Judges, Experiencers, and Taste*

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Abstract

This paper reviews the claim that certain predicates, including what are called predicates of personal taste, have a sometimes-hidden element for a judge or experiencer. This claim was advanced in my own earlier work, as well as a number of other papers. My main goal here is to review some of the arguments in favor of this claim, and along the way, to present some of my earlier unpublished work on the matter. In much of the earlier literature, this claim was part of a debate between relativists, contextualists, and others about the

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> semantics of 'subjective' or 'perspectival' predicates. I shall argue here that these issues are independent. Whether we opt for experiencer or judge parameters is independent of whether we prefer relativist semantics to any other kind.

My main goal in this paper is to review the claim that certain predicates, including what are called 'predicates of personal taste', have a sometimes-hidden element for a judge or experiencer. The main idea is fairly simple. Take a taste predicate like *tasty* and a run-of-the mill gradable predicate like *tall*. We might think both simply describe things:

(1) a. Sam is tall.
    b. Chili is tasty.

At first glance, we might think that (1a) and (1b) have the same basic structure. The first predicates tallness of Sam, the second tastiness of Chili. So both look like $T(x)$. But, we might also say, there is something different about (1b). After all, to be tasty is to be tasty for someone or some ones who experience the taste. To be tall is, to be sure, to be tall relative to some standard of tallness, but not to someone who experiences the tallness.

So we might claim that even though we do not always see it, there is a hidden argument in predicates like *tasty*. The form is more like $T(E, x)$ for an experiencer E. This claim was advanced in some of my own earlier work, as well as a number of other papers. Though it remains controversial, I believe it enjoys substantial support. My main goal here is to review some of the arguments in favor of this claim, and along the way, to present some of my earlier unpublished work on the matter.

In much of the earlier literature, this claim was part of a debate between relativists, contextualists, and others about the semantics of 'subjective' or 'perspectival' predicates. That was certainly true of some of my work. But one point that I believe has emerged over the past several years is that the two issues are independent. Whether we opt for experiencer or judge parameters is independent of whether we prefer relativist semantics to any other kind. Though this is implicit in a number of recent papers, it is worth making more explicit. In addition to looking at claims about a judge or experiencer argument, I shall try to clarify why that is different from issues of relativism.

The plan for this paper is as follows. In section 1, I shall set up the main issues of subjectivity, relativism, and contextualism. I shall be somewhat skeptical of whether those issues can yet be resolved. But I shall also introduce the idea that we might posit an experiencer E. In section 2 I shall

clarify this claim, and I shall offer evidence for it in section 3. Section 3 will also discuss some counter-evidence, and the status of the claim so far. I shall conclude, rather skeptically, in section 4.

1 Taste, Subjectivity, Relativism, Contextualism

A number of different elements of language show something we might call 'subjectivity' or 'perspective'. Our canonical example will be predicates of personal taste. As I shall discuss more below, there are some questions about how to define this category, but the standard examples from Lasersohn (2005) include *tasty* and *fun*. Other sorts of examples have received a great deal of attention. Epistemic modals are among the much-discussed ones:

(2) The keys might be in the desk.

This typically reports where the keys are, for all the relevant subject knows. So, it shows a kind of subjectivity.[1] But we can see other aspects of subjectivity in standard gradable predicates. Consider:

(3) Alex: Sam is rich
Bob: No she's not!

This can have a fairly familiar 'objective' reading where it amounts to a dispute about how much money Sam has. But as a number of authors have noted (Barker, 2002, 2013; Bylinina, 2017; Kennedy, 2013; Richard, 2004; Sæbø, 2009), there is also a reading where what is in dispute is not such an 'objective' fact, but rather what to count as a standard for richness. That is up to the speakers (more or less), so can be seen as a form of subjectivity. As especially Sæbø (2009), followed by Kennedy (2013) and Bylinina (2017) show, once you start looking for forms of subjectivity, we can find quite a variety.

Surrounding the issue of subjectivity has been the debate over relativism. Relativism is a complex issue, and I shall sketch a highly simplified version of it, just to set things up. One way to spot a kind of subjectivity is through the following sort of case. For taste predicates, we see:

[1] Though epistemic modals have been central to the relativism debate, I shall for the most part ignore them here. They bring with them their own complications, which are beyond the scope of this paper. See the survey by Egan (2011) for many references.

(4) John: The chili is tasty.
Mary: No, the chili is not tasty.

This has the surface form of a disagreement. Both John and Mary say the same words, but one says yes, and the other no. It also seems in some ways to be a disagreement, as John and Mary seem to disagree about chili. But at the same time, it does not appear that either John or Mary could be wrong. This is now called *fautless disagreement*.[2] How can we make any sense of this? A leading idea is to treat these cases in a relativist way. To put it loosely, the idea is John's claim is 'true for him', and Mary's claim is 'true for her'.[3]

To some, faultless disagreement has been a key diagnostic for a kind of subjectivity. And, it has often been argued, one that calls for a relativist semantics. To make this more clear, let me sketch a very minimal version of the relativist idea. I shall follow Lasersohn (2005) in the basics.[4]

[2]To my knowledge, the name comes from Kölbel (2002), though for taste predicates, it was highlighted by Lasersohn (2005). Early work of MacFarlane (e.g. MacFarlane, 2003) focused on different phenomena but was certainly along similar lines. MacFarlane takes up taste predicates in MacFarlane (2014).

[3]Relativism is of course, a long-standing philosophical issue, going back to pre-Socratic times. See the overview by Baghramian & Carter (2021) for more background. The focus here is on a form of relativism that emerged around the beginning of the 21st century, focusing on philosophy of language, semantics, metaphysics, and related areas. One striking thing about this revival of relativism is that it took place among people who were inclined to dismiss many forms of relativism as a mistake. Many of us thought of relativism as what we sometimes derisively called 'freshman relativism': the tendency of our introductory students to simply say things are 'true for you but not me' and that 'everything is relative'. There was also not in this group much enthusiasm for more sophisticated ideas we might find about 'conceptual schemes' from such authors as Kuhn (1962) or Putnam (1988) or Strawson (1959). The revival offered a form of relativism that seemed to those of us skeptical of the idea to be level-headed, well-argued, and right or wrong, a really interesting new development. Pioneering works of Egan et al. (2005) and Lasersohn (2005) and MacFarlane (2003) took somewhat different approaches to the issue, but came to related conclusions.

[4]Lasersohn (2017) presents a different formulation, but as he stressed in his earlier work, part of the idea was to present a conservative departure from familiar semantic machinery. I shall follow suit. Relativism has many different forms. Important work from Egan (2007), Kölbel (2002), MacFarlane (2005, 2014), Recanati (2007), and Richard (2004) all offer different forms. There is some useful discussion of the varieties of relativism in Kölbel (2003), MacFarlane (2009), and Weatherson (2009). A strongly anti-relativist position is offered by Cappelen & Hawthorne (2009). For our purposes, the semantically conservative model of Lasersohn (2005) will be helpful.

Let us start with a familiar and common semantic picture. Sentences and other constituents are assigned semantic values in contexts. In notation: $[\![\varphi]\!]_c$. We can follow Cresswell (1973), Kaplan (1989b), and Lewis (1980) in thinking of a context as containing a bundle of information including a speaker, hearer, location, time, possible world, and so on. So, it looks like some form of tuple: $\langle w, t, l, s, h\rangle$. But what is expressed in a context is a proposition, that is true presumably at a world, or in Kaplan's framework especially, a world and a time. So we need points of evaluation for truth. Lewis calls these *indices*, and I shall follow his terminology. The official Kaplanian semantics makes indices a pair of a world and a time: $\langle w, t\rangle$.[5] To get a truth value, we must evaluate what is expressed in a context at an index. In notation:$[\![\varphi]\!]_c^{\langle w,t\rangle}$. So propositions are now true at a world and a time.

Lasersohn suggests we add a judge to an index. Rather than $\langle w, t\rangle$, we have $\langle w, t, j\rangle$. But importantly, the judge can vary independently of context. So, when we come to assess a dialog like (4), we can note both a sense in which John and Mary say the same thing, but that it is true for one judge, and false for another. To make it a little more explicit: Lasersohn assumes there is no context dependence here. *Tasty* expresses the same thing in any context. $[\![\text{Chili is tasty}]\!]_{c_j}$ in the context in which John speaks is the same proposition as $[\![\text{Chili is tasty}]\!]_{c_m}$ in the context in which Mary speaks. But, we do have non-trivial judge dependence. Claims about tastiness differ substantially when they are true for one person (John) or another (Mary). The very same proposition can be true at a John-index and false at a Mary-index. We can capture the properties of faultless disagreement by defining two contents to be contradictory if there is no world w, time t, and judge j such that both contents are true at $\langle w, t, j\rangle$. In this framework, the propositions expressed by *Chili is tasty* and *Chili is not tasty* are always contradictory, in any context. Hence, people who utter them disagree. But, in the two relevant contexts for John and Mary, we feed different judges into the index, and so can make them both true. Hence, we have faultlessness. This is indeed a simple and elegant solution!

One of the other leading options for addressing this issue is a contextualist one. What Lasersohn diagnoses as judge dependence in an index is, according to this view, a more familiar context dependence. I defended this view in Glanzberg (2007) as did Stojanovic (2007). Here is a quick version of my own

[5]The issue is somewhat more complicated for Lewis himself.

approach. We look at the structure of *tasty*. Where Lasersohn sees a non-context-dependent ordinary predicate, we see a highly context-dependent one. To make this clear, we posit a special argument in the predicate. Where we might have expected only $T(x)$, we propose we really have $T(E, x)$, though E is often what linguists call 'covert', i.e. somehow not pronounced.

We can illustrate this as follows. Like other gradable predicates, we can treat *tasty* as assigning a degree of tastiness to things (edible, presumably).[6] To say that Chili is tasty is to say that its degree of tastiness exceeds a contextually provided standard: a degree d_c that counts as sufficiently tasty. But unlike other gradable predicates like *tall*, the degrees of tastiness are degrees of tastiness for a contextually provided experiencer or group of experiencers E. In notation:

(5) $[\![\text{tasty}]\!]_c$ = degree-gustatory-quality-experienced-by-E

After composing, we will get:

(6) a. Stewed duck tongue is tasty.
b. $[\![\text{tasty}]\!]_c([\![\text{Stewed duck tongue}]\!]_c) > d_c$

The contextualist view is that there are two parameters fixed by context here: E and d_c. But all the judge dependence we need comes from the contextual paremeter E.[7]

A few points are important here. One is not contentious, but is worth a comment. The contextualist view just sketched holds that context provides values for E and d_c. That is not really disputed, as if you take a Lasersohn-style relativist line, you will have an index of any context. This might give the impression that there is not much of an issue here. We are asking if the right analysis tells us to write $[\![\text{Chili is tasty}]\!]_c^{\langle w,t\rangle}$ is true, where the context provides a judge or experiencer j; or tells us to write $[\![\text{Chili is tasty}]\!]_c^{\langle w,t,j\rangle}$ is true, where the context can provide j but we look to the index instead. Is this a matter of what we write as a subscript, and what as superscript? This appears all the more so when we look at sophisticated relativist theories that manipulate the judge paremeter of an index, such as Lasersohn (2009) and in part Stephenson (2007).

[6]This is one of the leading approaches to all gradable adjectives, including *tall, rich*, etc. See Barker (2002), Bartsch & Vennemann (1972), Bierwisch (1989), Cresswell (1977), Heim (1985), Kennedy (1997, 2007), Rett (2015), and von Stechow (1984). Alternative views are defended by Burnett (2014) and Klein (1980).

[7]See Glanzberg (2007) for a more extended presentation of this view.

At a very high level of abstraction, this may seem like a notational issue. But with a little more attention to details of language, we can see it is not merely that. The relativist claim is that judges in indices vary independently of context. We have not said that much about what makes a context, but is tied to the circumstances in which an agent speaks.[8] So, the more important claim, that really is under dispute, is whether what we see in predicates of personal taste is ordinary context dependence, or a special kind of distinct index dependence. Contextualists and relativists substantially disagree about this.

Another contentious claim of the view just sketched is that there really are often-hidden elements E and d_c in the logical forms of sentences with predicates of personal taste. These provide a mechanism for context to affect that they say. The claim is even if hidden, these are real. This is fairly familiar for d_c, but much more contentious for E.

And finally, there is faultless disagreement itself. Lasersohn argues that faultless disagreement is a distinctive real phenomenon, which is best accounted for by a fully relativist version of index dependence. Contextualists like me and Stojanovic took the opposite line, that there is not really any such thing. We claimed that once you take the flexibility of context dependence into account, there is nothing left to explain. There are any number of middle positions. As I already mentioned, Barker (2013) and Kennedy (2013) find a different form of faultless disagreement in other gradable predicates like *tall*, which as Bylinina (2017) documents, do not seem to show judge dependence. Stephenson (2007, 2009) offers a hybrid view that combines elements of relativism and contextualism. Views of Moltmann (2006, 2010) and Pearson (2013) emphasize the generic quality of experiencers, rather than their context dependence.[9]

Though I stick to my contextualist views, I think the cautious thing to say is that the debate between relativism and contextualism (and other options) remains unresolved. Some of the judgments that have formed the data for these theories are delicate, and speakers disagree. The theories have become complicated.

We might hope that controlled studies might resolve some of these ques-

[8] See the discussion in Kaplan (1989b,a), Lewis (1970, 1980), and Stalnaker (1998). One further point. I happen to disagree with the Kaplan-inspired view that indices include times (Glanzberg, 2011; Glanzberg & King, 2020; King, 2003). As the Kaplan framework is familiar, I have followed it here in spite of that.

[9] A good discussion of some of these issues is from Huvenes (2012).

tions, but so far, there have not been enough to really answer them. As far as I know, there have been a few studies on predicates of personal taste (Kneer, 2015, 2021b, under reviewb), and a few on epistemic modals (Khoo, 2015; Khoo & Phillips, 2019; Kneer, under reviewa; Knobe & Yalcin, 2014). With such little data in hand, it is risky to make any firm conclusions, but all these authors see their results as raising challenges for relativist theories. On the other hand, Beddor & Egan (2018) and Dinges & Zakkou (2020) find data that seems to support specific forms of relativism. Kneer (2022) takes issue with Dinges and Zakkou's experiment design, and offers further evidence to support a contextualist approach. Indeed, Kneer argues that the experimental evidence supports contextualism and does not support relativism. Even so, with so few studies available so far, a cautious view is that empirical work has yet to really firmly resolve the debate.

The claim that taste predicates requires a relativist semantics, perhaps on the basis of faultless disagreement data, or a contextualist semantics, perhaps on the basis of observations about context and contextual parameters, is highly disputed. My own diagnoses is that it is not one we can yet resolve (though I know which outcome I prefer!). In the next section, I shall concentrate on the status of such elements as E, but let me pause to note that the idea that there is some kind of subjectivity or perspective in many different aspects of language is not really in doubt. There is something subjective about predicates of personal taste, and it is something different than we see in predicates like *tall*. All that is well-supported, even if its final explanation remains elusive.[10]

2 Judges, Experiencers, and Stuff

So far, we have seen reasons to find some form of subjectivity in predicates of personal taste like *tasty*. We have seen several competing analyses of what this subjectivity amounts to, and focused on two: relativism and contextualism. In section 1, I ended by saying I do not see how to resolve this debate, though I find myself on the contextualist side.

[10] As I leave the main relativism/contextualism debate, let me mention one more issue. There is a debate over the status of retraction and the nature of disagreement. See López de Sa (2015), MacFarlane (2007), Marques (2018), Marques & García-Carpintero (2014), Zakkou (2019), and the survey by Zeman (2017). For interesting empirical discussion, see Kneer (2021a).

In this section, I want to focus on a more narrow issue, where I think we can make progress. I shall present some arguments in the following section 3. In this one, I shall try to clarify the issue.

The issue is simple to state: whether E really exists. The two strategies we looked at placed subjectivity differently. The example relativist we looked at placed it in a coordinate in an index. Propositions are true at a world, time, *and judge* j. The example contextualist we looked at placed in an argument of the predicate. Personal taste predicates have an argument E which we called an *experiencer*, and to be tasty is to be tasty for an E.

Both of these strategies try to implement some kind of subjectivity or perspective by invoking a judge or experiencer. As I said, I shall not try to resolve the main issues between these strategies. But some things should be clarified. First, some terminological issues. On the one hand, we have the idea that an index has an extra coordinate: instead of $\langle w, t\rangle$ we have $\langle w, t, j\rangle$. On the other hand, we have the idea that predicates like *tasty* have an extra 'argument', and so look more like $T(E, x)$ than like $T(x)$. For reasons that will become clear later, there are technical issues about calling E an argument, but for the moment, that will work well enough. Because it is often hidden, we sometimes call it a hidden parameter.[11] But, to make terminology annoying, we sometimes also call j a paremeter in the index. I think context will disambiguate, but it is important to remember that terms like 'parameter' can be used in many ways. For the moment, I shall stick with 'argument E' versus 'coordinate j'.

There are several ways that setting things up as E versus j is misleading. One is that subjectivity can be found in other places. As I mentioned, a number of authors have suggested that the less contentious idea that there is a contextual parameter d_c can also be seen as a source of subjectivity. But more important to our focus is that merely having a coordinate j does not make for real relativism. This has been stressed by MacFarlane (e.g. MacFarlane, 2009, 2014), though I think broadly agreed among relativists. Merely having j is not enough. The coordinate j needs to vary in the right ways, independently of a context (in our notation, c). In MacFarlane's terminology, we need a distinct *context of assessment*, which would set j among other things, independently of a context of assertion.[12]

[11] Well, I did in Glanzberg (2009/2016).

[12] I am here mashing together Lasersohn and MacFarlane. MacFarlane's view has a number of very different features, to which I am not doing justice. But I think one of the lessons from MacFarlane can be put this way.

Here is another way things are misleading. I have set things up as a controversy between a form of contextualism I like (mine) which posits E, versus a form of relativism I like (Laserson's) which rejects E but posits j. But the broad issues of relativism and contextualism are independent of this specific way of putting things. Let us first look at E. Whether E really exists is independent of whether one is a relativist or a contextualist.

First, one can hold a contextualist view whether one agrees there is an implicit E argument or not. Many contextualists, myself included, find it natural to insist that if there is context dependence, there must be a contextual paremeter, which may sometimes be hidden. That fits the view advocated by Stanley (2000). But other contextualists are happy with various forms of 'unarticulated constituents', allowing for context dependence without having a parameter in syntax (Bach, 1994; Perry, 1996; Recanati, 2004).

So contextualism does not require E. But also, we know that agreeing that there is an E argument does not decide between relativism or contextualism. A good example is from Stephenson (2007, 2009). She argues that what I am calling the E argument can be two distinct covert elements. One is a normal context-dependent parameter, but the other is a realization in syntax of the relativist idea. She still takes indices to have a judge j coordinate. The special version of E (called PRO_j in her framework) is always set to be j. Thus, it realizes the relativist idea in syntax.

We have already noted independence in the other direction. Positing a coordinate j does not make for relativism or contextualism. It depends how you think j works. It might be notationally profligate to put it in an index if you do not think it reflects the kind of context of assessment we mentioned a moment ago. But the mere notation does not decide that.

So, let us assume that whether one posits E or j is a weak, not very reliable guide to whether one is a relativist or contextualist. It is still an important issue, and that is the issue I shall explore in the rest of the paper.

The main idea is this. Positing E puts the locus of subjectivity in the syntax. Remember, though I have been cagey about some details, the idea is that we have an *argument* of a predicate that makes it subjective. That can be done in a relativist or contextualist way, but it is still an argument of a predicate. The alternative is that it is not in the syntax, but in the way the semantics works. We can represent this with dependence on a coordinate j of an index. The model here is how we think of dependence on a world. We do not (on this view) see a syntactic location for a world in a sentence. It is just how semantics works that it spits out propositions that are true at some

worlds and false at others. Some are necessary, so are world-independent. We can say the same about j. It is just how the semantics works that it spits out propositions that are true for some judges but not others. Some (many) are judge-independent, but not ones about taste.

So all of this is to set up the idea that there is a specific issue, connected to ones about relativism, but independent. Does E really exist? We can come to relativist or contextualist conclusions independently of this, but it is an important issue on its own. I maintain, as the next section will try to show, that we have good evidence for the existence of E. As I have stressed, that will not decide the debate between contextualists and relativists, but it will help shape it, and it is an advance all by itself to decide if E is really there.

Before turning to that evidence, there are a few more issues that needs to be addressed. I have remarked that E is posited as an 'argument', but have been cagey about what that means. But also, it is one that is often hidden. When I say *Chili is tasty* you find no E in the overt syntax.

So, the view we are exploring posits sometimes hidden 'stuff'. It is a much-debated issue in philosophy and linguistics just what that means. I shall not try to resolve the many complex issues about this here. But let me review a few options, so we have some idea what the claim that E really exists even if we do not hear it could mean.

What is it for something to be present in syntax but not heard? Here is one clear idea. In the ellipsis literature, the idea that syntax is fully present but simply not sent to phonology or articulation is a very common, as we see in, for instance, Merchant (2001).[13] We can also think, as some of the philosophy tradition does, about variables present in syntax, but that never have any phonological reflex (Epstein, 1984; Stanley, 2000). Some people think these are more like specific pronominal elements (Epstein, 1984; Manzini, 1992; Rizzi, 1986). Yet another option, which is widely discussed in the syntax literature, is that implicit elements are required by lexical items (thematic) but 'not projected in syntax' (Brody & Manzini, 1988; Chomsky, 1986; Rizzi, 1986; Landau, 2010a; Roeper, 1987; Williams, 1985, 1987). A view on which some implicit elements are represented only in the semantic side of the lexicon is developed by Safir (1991). I shall not attempt to resolve these difficult issues here. What will be important as we proceed is that

[13]Very common does not mean universally agreed upon. For an overview of the issues about ellipsis, see Merchant (2019).

somehow, implicit elements are visible to a range of syntactic processes. Of course, there are many views that reject the idea of any hidden elements in syntax. A good recent representative includes the papers in Barker & Jacobson (2007).

One more issue needs to be addressed, that starts out terminological, but turns out to be something more. Some relativists, like Lasersohn, liked to call the coordinate of an index a *judge*. Some contextualists, like me, liked to call the hidden element of syntax an *experiencer*. Does this matter? In one way, of course, no. It is just terminology. Even in clearer cases when we are sure there is a syntactic argument with a semantic function, there are a lot of names for them that are evocative, but not of all that much substance. What makes a 'theme' versus 'patient' argument is not always so clear (e.g. Levin & Rappaport Hovav, 2005). Perhaps there is just a matter of labels here, though obviously, richer theories can give these labels substance. We might use the labels to keep track of a coordinate of an index (judge j) and an element of syntax (experiencer E). That would be fine terminology.

There are a few reasons that, recognizing it may come down to terminology, I really prefer *experiencer* for the proposed argument E. One is general. Experiencer arguments in syntax are not remarkable. It simply classifies these predicates within the much-studied group of 'psych predicates', which involve describing psychological states. Generally, these predicates are dyadic, involving a relation between an experiencer and something which the psychological state is about or which causes it (a *theme*, or in the terminology of Pesetsky (1995), a *target* or *subject matter*). The class of experiencer predicates is clearly wider than the class of predicates of personal taste, including such 'subject experiencer' adjectives as *proud* and *fearful*. Predicates of personal taste fall within the class of 'object experiencer' predicates. I am not sure if they are equivalent, and indeed, this shows some lack of specificity in the category of predicate of personal taste. Is, for instance, *embarrassing* a personal taste predicate? It is uncontroversially an object experiencer predicate. I shall not pursue this issue, as the general issue of experiencer predicates is really one of syntax, and goes beyond our concerns here. I merely want to note that appealing to experiencer arguments is not unusual.[14]

So, as I suggested in Glanzberg (2009/2016), I think the terminology

[14]For more on psych adjectives, see Bennis (2000) and Landau (2006, 1999, 2010b). For a more relativist take on these issues, see Lasersohn (2008).

'experiencer' is nice and evocative of things more fully understood. But more results have emerged to support this idea. Here are some. First, as Pearson (2013) notes, many uses of taste predicates really do require some direct experience of what is being tasted. She notes:

(7) a. This cake is tasty to me. #But I have not tried it.
b. This cake is tasty to John. #But he has not tried it.

There are what Lasersohn (2005, 2008) calls 'exocentric' uses where you adopt the perspective of some other agent, but even so, there is strong pressure with taste predicates to have experienced, or think as if you experienced, the taste involved. These points are supplemented with cross-linguistic data in Bylinina (2017). Ninan (2014) explores the nature of the experience requirement in depth.

We have now come to the main idea. We want to take E seriously. We consider the possibility that it really exists in syntax, and that it really is an experiencer argument, not just as a trivial matter of terminology. We have seen that this idea is independent of the contextualism/relativism debate (though certainly linked to the contextualist side in some ways).

So, we need to ask again: does E really exist?

3 Evidence for E

I think the answer is yes. To be clear up-front, the evidence is controversial. But it is substantial.

I shall focus on syntactic evidence. If E is there in syntax, we should see some syntactic reasons to think so. We will see that syntactic and semantic evidence overlap, making a stronger case. But some of the reasons really are syntactic.

The argument I shall present here was originally sketched in some of my unpublished work (Glanzberg, 2009/2016). In the intervening years, a number of other authors have picked up similar points, notably Bylinina (2013, 2017), Schaffer (2011) and (in some forms) Stephenson (2007, 2009). My own version takes its cues from the survey article on implicit arguments by Bhatt & Pancheva (2006). I shall present things much the way I did before, but I pause to note that a number of other authors have presented related arguments.

3.1 A Comparison

What kind of syntactic evidence can we find? I think it is useful to start with a point of comparison, where we are reasonably confident there is an implicit argument, perhaps more clearly than the experiencer of a predicate of personal taste.

The point of comparison is the 'short' or 'agentless' passive construction (borrowing heavily from Bhatt & Pancheva (2006) for how to approach this):

(8) a. Nelson sank the ship.
b. The ship was sunk.
c. The ship sank.

The passive (8b) appears to have an agent argument, even though it is not overtly present in the syntax. We do not see the same thing with the unaccusative *sank*. The agent argument is explicit in (8a), implicit in (8b), and seems to be absent altogether in (8c).

It seems intuitively natural to say the passive (8b) contains an agent argument, just like the active (8a) does, but that somehow the passive construction makes it implicit or hidden. But this intuition alone does not really establish the syntactic presence of the argument. It is presumably based on some mixture of syntactic and semantic knowledge, which helps us to see that in (8a) and (8b) we describe an event of sinking done by an agent, while in (8c) we simply describe the situation where the ship went down.

There are some more specific reasons to think there is a syntactically real implicit argument in (8b). The arguments I shall review have been controversial, and I shall not try to resolve any of the controversies here. Rather, I shall simply mention the sorts of evidence that have been offered. This will provide us with a kind of baseline for our attempt to establish the presence of other related implicit arguments, such as E. I shall take it as success if I can do more or less as well as the agentless passive case.

Two classic arguments for the presence of the agent, highlighted by Roeper (1987), are licensing *by*-phrases and controlling PRO subjects. First, *by*-phrases are allowed in the short passive, but not the unaccusative:

(9) a. The ship was sunk by Bill.
b. * The ship sank by Bill.

It appears that the *by*-phrase is filling the argument position in the passive. There is no such argument in the unaccusative, so the *by*-phrase is not al-

lowed, even though we might well infer the existence of a person doing the sinking in most events of ships sinking. Thus, we have some evidence that it is a syntactic feature of the verb that tells us there is an argument place for the agent, even when it is not realized explicitly.[15]

We also see evidence that the argument position figures into other aspects of syntax, which would only make sense if the argument is really there, even when implicit. One such case is control of PRO. It is a widespread view in syntax that infinitival clauses must have a subject, usually represented as PRO. In important cases, PRO needs to be grammatically linked to another noun phrase which (at least partially) sets its value. This is the syntactic phenomenon of *control*. The implicit argument of a short passive seems able to control PRO, as we see with:

(10) a. The boat was sunk [PRO to collect the insurance].
b. * The boat sank [PRO to collect the insurance].

It appears that (10a) is acceptable because there is an agent argument, which is able to control PRO, even though it is implicit. There is no such argument in (10b), and hence, the sentence is unacceptable.

This argument was advanced by Roeper (1987) following Manzini (1983), but it has been highly controversial. The main reason is the claim that PRO requires a controller in this case is delicate, and has been the subject of much debate. I shall not try to review all the arguments that have been given on either side here. Rather, I shall simply note that if successful, this offers us a kind of syntactic argument for the existence of an implicit argument.[16]

So far, we have seen two sorts of syntactic evidence that can be offered for the presence of an implicit argument: the way a predicate selects complement phrases, and the way it figures into control and other syntactic constructions. The evidence here is by nature of the topic indirect. We will not be able to 'directly observe' an implicit argument. Rather, we observe interactions which only make sense if the implicit argument is really there, and ways that

[15]There are some complex syntactic questions about the nature of the implicit argument, that relate to the structure of the passive itself. We will not be concerned with that structure, but see Baker et al. (1989) and Jaeggli (1986).

[16]For overview of the debate, see Bhatt & Pancheva (2006), Jones (1991), and Landau (2000). Landau concludes that the argument fails in this case, but that it is much better off in the case of experiencers. Control has been a central topic in syntax for many years, notably since Chomsky (1965) at least. But at the same time, it remains a difficult, contentious, and perhaps not fully understood phenomenon. I shall not try to survey the many issues that make this so. See Landau (2013) for a comprehensive overview.

we can render it explicit. If the range of evidence adds up, we conclude the implicit argument is there. This is not the only kind of evidence we might look for, of course. For instance, psycholinguistic work of Mauner and her colleagues (e.g. Mauner & Koenig, 2000) also provides evidence. As is so often the case with the study of language, we build a case indirectly, piecing together evidence that is often indirect, from a number of sources.[17]

3.2 Back to E

Now, we can see that there is similar syntactic evidence for E, though as with agentless passives, it all remains controversial. I shall begin by showing that the same sorts of syntactic arguments used to establish the presence of the agent of an agentless passive apply to the experiencer argument of predicates of personal taste. I shall thus conclude there is good syntactic evidence for E. The two arguments we reviewed above were an argument from complement licensing, and from control. I shall consider each in turn.

3.2.1 Prepositional Phrase Licensing

The most obvious reason to think there is an experiencer argument in predicates of personal taste is that these predicates license *for* or *to*-phrases which realize them. We have:

(11) a. Duck tongue is tasty to me.
b. Disneyland is fun for the whole family.

In contrast, many gradable predicates do not allow such arguments:

(12) * Taipei 101 is tall to me/for me.

(Some people find this acceptable on a reading where it means 'according to me, Taipei 101 is tall', but otherwise it is judged uniformly bad.) This is on par with what we saw with agentless passives, which license *by*-phrases.

In fact, we see a little more here. As Stephenson (2007) and then Bylinina (2013, 2017) note, just which PPs realizes the argument is determined by the predicate, and it varies somewhat idiosyncratically from predicate to predicate. For instance:

[17] In the case of 'optional' oblique arguments, like instrument arguments, psycholinguistic results appear quite complex. See, for instance, Rissman et al. (2015).

(13) a. The chili is tasty *to me/you/us/them.*
b. ? The chili is tasty *for me/you/us/them.*
c. The roller coaster is fun *for me/you/us/them.*
d. * The roller coaster is fun *to me/you/us/them.*
e. The chili tastes good to me/you/us/them.
f. * The chili tastes good *for me/you/us/them.*

We see some variation among speakers for which PPs are required (cf. Stephenson (2007), who lists slightly different judgments but comes to the same conclusion). But the important point here is that even with some dialectical variation, it appears to be the predicate that is selecting the particular PP complement. This kind of lexical determination is the mark of syntactically determined argument.

In the agentless passive case, we saw more than merely that the passive licenses a *by*-phrase. We also saw that the corresponding unaccusative does not:

(14) a. The ship was sunk by the captain.
b. * The ship sank by the captain.

We can typically infer the existence of an agent doing the sinking in events described by both sorts of sentences, but only the passive licenses the *by*-phrase. This helps show that the passive really selects an argument, as it shows that the acceptability of the *by*-phrase is not merely a result of inferring the existence of the agent.

It would be nice to have a pair like *was sunk/sank* for predicates of personal taste. I do not have a case that is quite as clear, but I believe we do see something similar with the predicate *sublime*. Most of my informants find *for* or *to*-phrases unacceptable with *sublime*, and some report it is not a predicate of personal taste. So, most of my informants find:

(15) a. Stewed duck tongue is sublime.
b. * Stewed duck tongue is sublime to me/for me.

Though this may mean that *sublime* is not really a predicate of personal taste, it is in important ways like one. Events where something is sublime typically involve an experiencer who is in a position to judge it sublime. Thus, we can typically infer the existence of an experiencer. Even so, a *to* or *for*-phrase is not licensed. In this way, *sublime* is on par with *sank*. It

shows that the unacceptability of the *to* or *for*-phrase is not simply a matter of being able to infer the existence of an experiencer. Thus, it helps to show that there is a genuine experiencer argument in predicates of personal taste. (Actually, if we look at predicates more distant from genuine personal taste predicates, we can find lots of cases where an experiencer can be inferred but a *for* or *to*-phrase is not licensed. Color predicates like *green* or *blue* provide examples, for instance.)

We should also pause to note that there are a few complicating features of the arguments structure of predicates of personal taste that I shall not really be able to explore. Some predicates, like *fun*, allow nominal and clausal theme arguments, and allow extraposition:

(16) a. Roller coasters are fun.
b. Riding roller coasters is fun.
c. It is fun to ride roller coasters.

But predicates like *tasty* have a much more restricted distribution:

(17) a. Stewed duck tongue is tasty.
b. * Eating stewed duck tongue is tasty.
c. * It is tasty to eat stewed duck tongue.

I have found that very few speakers accept (17b), and a few more (17c), but on balance I think the right conclusion is these are not grammatical.

I do not know if this sort of difference is important or not. It may reveal some important underlying syntactic differences between these sorts of predicates, or it may simply be a reflection of their differing semantic properties. What is fun includes events, while what is tasty does not. Though I do not think the facts are yet clear enough, I shall continue with the assumption that there is a natural class of predicates of personal taste.

3.2.2 Control

So far, we have seen evidence for an E argument in predicate of personal taste from licensing a PP, just as we saw with passives. Again as with passives, further evidence comes from control of PRO.

In fact, it turns out that most of the case for predicates of personal taste having an experiencer argument that can control is already available in the syntax literature, in work of Epstein (1984), Bhatt & Izvorski (1998), and

Bhatt & Pancheva (2006), following early work of Kimball (1971).[18] Epstein notes sentences like:

(18) It is fun to play basketball.

As I mentioned above, syntactic theory tells us that the infinitive *to play basketball* needs a PRO subject. So, the sentence has an underlying form like *It is fun* [PRO *to play basketball*]. But furthermore, it is argued that the value of PRO must be set by linking it to a controller. For the sentence to have its reading, the value of PRO must be people playing basketball, which can only be provided by an implicit experiencer argument of *fun*. Thus, the sentence looks like:

(19) a. It is fun_{E_i} [PRO_i to play basketball].
b. It is fun (for us_i) [PRO_i to play basketball].

We know there must be an E parameter, as it show up in controlling the PRO subject of an embedded infinitival.

As I mentioned above, the corresponding argument for agentless passives has been quite controversial. There are lots of questions that have been raised about the nature of PRO and the control relation. But the most pressing issue is whether the controller in constructions like this really needs to be somehow or another given by the syntax. If it does, then the case for an implicit argument is very strong indeed.[19]

It turns out this is a much-debated point in syntax. But, there is some reason to think that in the particular sort of case in question, the controller must be syntactically present. Here are a few such reasons. First, where the predicate does not take an experiencer argument, the construction fails. As Bhatt & Izvorski (1998) note:

(20) a. [PRO to dance] is fun.
b. * [PRO to dance] is unlikely.

When the experiencer argument is explicit, it is evident that it must be the controller, as observed by Koster (1984):

[18] These observations are picked up by the more extensive discussions of personal taste in Moltmann (2010), Schaffer (2011), and Snyder (2013).

[19] A related construction for adjectives like *stupid* is discussed by Barker (2002), focusing mostly on semantic properties. But this sort of evaluative adjective behaves differently from predicates of personal taste, and has a different argument structure. For more discussion of the syntax, see Bennis (2000, 2004), Cinque (1990a), Landau (2006, 1999), and Stowell (2004).

(21) a. Max said that it was fun to disguise himself as a doctor.
b. * Max said that it was fun for Mary to disguise himself as a doctor.

The properties of the experiencer argument can block readings of PRO, indicating the two must be linked.

The latter point is part of an argument that control in this sort of case is what is known in the syntax literature as 'obligatory control', which requires a controller to be present in the syntax (cf. Williams, 1980). Upon reviewing the argument, Landau (2000) concludes that this is obligatory control.[20] If so, then we have a very strong argument that the experiencer parameter must be present in the syntax. The argument shows we can see the hidden experiencer parameter of a predicate of personal taste at work in the right grammatical environments. In the right environment, there is reason to think that syntax is involved in determining the visible behavior, and that only makes sense if we include the implicit experiencer in some way that is visible to syntax.[21]

The off-the-shelf argument applies to adjectives like *fun*. As I noted in section 3.2.1, adjectives like *tasty* have slightly different syntactic properties. However, the classic analysis of these predicates from Chomsky (1977, 1982) gives us exactly the same results. According to that analysis, we have:

(22) a. Chili is tasty to eat.
b. Chili$_i$ is tasty$_{E_j}$ [O_i PRO$_j$ to eat t$_i$].

[20] As I mentioned, Landau also concludes that the case of agentless passives is not obligatory control, though Higginbotham (1997) defends the control argument for the existence of the agent argument. See also Landau (2010b).

[21] This is not to claim that we have the simple argument that PRO is always controlled by a syntactically represented controller. That is a contentious claim. As I have already noted, not all control structures pattern with obligatory control. Moreover, there are a number of examples in the literature of 'pragmatic control', where no controller seems to be available. These typically involve discourse effects, like:

(i) John agreed to kill Mary. But he instantly felt some hesitation. To kill her would leave poor little Billy without a mother.

(This example is from Peter Lasersohn (p.c.), but related ones can be found in Bresnan (1982).) As Higginbotham (1997) notes, the judgments on these sorts of cases are rather delicate. But more importantly, the cases of obligatory control, where discourse effects are not present, give us a strong enough pattern to provide some substantial evidence. Of course, this makes the argument for the existence of the parameter indirect, built from a number of syntactic patterns all of which make more sense if we posit the implicit argument.

c. Chili$_i$ is tasty (for us$_j$) [O_i PRO$_j$ to eat t$_i$].

The additional structure is needed to explain the object gap, but the important point is the implicit experiencer still controls the PRO subject. Thus, we again see the experiencer argument at work. Again, the syntactic phenomena give us reason to posit an implicit argument somehow in the syntax. The classic analysis of the construction makes vivid how to do so.[22]

I believe we now have some fairly solid grounds for positing a hidden experiencer parameter in predicates of personal taste. In particular, I have offered evidence of the same kind that is used for the case of agentless passives, and I believe the case for positing an implicit experiencer parameter is as good or even better than that case.

There are a number of other sorts of evidence that have been brought to bear in favor of implicit experiencer arguments in the literature. I have focused on the ones close to the agentless passive case, but let me briefly mention a few others.

On the syntactic side, effects related to ellipsis can provide evidence for the experiencer argument. For instance, Snyder (2013) observes that we can get strict/sloppy ambiguities in VP ellipsis:

(23) Ted hopes the mind bender will be fun, and so does Fred.
   a. Ted hopes the mind bender will be fun for Ted, and Fred hopes the mind bender will be fun for Ted. (Strict)
   b. Ted hopes the mind bender will be fun for Ted, and Fred hopes the mind bender will be fun for Fed. (Sloppy)

(The strict reading (23a) is salient in a context where Fred and Ted are complete strangers, who happen to be going to the theme park, to rid their favorite rollercoaster, the mind bender. The sloppy reading (23b) is salient if Fred is Ted's friend, who hates rollercoasters, but is not going to the park, and is thinking about his friend Ted.) On some approaches to ellipsis, this indicates a hidden argument in the antecedent.

In a related vein, Schaffer (2011) observes an effect with sluicing (deletion of the complement of a *wh*-clause). We see:

(24) a. The cheese is tasty, but to whom?

[22]For more discussion, see Cinque (1990b) and Hicks (2009). Though relatively little is known about the properties of this particular construction, see Lasnik & Fiengo (1974) for some interesting observations.

b. * The cheese is circular, but to whom?

Again, some prominent approaches to sluicing explain this in ways that require an implicit experiencer argument in the antecedent (see Merchant, 2001).

Outside of syntax, there is semantic evidence as well. For instance, Sæbø (2009) observes that taste predicates embed under certain subjective attitude verbs, like *find*, while non-taste predicates do not. His explanation of this requires an implicit argument in taste predicates that is absent in others. Hence, we have evidence for the implicit argument. Beyond this, we might simply note that insofar as contextualist semantics for taste predicates, which rely on an experiencer argument, are successful at explaining various properties of these predicate, that already is semantic evidence for the existence of that argument.

As I have noted, the evidence is somewhat indirect, and relies on a range of observations and theoretical considerations. We have observed that the PP experiencer complement seems to be selected, idiosyncratically, by the lexical head, and its acceptability is not a matter of the inferability of an experiencer in the described event. We have also seen how the implicit experiencer can figure in syntax, even if it is not overly represented. I also mentioned a few more pieces of syntactic and semantic evidence. These arguments are more inference to best explanation than observation. We might like to have, for this sort of syntactic exploration, something like a bubble chamber, which renders an otherwise invisible parameter visible. To my knowledge, no such technique has been found. So, instead, we rely on the sorts of indirect evidence that one always relies on to conclude something not visible is nonetheless present.[23] At least, I think we can safely say that the case for a hidden experiencer parameter in predicates of personal taste is as solid as the case for an implicit agent in agentless passives.

3.3 Challenges

As I already mentioned, I think the evidence just reviewed is compelling, but it is controversial. There is also some counter-evidence, which makes the issue all the more complicated. I shall briefly review some of this counter-evidence. I shall not, I'm afraid, reply to it in any substantial way. That is beyond the scope of this paper. But I want to note where challenges lie.

[23] Schaffer (2011) and Snyder (2013) come to similar conclusions.

In an extended discussion, Collins (2013) takes issue with all the arguments I presented here. For instance, he rejects the control-based argument. We have already seen some reasons why. Control is complex, and whether it really supports claims of hidden syntactic material remains contentious. He also points out difficulties in finding analyses showing control in many cases of taste predicates. Along with Lasersohn (2017), he finds the control-based argument unpersuasive.

Control is a complex and not fully understood phenomenon, I shall not even try to resolve the issues just raised. One point I did try to make above was to compare the status of E with that of a covert argument in an agentless passive. I noted the arguments in both cases seem on par. As Collins spells out clearly, this remains a weak case. The control argument has been challenged for passives, and whether we really need to have an implicit argument projected in syntax for the agent of a passive is contentious. But it does strike me as probative. Right or wrong, the idea that there is an implicit argument in the passive case is not bizarre or unmotivated.

Collins also takes issue with the argument via prepositional phrase licensing. His main concern is that in some ways, these phrases do not behave like real arguments of predicates. Rather, they behave in some ways more like what are called adjuncts: extra phrases that modify a content but are not required arguments. Here again, one of the issues is that our tests for what counts as argument or adjunct are delicate, and E shows different sorts of behavior in different instances. I cautiously suggested in Glanzberg (2007), as Schaffer (2011) also did, that E might be an argument in the strict sense. I now think that Collins evidence casts doubt on this. With Bylinina (2013, 2017), I am still inclined to see it as a lexically selected thematic adjunct. That is an unusual category, but Bylinina notes some independent evidence for such a category.

There are a number of other issues that Collins (2013) and Lasersohn (2009, 2017) raise. Binding, crossover effects, movement tests, and so on all raise questions.

I am not attempting to answer all of those here. But let me close with some methodological points that bear on how we decide the matter. As I think all sides are aware, we have a wide range of delicate and sometimes inconclusive evidence. Our task is to form an 'all-things-considered' evaluation of that evidence. I have focused on syntactic evidence, as I agree that a syntactic claim should have some syntactic evidence. But the semantic observations are also important. At least as I see it, we need E to do the

semantics. So, I am inclined to be generous with the equivocal syntactic arguments. For broadly semantic reasons, Lasersohn sees the matter differently, and so finds the arguments for E wanting.

On the syntactic side, Collins argues for a view where E is not present unless made explicit. So, he argues against positing hidden material in syntax without very strong reasons. In a way I think they are both right. None of the evidence forces the syntactic claim, and there are other options. But, I still maintain, the whole package, syntactic and semantic, looks to me like the best way to put things together.

4 Conclusion

In many ways, my conclusions in this paper are grim. I despaired of resolving the contextualism verus relativism debate given our current state of knowledge. I suggested that I think the evidence for E is clearer and more compelling, but it remains difficult to assess, and rightly controversial. But I am more optimistic than that. Underneath all that uncertainty is some real progress, in understanding how subjectivity can be represented in language, and how it relates to syntax and to semantics. Perhaps the steps are small, but over time, they seem to me to be adding up.

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