaM plus general metonymy theory. The added spice of broad reflexivity is essential.

An intriguing matter for future investigation is a link to the partial treatment of metonymy in “blending” theory (Coulson & Oakley, 2003; Fauconnier, 2009). In some cases, things that are metonymically related, such as a cause and its effect, become fused into one thing inside a blend space. The Metonymic Reflexivity Conjecture may provide a new motivation or facilitation for such fusion, which effectively converts a link between two different things outside the blend into a self-link at one thing inside. When the metonymic relationship is, or is a close special case of, a broadly reflexive relationship, the presence of a prominent self-linking instance of that relationship is intuitively justified.

This article has exclusively dealt with examples of reflexive hyperbole that arise through explicit equative constructions of form “X COP Y” where COP is a copula formed from a verb such as “to be” or “to become”. However, it could in principle also apply in cases where there is merely an implicit equation between X and Y. In fact, Barnden (2017a; see also 2018a) discusses some cases of this,
notably in the paradoxical and unfairly vilified use of “literally” in expressions such as “Mike literally exploded.” The hyperbolic equation is now merely implied, and is between what Mike did and physical exploding. It is interesting also that “literally” is often used to further emphasize explicit equations of the sort studied in this article. The reader may have noticed its use in (3). It is also used in (4), but there it may attach to the metaphorical phrase “[money] in their pockets” (rather than to the equation between fans and money), in which case its operation is much as in “Mike literally exploded”. With that attachment, we have doubly hyperbolic depiction of directness and definiteness with which the fans Lead to money for the celebrity housewives: there is standard reflexive hyperbole via the equation between fans and money, but also separate heightening, via the more implicit reflexive hyperbole provided by “literally”, of the directness and definiteness conveyed by the metaphorical idiom “money in [someone’s] pocket”.

I claim that hyperbolic interpretation (of any sort, not just reflexive) rarely gives the hearer anything like a precise intensity value of the matter at hand – e.g., anything like a precise number of pets, suitcase weight or degree of kindness, in the examples used in the first segment of Section 3 – and that, when it does, it does so via additional reasoning about the specific circumstance, rather than a matter of hyperbolic processing as such. If this claim is correct, then hyperbole is normally a way of conveying vague information about the remarkably high intensity. (Of course, the surface linguistic form can itself be precise, as in “ten thousand thanks” or in the precise extreme case formulations mentioned below, rather than itself vague as in “millions of pets”.) There can be many reasons or pragmatic functions for vagueness (Zhang, 2011). These include general ones such as the speaker himself not knowing a more precise value, a precise value being beside the point, and the vagueness allowing briefer and simpler, and therefore perhaps clearer and more forceful, expression, or more specific functions such as being a marker of intimacy (Cutting, 2007, p. 225, Zhang, 2011). I assume that reflexive hyperbole can serve these reasons or functions to the extent that hyperbole in general can. Whether reflexive hyperbole serves special vagueness-based pragmatic functions in addition to those is a matter I leave to future investigation.\(^{17}\)

Reflexive hyperbole is often a special case of “extreme case formulations” (ECFs, Norrick 2004). ECFs are hyperboles where the utterance overtly uses the maximum intensity that is possible. Examples of ECFs are Everyone in the audience laughed when there may have been a few people who did not laugh, and where intensity is the proportion of the audience that laughed. Reflexive hyperbole where the intensity scale for the relation in question has a maximum point (100\%), such as when the relationship is Likeness, Contribution as Part or Mental

\(^{17}\) I am indebted to a reviewer for pointing out the connection to vagueness theory.
Identification) is a form of ECF, because the equation directly implies the maximum intensity. It would be worth investigating the extent to which special pragmatic effects of ECFs as opposed to non-ECF hyperbole carries down to the case of those forms of reflexive hyperbole, and even to reflexive hyperbole where there is no maximum to the intensity scale.

Finally, while reflexive hyperbole is used in at least some other languages – cf. French examples such as Je suis Charlie and L’état, c’est moi, and various Spanish examples I have gathered – a major area for future work is cross-linguistic similarities and differences in its usage and in its connections to metonymy.

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18. Included in a 2019 talk, the slides for which are available at https://www.cs.bham.ac.uk/~jab/Talks/RiojaSeminar.nov19/talk.rioja.for-distbn.ppt


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