Intensional Perceptual Ascriptions*

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Abstract

This paper defends the view that perceptual ascriptions such as "Jones sees a cat" are sometimes intensional. I offer a range of examples of intensional perceptual ascriptions, respond to objections to intensional readings of perceptual ascriptions, and show how widely accepted semantic accounts of intensionality can explain the key features of intensional perceptual ascriptions.

Keywords: intensionality; existence-neutrality; perceptual verbs; perceptual ascriptions; ambiguity; generalized quantifiers; propositionalism; Ayer; Austin; Dretske; Grice; Soames

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According to some authors, perceptual ascriptions of the form "α ϕ-s S" are sometimes intensional.[1] This claim has elicited considerable opposition.[2] This paper aims to make progress toward a resolution of this old debate in favor of the pro-intensionality camp. One important element of the resolution I propose is a distinction between two different understandings of the claim that perceptual verbs have intensional uses. I also suggest that widely accepted semantic views of intensional transitives can plausibly be extended to perceptual verbs, a fact that lends credence to the view that perceptual verbs have intensional uses in my sense.

1 Intensional perceptual ascriptions

A *perceptual ascription* is a statement of the form "α ϕ-s S", where α is the subject, ϕ is a perceptual verb ("see," "hear," "smell," "taste," "feel," or "perceive"), and S is the object of the verb. For example, "Jones sees a triangle" is a perceptual ascription.

An *intensional* perceptual ascription (IPA) is a perceptual ascription token that is intensional. An *extensional* perceptual ascription (EPA) is a

[1] For example, Moore (1905), Ayer (1940), Smythies (1956), Anscombe (1965), Hintikka (1969), Coburn (1977), Harman (1990), Chomsky (1995, p. 52), Moltmann (2008), and Brogaard (2012, 2015). Interestingly, Montague (1974, p. 169) has "no serious objection" to distinguishing intensional and extensional readings of perceptual ascriptions but ignores intensional readings as part of his seminal treatment of intensional transitives "for simplicity." The last section of this paper sketches an extension of his views on intensional transitives to perceptual verbs.

[2] Austin (1962), Dretske (1969), Grice (1989) and Soames (2003). Barwise (1981) and Higginbotham (1983) give accounts of the semantics of perceptual verbs that assume complete extensionality.

perceptual ascription token that is not intensional. What makes a perceptual ascription token of the form "α ϕ-s S" intensional is that it states a proposition that is existence-neutral with respect to the names and existential quantifiers occurring within S, in that these names and quantifiers do not have their normal existential import.[3]

In addition to existence-neutrality, two other "marks of intensionality" are sometimes recognized: non-specificity and referential opacity. To a first approximation, a reading of a statement of the form "α ϕ-s an F" is non-specific when it need not be made true by any specific F. A reading is referentially opaque when it does not allow substitution of co-referential terms (including predicates) *salva veritate*. These phenomena are closely associated with existence-neutrality, but they might come apart from it and from each other (see Coburn 1977 and Forbes, 2006, 2008, 2002). Since IPAs have been of interest mainly because of their apparent existence-neutrality and there is no guarantee that existence-neutrality is always associated with the other "marks of intensionality," it best suits our purposes here to define intensionality simply as existence-neutrality.

IPAs are utterances that *state* existence-neutral propositions, so understanding the thesis that there are IPAs requires understanding the distinction between what an utterance states ("what is said") and what it merely con-

[3]A better formulation of existence-neutrality would allow that there are non-vacuously existence-neutral readings of constructions involving no names or existential quantifiers (e.g. "I ordered all cars"), but the pursuit of such a formulation would take us too far afield.

veys. How to explain this distinction is a controversial matter, but most philosophers seem to have an intuitive sense of the distinction. Cases seem to illustrate it fairly clearly. For example, in cases of irony, what is conveyed is the opposite of what is said. In Grice's (1961) famous example of the recommendation letter that states that "Jones has beautiful handwriting," what is conveyed is quite different from what is said. I am going to remain neutral between different theoretical accounts of the stating-conveying distinction.[4]

The view that there are IPAs should be distinguished from two other views regarding existence-neutrality and perceptual ascriptions. First, it should not be confused with the weaker view that perceptual ascriptions sometimes *convey* propositions that are existence-neutral with respect to the names and existential quantifiers occurring within the object of the verb. No one denies that it is possible to convey existence-neutral propositions using perceptual ascriptions, or, for that matter, any kind of construction. Given the right context, even a straightforwardly extensional statement such as "There is an apple" can be made to convey an existence-neutral proposition (suppose that I am looking at the readout of a dream detector while uttering this statement). The interesting claim is that perceptual ascriptions can *state* existence-neutral propositions.

[4]If it turned out that the stating-conveying distinction is not viable, this would at best call for a reformulation of my thesis in more precise terms. Ultimately, my view is that perceptual ascriptions involving quantifiers allow narrow scope readings like other mental ascriptions. This view is perfectly intelligible independently of the stating-conveying distinction. I approach the issue in terms of the latter distinction because that is how it has traditionally been formulated.

The claim that there are IPAs should also not be conflated with the stronger claim that perceptual verbs are lexically ambiguous between intensional and extensional meanings. This is the distinction I advertised in the introduction: in one sense, an intensional use of a perceptual verb is a use that a) involves an intensional meaning for the verb; in another sense, an intensional use of a perceptual verb is merely one that b) states an existence-neutral proposition. It is in terms of feature (b) that I understand IPAs. This feature can be dissociated from feature (a). Even if we assume that a perceptual ascription's literal meaning is identical to what it states,[5] there is plenty of room for such a statement to have feature (b) without having feature (a). In particular, it could be that the statement exhibits a mere syntactic or logical ambiguity (as opposed to a lexical ambiguity) like that found in "Everyone loves someone." In such a case, the whole statement can be ambiguous between intensional and extensional literal meanings without any of the words that constitute it being lexically ambiguous. So the claim that there are IPAs does not commit us to the (on its face much less plausible) claim that perceptual verbs are subject to a lexical ambiguity between intensional and extensional meanings. Objections to IPAs draw at least some of their plausibility from a tendency to conflate the claim that there are IPAs

[5]If we don't assume this, it is possible that contextual enrichment of literal meaning can yield either an intensional or an extensional proposition, which provides another reason for denying that (b) implies (a). Contextual enrichment is consistent with my position, and consistent with maintaining a stated-conveyed distinction (it simply gives a greater role to pragmatics in determining what is said). However, this is not how I ultimately want to account for the intensional-extensional distinction, so I set this possibility aside for simplicity here.

with a lexical ambiguity claim.[6] I reject the lexical ambiguity claim. In the last section of this paper, I sketch an account of the intensional-extensional ambiguity as an ambiguity in logical structure.

Several authors have offered examples of apparently intensional perceptual ascriptions.[7] Here are some examples taken from the scientific literature on perceptual anomalies, which should be philosophically untainted:

(1) "[...] patients have hallucinatory perceptions ranging from **seeing** shapes and colors to vivid scenes that involve people and animals." (Prerost et al., 2014)

(2) "A high score on the HQ reflects more frequent experiences of visual misperception, such as **seeing** shapes, lights, patterns or people that are not there [...]" (Schwartzman et al., 2008)

(3) "[...] she started to have occasional strange experiences of **hearing** noises and voices [...]" (Lam et al., 1998)

(4) "Auditory hallucinations typically involve **hearing** voices [...]" (First et al., 1997)

(5) "Also known as phantosmia, olfactory hallucinations involve **smelling** odors that are not derived from any physical stimulus." (Ali et al., 2011)

[6] See the quotes from Austin and Dretske in the next section.

[7] Moore (1905), Ayer (1940), Smythies (1956), Anscombe (1965), Hintikka (1969), Coburn (1977), Harman (1990), Chomsky (1995), Moltmann (2008), and Brogaard (2012, 2015).

(6) "[...] she experienced **smelling** odors that could not be clearly related to the environment [...]" (Landis and Burkhard, 2008)

(7) "In my mouth I could **taste** something like phenic acid." (Blanke and Landis, 2003)

(8) "I might **see**, **hear**, and **taste** things that aren't there [...]" (French, 2011)

(9) "They **feel** insects on the hands and arms." (Brown et al., 1916)

(10) "[...] he could **feel** illusory wrist flexion movements [...]" (Naito et al., 2011)

In all of the preceding perceptual ascriptions, "something" is said to be seen, heard, smelled, tasted, or felt, but it is clear from the context that the speaker does not intend to imply that the thing in question exists. (From now on, I will use "i" or "e" subscripts on perceptual verbs to specify which reading of an ascription is intended. When I don't use a subscript, I am leaving it to the context to disambiguate.)

Intensional perceptual ascriptions also occur in other languages. According to native speakers of French, Spanish, German, Hungarian, Finnish, and Polish I have informally consulted, (11)-(16) are perfectly good ways of describing what is going on subjectively when one is hallucinating a pink elephant:

(11) Je vois un éléphant rose.

(12) Veo un elefante rosa.

(13) Ich sehe einen rosa Elefanten.

(14) Egy rózsaszín elefántot látok.

(15) Näen vaaleanpunaisen elefantin.

(16) Widzę różowego słonia.

The widespread, systematic availability of intensional readings of perceptual ascriptions both in English and across languages is *prima facie* evidence that these readings are sometimes stated by perceptual ascriptions, not merely conveyed: in general, what is merely conveyed does not attach so systematically to linguistic form (except perhaps in cases of generalized implicature, which the above are clearly not). I offer more evidence that perceptual ascriptions sometimes state (as opposed to merely convey) existence-neutral propositions in the next section. Before we get to this, one last observation regarding intensional readings of perceptual ascriptions is in order.

In the case of perceptual ascriptions, existence-neutrality is associated with another important feature besides the familiar features of non-specificity and referential opacity: a subject's seeing an F, on the intensional reading, entails that the subject is having an experience with a phenomenology that has something to do with F-ness. For example, if one is seeing$_{\text{i}}$ a pink elephant, it follows that there is something pinky and elephantine about the character of one's perceptual experience. In contrast, to say that one is

seeing$_e$ an F is not to say that the phenomenal character of one's experience has anything to do with F-ness. For example, one can see$_e$ a ship as a big ship-like object, as a light in a fog, or as a dot on a radar screen. Seeing$_e$ an F might require that one has a phenomenal experience of some sort, but the experience need not be an experience with an F-y character. I am going to refer to this feature as *appearance-neutrality.*[8] Intensional readings are existence-neutral but not appearance-neutral, whereas extensional readings are appearance-neutral but not existence-neutral.[9]

The preceding distinction is a special case of a more general distinction exhibited by other statements that allow both intensional and extensional readings. Consider (17).

(17) Angela wants a winning ticket.

The existence-neutral (and preferred) reading of (17) entails that Angela specifically wants a winning ticket. In contrast, the non-existence-neutral (and harder to hear) reading of (17) does not entail that Angela specifically wants a winning ticket. This reading essentially says there is a winning ticket that Angela wants. This could be true merely in virtue of Angela wanting the ticket bearing her lucky number, which happens to be the winning ticket, even if she were not at all interested in winning. When a statement of the form

[8]Note that appearance-neutrality, as stated, is compatible with there being systematic constraints on phenomenology in order for one to see something. For example, appearance-neutrality is compatible with the relatively weak phenomenological constraints outlined by Siegel (2006).

[9]Ayer (1940, ch. 1) makes a similar observation.

"α ϕ-s an F" is such that it can be true without α's ϕ-ing being specifically directed at Fs *qua* Fs, I am going to say that the statement is *property-neutral.* Appearance-neutrality is a special case of property-neutrality.[10]

2 Stated vs conveyed

A number of authors have criticized the view that there are IPAs by invoking the stated-conveyed distinction or a closely associated distinction (all objections to IPAs that I am aware of rely on such distinctions). Austin, who is among the earliest and most earnest critics of alleged IPAs, objects to Ayer's (1940, ch. 1) claims about intensional uses of perceptual verbs as follows:

[10]None of the alleged IPAs discussed in this section contain names as part of the object of the verb. The reason is that singular perceptual ascriptions such as (18) and (19) elicit mixed intuitions.

(18) I see Barack Obama.

(19) I see Santa Claus.

Speaking for myself, I have difficulty hearing (18) intensionally: if it turns out that "Barack Obama" does not refer (not merely that Obama is not within sight), this statement will have turned out to be false or meaningless. However, I can easily see how (19) might be true despite the fact that Santa Claus does not exist.

One possibility is that singular perceptual ascriptions have intensional readings only when the names occurring in them are not "real names," i.e. when they are names that, unlike names such as mine or yours, merely stand in for descriptions. There seems to be a reading of "Santa Claus" on which it is treated as (something like) a description along the lines of "a bearded man with a red jacket." This makes it easy to hear (19) as intensional. However, if "Santa Claus" is taken to be the name of an individual presumed to exist, it is harder to hear the intensional reading of (19). Space being limited, I am going to assume that true names do not lend themselves to IPAs. This simplifies the discussion of possible accounts of the intensional-extensional distinction in section 3. Without this assumption, the approach I suggest needs to be extended to singular ascriptions, which is only possible under the assumption that names are generalized quantifiers (a view widely accepted among semanticists; see Barwise & Cooper 1981 and Westerståhl 2011).

> [...] the fact that an exceptional situation may thus induce me to use words primarily appropriate for a different, normal situation is nothing like enough to establish that there are, in general, two different, normal ("correct and familiar") *senses* of the words I use, or of any one of them. (Austin 1962, p. 91)[11]

We can distinguish two claims in this passage: one about "any of the words" occurring in alleged IPAs, the other about all the words constituting alleged IPAs. The first and weaker claim is that examples such as those I offer in the preceding section are not enough to show that perceptual verbs (or any other terms entering in such statements) have intensional senses. Here it is natural to take senses to be literal meanings (which I simply call "meanings"). As I stressed earlier, the view that there are IPAs does not require that perceptual verbs have intensional meanings.[12] It at best requires that whole perceptual ascriptions have existence-neutral meanings. Austin's first claim is therefore not in conflict with the view that there are IPAs as I understand it. Austin's second claim, however, is that examples such as those I offer above are not enough to show that whole perceptual ascriptions have existence-neutral meanings. Setting aside a possible gap between literal meaning and what is stated, this second claim does make contact with my

[11] Austin's extensive discussion of Ayer's views contains several other objections, but all target idiosyncrasies of Ayer's views, so I am not going to discuss them here. Several of Austin's objections target idiosyncratic features of Ayer's glosses on appearance-neutrality and existence-neutrality. For example, Ayer's way of characterizing these features seems to commit him to Meinongian objects.

[12] As a historical note, I am doubtful that Ayer's claims are fairly characterized in terms of "senses." Ayer talks about the "usage" of perceptual verbs, not their senses.

thesis. Austin's two claims are echoed and sharpened by Dretske (1969, pp. 44-9), Grice (1989, p. 44), and Soames (2003, pp. 184-5), with varying degrees of emphasis on one claim or the other.

Austin is right that typical examples of alleged IPAs are not enough to *establish* that there are IPAs. Establishing P requires supplying fairly strong evidence for P (if I had to put a number on it, I would say that the evidence has to warrant a credence of around .95). All the examples given above could in principle be cases in which the speaker communicates an existence-neutral proposition without stating it. As I noted earlier, there is some reason to think that this is not the case, but the evidence so far is insufficient to *establish* this.

In this and the next section, I consider further evidence that bears on the question of whether existence-neutral propositions are stated or conveyed by perceptual ascriptions. This evidence might not *establish* that existence-neutral propositions are ever stated (when does this happen in philosophy?), but it significantly strengthens the case for this view.

First, it is helpful to be clear on the details of the rival hypothesis. If existence-neutral propositions are not stated by apparent IPAs, something else must be stated. This is not a point that we need to debate, because all critics of IPAs agree. On their views, someone who utters (20) in order to describe a hallucination of a pink elephant is stating a proposition that is not existence-neutral. The proposition stated is the extensional reading of (20). This proposition can be stated more explicitly as (21).

(20) I see a pink elephant.

(21) There is a pink elephant that I see.

In typical cases where one uses (20) intensionally, there is no pink elephant, so (21) is false, and what is stated is false on the hypothesis under consideration. This leads to an objection to this view: it does not seem that one says something false when one utters (20) to describe a hallucination. Generally speaking, when one says something false in order to convey something true, it is possible to imagine alternative circumstances in which one is blameworthy for having said something false.[13] Imagine for example that you are responding to a telephone survey. Your questioner asks whether you have a cell phone. Strictly speaking, you have a cell phone: you have one somewhere in the basement. However, you have no intent to use this phone. Because you take your questioner to be mainly interested in whether you *use* a cell phone, you answer "no" to the question. In giving this answer, you state that you do not own a cell phone, which is false, but you convey, or at least aim to convey, the true proposition that you do not use a cell phone. In most circumstances, nobody would quibble with your saying something false in order to convey something true, but there are also circumstances in which you might be blameworthy in virtue of the falsehood of your statement. For example, it could be wrong to not answer survey questions literally. Giv-

[13]Some might say that this is due to a necessary connection between lying and stating: an utterance is lie-prone with respect to P if and only if it states P (see Stainton, forthcoming). I am not sure about this alleged connection. We need not assume such a connection to agree that stating a falsehood exposes one to blame in principle.

ing non-literal answers introduces a possibility that not everyone is answering the same question, which can conceivably have serious consequences. We can imagine a world in which this is major concern and you would be severely blamed for having given an answer that was not literally true. In contrast, it is hard to see in what circumstances someone who uses (20) to describe a hallucination might be blamed. Even in a context in which one is expected to literally state what one wants to communicate, such as in court proceedings, it does not seem inappropriate to use (20) to describe a hallucination. (20) simply seems to be the best description one has of the subjective conditions involved in visually hallucinating a pink elephant.[14]

Relatedly, if (20) as uttered by the subject of a hallucination stated the same proposition as (21), she could utter (21) instead of (20) without this making any difference to what she says or communicates.[15] However, (20) seems far more suitable than (21) as a report of a pink elephant experience. If I heard the subject utter (21), I would conclude that she is deluded, not merely hallucinating. In contrast, (20) does not suggest to me that she is taken in by the experience. It is hard to see how this contrast might be explained on the hypothesis that (20) and (21) state the same proposition as

[14]Note that "visually hallucinating a pink elephant" does not fit the bill because it also says something about what is going on in the world outside.

[15]Normally, what is communicated is not altered by changes in wording that don't affect what is stated. In the case of conversational implicatures, this is known as *detachability* (Grice 1989). There are exceptions to this generalization; it is certainly possible to convey messages with specific word choices. However, when this is the case we can generally use devices such as intonation to reinforce the message. Here it is very hard to see how intonation could be used to reinforce an existence-neutral reading.

critics of IPAs claim.

Another important consideration is that in order to convey P by stating a distinct proposition, it has to be possible for the audience to work out that one means to communicate P. What sort of reasoning might underly an inference from an extensional perceptual ascription to the conclusion that one is trying to convey a mere experience of a pink elephant?

Austin does not explain how we work out what the speaker intends to communicate in this case, but subsequent critics of IPAs have all converged on the same account. Dretske presents this account as follows:

> Some philosophers become very puzzled when other people poke their fingers in their eyes and "see two pencils instead of one." The conclusion they draw from this is that there is a sense of the verb "to see" in which one can see two pencils when there is only one (real) pencil, hence, a sense of the verb which is not governed by the existence condition. Somehow it never occurs to them that a person behaving in this unusual fashion is as significant for what he is saying as is the fact that the person uttered the words "It seems as though" before his perceptual claim. But both pieces of behavior, the one linguistic, the other non-linguistic, function in precisely the same way with respect to the words "I see two pencils": they suspend the existence condition on the verb "to see" in order to exploit the residual meaning of this verb to describe their visual experience. (Dretske, 1969, p. 48)

Dretske is here explicitly attacking the thesis that perceptual verbs are lexically ambiguous between intensional and extensional meanings, which is not the thesis under consideration in this paper, but his account of what is going on in alleged IPAs would work just as well against the thesis that there are IPAs as I understand it (in other passages, Dretske seems to have both kinds of view in mind). In a nutshell, Dretske thinks that apparent IPAs are cases in which one communicates that one's perceptual ascription should be understood as a claim about how things seem or appear instead of a claim about how things are. The hearer understands a proposition that is existence-neutral because what they understand is that *it seems as though* P*,* where *P* is what was stated. I am going to refer to the view that perceptual ascriptions convey existence-neutral propositions through such unstated qualifications as *the unstated qualification view.*

Soames also endorses the unstated qualification view. Here is what he says about apparent IPAs:

> The case is analogous to one involving a mental patient suffering from the delusion that his body is covered with bugs. Seeing him repeatedly going through the motions of plucking things from different parts of his body, we explain to a visiting doctor, *He is removing the bugs that attack him when he sleeps.* Since there are no bugs that attack him when he sleeps, the sentence we utter is literally false, though we use it successfully to explain the patient's action, as it seems to him. (Soames 2003, p. 184)

Soames' example brings out the fact that the communication mechanism allegedly at work in the case of apparent IPAs is quite general. The general mechanism involves stating P while communicating in some other way that one merely intends to convey that P is true in some qualified sense, for example, true as far as the patient's believes go, or true as far as appearances go. The same mechanism explains how we can read fiction out loud without lying: features of the context indicate that one merely intends to communicate that what one is stating is true in the story. Applying this account to apparent IPAs, the view seems to be that a statement such as (20) conveys that the proposition it states is a true description not of how things are, but of how things seem or appear to the subject.

Grice (1989, p. 44) also endorses the unstated qualification view: apparent IPAs state extensional perceptual ascriptions, but they merely convey that these ascriptions seem true to the subject. Grice does not explicitly say why he prefers this explanation over one in terms of conversational implicatures, but one possible reason is that the information conveyed by (20), unlike information conveyed through a conversational implicature, is not detachable from the particular form of words used: as we noted above, it does not seem appropriate to describe a hallucination by uttering (21), even though (21) and (20) unambiguously state the same proposition on the view under consideration.[16]

[16]As noted earlier, this also seems to be an objection to the view under consideration, but it is not hard to see why Grice might have been more aware of it as an objection to an application of his theory of conversational implicatures than he was aware of it as an

Everyone should agree that it is possible to convey existence-neutral propositions by stating non-existence-neutral propositions in the manner suggested by Dretske, Soames, and Grice. As noted in the previous section, even "There is an apple" can be used to convey that there seems to be an apple, given the right context. The question at issue is whether *all* apparent IPAs are like this.

To see that not all apparent IPAs involve unstated qualifications, we need only notice that the unstated qualification view yields the wrong predictions regarding what is communicated by the best candidate IPAs. On this view, the proposition communicated by (20) should be what is stated by a statement along the lines of (22) or (23).

(22) It seems to me that I am seeing$_e$ a pink elephant.

(23) It appears to me that I am seeing$_e$ a pink elephant.

One problem is that the proposition stated by (22) or (23) is in one respect weaker than the existence-neutral proposition conveyed by (20). At the end of the preceding section, we observed that intensional readings convey substantive information regarding how one is experiencing the world, whereas extensional readings do not. Embedding an extensional reading within a context such as "It seems to X that ..." or "It appears to X that ..." produces an existence-neutral construction, but it does not help recover the non-appearance-neutrality of intensional readings: since the proposition

objection to the unstated qualification view.

stated by (20) on its extensional reading does not entail that the speaker is having a pinky-elephantine experience, neither does a statement to the effect that it seems to one or that it appears to one that this proposition is true.

An example might help make this point vivid. One way to see_e a pink elephant is using night vision goggles that make everything look green. Everyone should agree that a pink elephant enthusiast who locates an elephant-shaped object using such goggles could state this fact by uttering (20), intending it to be understood extensionally. If the pink elephant spotter were to be in doubt as to what she is seeing (perhaps only the tail of the elephant is visible), she might describe her situation by uttering (22) or (23). Neither claim entails that she is having a pinky-elephantine experience, so neither is equivalent to an intensional reading of (20).[17] This observation holds true of any other context we might want to substitute in place of "It seems to me that" or "It appears to me that."[18]

The proposition stated by (22) or (23) is also in some respect stronger than the intensional reading of (20): the former implies the availability of a certain type of evidence, whereas the latter does not. Imagine for example that experiences of pink elephants were universally known to be always

[17]Incidentally, this explains why (21) is a poor choice to convey the content of a hallucination.

[18]One might think that this is not true on a phenomenal reading of "seems" or "appears." First, I don't think there are such readings (see the next objection below). Second, even if there were such readings, they would yield the wrong result: (20) expresses that one stands in the first-order mental state of experiencing a pink elephant, not that one stands in the higher-order mental state of experiencing seeing_e a pink elephant. The content of the higher-order experience would be *I am seeing a pink elephant,* whereas the content of the first-order experience is *There is a pink elephant.*

hallucinatory. Imagine that they were known to be a clear symptom of a specific neurological condition. Even in these circumstances, someone who is experiencing a pink elephant might report what is going on with them by uttering (20), meaning it intensionally. However, assuming that they are not delusional, they would not be inclined to say that it seems or appears to them that *there is* a pink elephant they are seeing. As Austin (1962) persuasively argues, it seeming or appearing to one that P requires that one has some kind of evidence for P (if only a hunch that P is true). In contrast, seeing$_{\text{i}}$ a pink elephant does not require that one has evidence of the presence of a pink elephant. This holds true for other epistemic qualifications that one might want to substitute in place of "It seems to me that" or "It appears to me that."[19]

Another argument for locating the intensional-extensional distinction at the level of what is stated in the case of perceptual ascriptions is that this is where we locate it in the case of other construction types. Take for example (24) and (25).

(24) I ordered a car.

(25) I want to have a pink elephant.

On the intensional reading of (24), it could be true without there being any cars. On its extensional reading, it requires that *there be* a specific car I

[19]As highlighted in the preceding footnote, a non-epistemic, phenomenal "It appears that" qualification would have other unintended implications.

ordered. Similarly for (25). In the case of "order" and "want" constructions, the distinction is uncontroversially at the level of what is stated. As far as I know, nobody denies that (24) can state either an existence-neutral or a non-existence-neutral proposition. This makes it plausible that the intensional-extensional distinction is also a distinction in what is stated in the case of perceptual ascriptions.

Something must be conceded to the skeptic: as a general rule, the extensional reading of a perceptual ascription is more salient than its intensional reading. Presumably, this is part of why skeptics find it plausible that only the extensional reading is ever stated. But the salience of extensional readings has other possible explanations. First and foremost, it might simply be that the extensional readings are typically more useful to us. Extensional perceptual ascriptions are a way of reporting on our perceptual findings: they state what is a) in the environment and b) perceptually affecting us. In contrast, intensional ascriptions merely report on how we experience the world. Unless the locus of conversation is what is going on in our minds subjectively, perceptual ascriptions are the most useful ascriptions to use. I suggest that we are generally more interested in what is going on in our environment than in what is going on in our minds. In addition, it is much more difficult to know what is going on in others' minds than what is perceptually affecting them. As a result, third-person perceptual ascriptions are largely limited to extensional readings. The greater usefulness of extensional claims and the greater availability of evidence for such claims in the third-person case seem

enough to explain their default status.

To summarize what I said in this section: Austin and other critics of IPAs are right to point out that cases where it is natural to say that one sees an F without there being an F are not enough to show that perceptual ascriptions of this form ever state propositions that are neutral with respect to the existence of Fs. However, we must also take into account the fact that the alternative view entails that all such utterances state something false, which seems inaccurate. Also, it does not seem that explicitly extensional utterances can take the place of apparently intensional perceptual ascriptions. This suggests that the latter ascriptions really do state existence-neutral propositions. Moreover, there seems to be no plausible explanation of how we communicate existence-neutral propositions using perceptual ascriptions if we do not state them. The unstated qualification view is the only explanation on the table, and it yields the wrong predictions regarding what is communicated by such utterances: it wrongly predicts that what is communicated by alleged IPAs has little phenomenological import but necessarily has some epistemological import, whereas in fact what is communicated always has significant phenomenological import without necessarily having any epistemological import. Finally, it seems plausible that the intensional-extensional distinction works in the same way in the case of perceptual and non-perceptual statements. The next section sketches how the most widely accepted accounts of the intensional-extensional distinction

can apply to perceptual ascriptions, lending further support to the last line of argument.

3 Accounting for the intensional-extensional distinction

Intensional constructions come in two main grammatical forms: those in which the object of the verb is a noun phrase (e.g. 24), and those in which the object of the verb is a clause (e.g. 25). Given the appropriate level of abstraction, clausal intensional constructions uncontroversially have the form $R(s,P)$, where R is a relation expressed by the verb and P is a proposition denoted by the complement clause (or a similar entity). This is true of paradigm propositional attitude ascriptions (e.g. "I believe that ...") as well as of less obviously propositional types of attitudes that are complemented by bare infinitive clauses and participial clauses (e.g. 25).

The structure of intensional constructions with NP objects is more controversial. One view, propositionalism, brings them under the fold of the propositional paradigm.[20] On this view, a statement such as (24) has an unvoiced syntax similar to that of an explicitly propositional attitude ascription. A more explicit statement of the proposition stated by (24) on this view is given by (26).

[20]See Quine 1956, Fodor 1979, Parsons 1990, and den Dikken, Larson & Ludlow 1996.

(26) I ordered that I have car.

Den Dikken, Larson & Ludlow (1996) offer considerable evidence for a view along these lines.

The main alternative to propositionalism is a set of views inspired by Montague (1973).[21] On Montagovian views, the overall form of an NP intensional construction is $R(s, \hat{} V)$, where R is a relation expressed by the verb, $\hat{}$ is the intension operator, and V is a generalized quantifier denoted by the NP object. A generalized quantifier is a property of properties, for example, the property of being a property had by at least one car ($\lambda P[\exists x(Car(x) \wedge P(x))]$), which I will call "$Q$." On the Montagovian view, (24) states that one stands in the ordering relation to the intension of Q. Like propositionalism, there is considerable evidence for this view.[22]

Whether one endorses propositionalism or an account along the lines of the Montagovian view of intensional NP constructions, one should agree that the difference between intensional and extensional readings of constructions such as (24) and (25) lies at the level of the structure of the proposition stated (or its syntactic determinants). Consider first clausal constructions such as (25). The proposition stated by (25) on its intensional reading uncontroversially has a structure along the lines of (27) (at some level of abstraction):

(27) $Want(I, \hat{} \exists x(PinkElephant(x) \wedge Have(I, x)))$

[21] Montague 1973, Barwise and Cooper 1981, Dowty et al 1981, Moltmann 1997, Stainton 1998a,b, Richard 2001, Forbes 2008, Westerståhl 2011.

[22] ibid.

The proposition stated on the extensional reading of (25) can be stated more explicitly as (28).

(28) There is a pink elephant that I want to have.

It seems plausible that the underlying propositional structure of (28) has very roughly the form of (29).

(29) $\exists x(PinkElephant(x) \wedge Want(I, \hat{}Have(I, x)))$

Setting aside complex questions regarding quantification into intensional contexts, this account of the respective structures of propositions stated on intensional and extensional readings gives a straightforward explanation of the key intuitive differences between such readings. The difference in existence-neutrality is explained by the fact that (29) formally entails that there is a pink elephant whereas (27) does not. The difference in non-specificity is explained by the fact that (29) entails that I have the wanting attitude toward my having a specific elephant, whereas (27) does not. Referential opacity is explained by the different roles played by the predicate "pink elephant": in (29), it singles out a set of objects (which any co-extensive predicate could do *salva veritate*), whereas in (27) it contributes a property that is constitutive of the proposition toward which one has the wanting attitude.[23] Differences in property-neutrality are explained in the same way as differences in opacity: in the intensional case, the property of being a pink

[23]While I think that non-specificity and referential opacity can be explained in this way, this is not very important for my purposes, because existence-neutrality is the defining feature of intensionality for my purposes. I am skimming over many details for this reason.

elephant is part of the object of one's attitude, whereas in the extensional case it is not.

The above scopal treatment of clausal constructions is straightforwardly extended to NP constructions. Propositionalism extends this treatment by assimilating NP constructions to clausal constructions with unvoiced syntactic constituents. The Montagovian approach takes a different route but arrives at a similar account in terms of quantifier scope. Simplifying considerably, on the Montagovian view, the extensional reading of (24) has the form of (30).[24]

(30) $Q(\lambda x[Want(I, \hat{} x)])$[25]

In words, the property of being wanted by me under an intension has the property of being instantiated by a car. This proposition reduces to (31).

(31) $\exists x(Car(x) \wedge \lambda y[Want(I, \hat{} y)](x))$

In contrast, on the intensional reading, the intension of being instantiated by a car is wanted by me (32).

(32) $Want(I, \hat{} Q)$

By changing the order of predication, we have changed the scope of the first-order quantifier contributed by the NP "a car." The intensional-extensional

[24]Two major simplifications are that Want should always take an intension as argument and quantifying-in introduces individual sublimations rather than individual variables on Montague's approach, which implies more complications before a proposition of the form of (31) can be inferred.

[25]In Montague's actual treatment, the object of the want is the intension of the sublimation of the variable ($\hat{} \lambda P[P(x)]$), but I am simplifying.

ambiguity is explained by the fact that sentences containing intensional verbs can be parsed either way.[26] As in the case of clausal constructions, this explains the features that differentiate intensional and extensional readings. Differences in existence-neutrality and non-specificity are a simple matter of logic. Differences in referential opacity and property-neutrality are explained by the fact that the term "car" contributes a property that is part of the object of my want in the intensional case but not in the extensional case, where it merely determines which object is wanted.

The foregoing account can straightforwardly be extended to account for the intensional-extensional distinction in the case of perceptual ascriptions. Like several other intensional verbs, perceptual verbs allow both clausal and NP objects. The clearest examples of clausal, intensional perceptual ascriptions involve bare infinitive or participial clauses (e.g. 35, 36).[27]

(35) I saw a car turn.

[26] See Montague 1973.

[27] Perceptual ascriptions complemented by "that"-clauses and "wh"-clauses (e.g. 33, 34) do not uniformly allow intensional readings.

(33) I see that a car is turning.

(34) I see who is turning.

These ascriptions seem to involve metaphorical uses of perceptual verbs. Consider the fact that "seeing that" constructions are factive while "hearing that" constructions are not, and "smelling that" and "tasting that" constructions seem senseless. Moreover, "seeing that" and "hearing that" imply no perceptual experiences at all, whereas other uses of "to see" and "to hear" do. This heterogeneity suggests that "that"-clause and the similar "wh"-clause ascriptions involve metaphorical extensions of the core, perceptual meanings of perceptual verbs. [[Due to editing mixups, these examples were misdescribed as involving nominal relative clauses in the published version of this article. This correction does not affect the substance of the points I make here.]]

(36) I see a car turning.

It is natural to give a propositional account of the objects of such constructions and explain the difference between their intensional and extensional readings as a quantifier scope distinction. Ignoring many complications, the forms of the propositions stated on intensional and extensional readings of (36) would then be given by (37) and (38), respectively.

(37) $See(I, \hat{}\exists x(Car(c) \wedge Turning(x)))$

(38) $\exists x(Car(x) \wedge See(I, \hat{}Turning(x)))$

As with other intensional verbs, this scope difference explains the main intuitive differences in meaning between intensional and extensional perceptual ascriptions. It explains differences in existence-neutrality and non-specificity as a matter of logic: (38), but not (37), logically entails that there is a car I see turning, which can only be a specific car. It explains differences in appearance-neutrality and referential opacity by bringing out the fact that the word "car" in the intensional case contributes a property that is part of what one sees, whereas in the extensional case it is merely used to characterize the object seen, which can be done equivalently by any co-extensive predicate. As with other intensional verbs, one can opt either for a propositional or a Montagovian account of the objects of NP constructions. Either way, the treatment given above is trivially extended to account for the intuitive differences in meaning between intensional and extensional perceptual ascriptions with NP objects.

To summarize, the difference in existence-neutrality between intensional and extensional readings of perceptual ascriptions is mirrored by other constructions types. There seems to be considerable agreement among theorists that this difference is best explained at the level of the structure of the proposition stated in the case of non-perceptual constructions. Such explanations in terms of propositional structure are straightforwardly extended to perceptual ascriptions. They elegantly account for all the differences that we find between intensional and extensional readings of perceptual ascriptions.

4 Conclusion

In section 1, we saw that apparent IPAs systematically occur in English as well as in other languages. In section 2, I began to address the question of whether apparent IPAs state existence-neutral propositions as opposed to merely conveying them. We saw that the hypothesis that existence-neutral propositions are merely conveyed by alleged IPAs faces three serious challenges: it predicts that we state falsehoods when in fact we don't, it predicts that we can use explicitly extensional constructions when in fact we can't, and the only available account of how we convey existence-neutral propositions without stating them (the unstated qualification view) makes incorrect predictions regarding what is conveyed by (apparent) IPAs. I also suggested that it is plausible that apparently intensional perceptual ascriptions should be treated like other intensional constructions, which are generally taken to

state existence-neutral propositions. In section 3, I sketched how the most widely accepted views of intensionality extend to perceptual verbs. These views predict that the intensional-extensional distinction is a distinction at the level of propositional structure between different propositions that can be stated. Although the preceding considerations might not yet *establish* that there are IPAs, they make a decent case for this view.

I would like to conclude by briefly addressing a concern about IPAs that seems to be an important factor in this debate even though it has not been put forward as an official objection. Ayer appeals to IPAs as part of an argument from illusion for sense-data. The criticisms of IPAs I discussed in section 2 (those of Austin, Dretske, Grice, and Soames) all occur as part of disapproving discussions of sense-data. It seems clear that the opposition to IPAs is motivated in part by a certain disdain for sense-data.[28] While there has historically been a link between pro-sense-data and pro-intensionality views, this link has, it seems to me, been severed by Gilbert Harman in his 1990 paper. Harman's discussion of the argument from illusion seems to show that recognizing IPAs leads to representationalism about perceptual experience, not sense-datum theory.[29] In any case, suppose it turns out (contrary to my expectations) that IPAs entail the existence of sense-data.

[28]Sense-datum theory is now considered a marginal view. See Bourget and Chalmers 2014.

[29]I expand on this topic in a companion article entitled "Implications of Intensional Perceptual Ascriptions for Representationalism, Relationalism, and Disjunctivism" (ms). I defend the kind of representationalism motivated by the present approach in Bourget 2010b,a, 2015a and forthcoming (see also Bourget and Mendelovici 2014). This representationalist view plays a key role in Bourget 2015b.

Still, we should not reject the claim that there are IPAs; we should simply conclude that they are never true. The evidence against sense-data is that they do not fit within the overall scientific picture of the world, and they seem hard to find introspectively. This evidence bears on what there is inside or outside the head, not on what is said.

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