Contextualism, Relativism and Binding: The Case of Predicates of Personal Taste

The debate between relativism and contextualism with respect to several types of expressions of natural languages is one of the most heated debates in contemporary philosophy of language. This paper purports to make a contribution to this debate in connection to one type of expressions: words like "fun", "tasty", "disgusting", "sexy", "cool" – expressions known as predicates of personal taste. It will do so by investigating and offering an answer to one specific argument against relativism and in favor of contextualism about predicates of personal taste that has recently emerged in the literature. Although only recently appealed to in the case of predicates of personal taste, the argument has figured earlier in another debate within contemporary philosophy of language in connection to other type of expressions, namely locational expressions. In the first section I will clarify my use of the terms "contextualism" and "relativism", which, given the multitude of positions to be found under these labels and the many ways in which philosophers have used them, seems a helpful thing to begin with. In section 2, I will present the argument against relativism and in favor of contextualism for predicates of personal taste as found in Jonathan Schaffer's recent paper "Contextualism for Taste Claims and Epistemic Modals". Section 3 connects this argument with a formally similar argument offered by Jason Stanley in the debate between truth-conditional semantics and truth-conditional pragmatics against the pragmatist view regarding the semantics of meteorological sentences such as "It is raining", an argument known as "the argument from binding" ("the Binding Argument", as I will call it). In section 4, I will survey a number of answers to the Binding Argument, both for locations and predicates of personal taste, and criticize them. In the 5th section I will present my favorite answer to the Binding Argument for predicates of personal taste, modeled on the answer given by François Recanati in the case of locations on behalf of the truth-conditional pragmatist in the debate mentioned above. In section 6 I will make some further remarks on the account given, mention some objections and my replies to them. I will close with a short summary of the paper.

1. Contextualism and relativism: terminology

The debate between contextualism and relativism has taken center stage in recent philosophy of language, with occasional interventions from the field of linguistics. In short time, there has been a proliferation of positions accompanied by a host of different uses of those terms. For

this reason, I think it is necessary to make clear right from the start how I am going to use the terms in question.

In order to do so, I will start from David Kaplan's (1989) picture of semantics, according to which the assignment of a truth value to an utterance is done in two stages. At stage one, the utterance is assigned a content, by the resolution of indexicals and other context-sensitive expressions in the context of utterance; at stage two, that content is evaluated with respect to the circumstance of evaluation of the context of utterance. Thus, in Kaplan's view, context plays a double role. On one hand, it provides elements that get into the content of utterances: call this, following John MacFarlane (2009), the *content-determinative* role of context. On the other hand, context provides elements in the circumstances of evaluation with respect to which utterances are to be evaluated: call this, again following MacFarlane (2009) the *circumstance-determinative* role of context. Now, although context has this double role, when it comes to one specific factor that has a bearing on the truth-value of a certain utterance, context can actively play only one of these two roles. This idea, accepted by many semanticists, is nicely captured by the following principle:

> ***Distribution***: The determinants of truth-value distribute over the two basic components truth-evaluation involves: content and circumstance. That is, a determinant of truth-value (…) is either given as an ingredient of content or as an aspect of the circumstance of evaluation. (Recanati, 2007: 34).

The Kaplanian picture and the Distribution principle allow me to state clearly how I will use the terms in question. Thus, I will call "contextualism about a certain type of expression" any view according to which, in connection to a certain truth-value determining factor associated with the type of expression in question, context has a content-determinative role, and "relativism about a certain type of expression" any view according to which, in connection to a certain truth-value determining factor associated with the type of expression in question, context has a circumstance-determinative role. I'm aware that by doing so I am lumping together very different positions under a single label; however, this will not have any bearing on the issues raised in this paper.

Let me illustrate the harmlessness of using the terms "contextualism" and "relativism" the way I have proposed to use them. Start with relativism. There are basically two main ways in which a relativist semantics for a given type of expression, and in connection to a certain truth-value determining factor associated with the type of expression in question, has been

devised. According to the first way, relativism is a slight modification of the Kaplanian framework succinctly presented above. We have seen that, according to Kaplan, context has a double role: a content-determinative role and a circumstance-determinative one. Now, Kaplan thought of circumstances of evaluation as comprising a possible world parameter and a time parameter. Although not necessarily motivated by the same reasons as Kaplan, but in the same spirit and similar from a formal point of view, the advocates of this first way to cash out relativism propose to introduce more parameters in the circumstances, in correlation with the types of expression the relativist theory purports to account for. On this way of cashing out relativism, it is a slight modification of the Kaplanian framework obtained by simply adding more parameters in the circumstance besides those already accepted by Kaplan. As such, this expansion is not trivial: for one thing, it will make the content of utterances neutral with respect to the parameters introduced (in the same way as, by allowing time in the circumstances, in Kaplan's framework we get temporal propositions – propositions that are time-neutral (that is, propositions in which there is no specification of time)); for another, it will make truth of sentences relative to more than a possible world and a time (besides being relative to contexts of use, as in Kaplan's definition of truth for occurrences (Kaplan, 1989: 522)). But even if not trivial, this departure from the Kaplanian framework is not radical.

In contrast, the second way to devise a relativist semantics for a given type of expression, and in connection to a certain truth-value determining factor associated with the type of expression in question, is more radical and constitutes a more pronounced departure from the Kaplanian framework. In a series of papers, John MacFarlane (2003, 2005a, 2005b, forthcoming) has argued that the right semantics for several types of expressions (future contingents, epistemic modals, knowledge attributions, etc.) requires the relativization of truth of utterances to what he calls "contexts of assessment". In Kaplan's view, truth of sentences is both relative to contexts of utterance and circumstances of evaluations; truth of utterances, on the other hand, is absolute. This is because truth of utterances is to be arrived at by evaluating them with respect to the circumstances *of the context of utterance.*[1] The context of utterance determines, in an absolute manner, the circumstances with respect to which an utterance has to be evaluated. In contrast, in MacFarlane's view, truth of utterances is itself relative to "contexts of assessment" – basically, any situations in which an utterance is evaluated for its

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[1] This does not mean that the circumstances with respect to which an utterance needs to be evaluated are *always* those of the context of utterance: if the sentence uttered contains circumstance-shifting operators (for Kaplan, modal and temporal expressions), then it is those shifted circumstances that matter. However, this does not undermine the point that the context of utterance determines the relevant circumstances: the circumstance-shifting operators are part of the sentence uttered, and thus they get their semantic value (that of shifting the circumstance) in the context of utterance.

truth. Thus, for MacFarlane truth of sentences is relative both to contexts of utterance and contexts of assessment, but the context of utterance *does not* determine the circumstances needed for the utterance's evaluation. These circumstances are determined by the context of assessment, and thus truth of utterances is relative to it. Although this view partially uses the Kaplanian framework, it nevertheless consists in a more radical departure from it than the first way of spelling out relativism.

The point of interest here is that these two ways of cashing out relativism, although different both in the formal apparatus they employ and in their empirical predictions, have the following thing in common: according to both, for a given type of expression and in connection to a certain truth-value determining factor associated with the type of expression in question, context has a circumstance-determinative role rather than a content-determinative one. The difference stems from which context is the one that determines the value of the parameters in the circumstances of evaluation: according to the first way of cashing out relativism, it is the context of utterance; according to the second, it is the context of assessment. These differences, although important, will not matter for the purposes of this paper.

Moving to contextualism, as I use the term, a view is contextualist if according to it, for a given type of expression and in connection to a certain truth-value determining factor associated with the type of expression in question, context has a content-determinative role – that is, it provides elements in the content of utterances. Now, the way in which such elements get in the content of an utterance is a highly debated matter. Although there are many positions fighting over what exactly is the extent to which context contributes elements in the contents of utterances, and over which is the right mechanism by which context makes that contribution, two main camps can be identified: I will call them, following some already established usage, truth-conditional semantics and truth-conditional pragmatics. According to the first, the linguistic meaning of a sentence (the meaning arrived at by computing the literal meaning of its parts, in concordance with the syntax of the language they belong to) is enough to determine the truth-conditions of an utterance of that sentence in any context. The role of context is reduced to resolutions of indexicals and other context-sensitive expressions. According to one proponent of truth-conditional semantics, "any contextual effect on truth-conditions that is not traceable to an indexical, pronoun, or demonstrative (…) must be traceable to a structural position occupied by a variable" (Stanley, 2000: 401). In contrast, truth-conditional pragmatics claims that besides the linguistic meaning of a sentence there are other – contextual, pragmatic – factors that contribute to the truth-conditions of an utterance

of that sentence in most, if not all, contexts. Thus, in computing the truth-conditions of utterances, one needs to appeal to factors that go well beyond the literal meaning of the expressions forming the sentence. In many cases, the contribution that context makes to the truth-conditions of an utterance of a sentence consists in providing unarticulated constituents[2] that enter in the utterance's truth-conditions, without – truth-conditional pragmatists claim – corresponding to any elements in the logical form of the sentence uttered.

Again, what is most relevant here is that these two forms of contextualism, although different formally and possibly also in their empirical predictions, have the following thing in common: according to both, for a given type of expression and in connection to a certain truth-value determining factor associated with the type of expression in question, context has a content-determining role rather than a circumstance-determinative one. The difference stems from the extent to which context is allowed to play a role in determining content and from the mechanisms by which context operates that each view postulates. These differences, although important, will matter for the purposes of this paper only inasmuch as one argument in the debate between the two views presented has been found to have structural similarities to the argument against relativism I'm concerned with.

2. Predicates of personal taste and binding

Predicates of personal taste – expressions such as "tasty", "fun", "disgusting", "sexy", "cool", etc. – have been one of the areas in which the debate between contextualism and relativism has been carried with particular insistence. However, I'm not particularly interested here in giving a thorough characterization of predicates of personal taste, nor in settling the issue of which of the expressions usually grouped under this label really belong to the class of such predicates (for considerations pertaining to these issues, see Stephenson (2007), Lasersohn (2005, 2008)). What I take to be crucial for predicates of personal taste, and which gives them their special character, is that they are essentially connected to a judge[3], in such a way that in order to evaluate utterances of sentences comprising them we need to somehow appeal to a judge. Now, both contextualism and relativism, each in its own way, substantiates this need to appeal to a judge: for the former, the judge is part of the content of utterances of sentences comprising predicates of personal taste, whereas for the latter the judge is part of the circumstances of evaluation with respect to which such sentences are evaluated. The issue of

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[2] The notion of "unarticulated constituents" was first introduced in Perry (1986).
[3] Or to a standard of taste, or to a "perspective", etc. These details will not matter here.

interest here is what arguments could be brought in support of any of these views. Usually[4], in making the case for relativism, philosophers have pointed towards alleged cases of "faultless disagreement": cases in which, although there is a perceived disagreement between two parties entertaining contradictory or contrary contents, neither of them is at fault (neither cognitively, not in any other way). For example, the claim is that when confronted with exchanges like the following

A: Avocado is tasty.
B: No, it's not. It's horrible,

there is a tendency towards interpreting A and B as both having a disagreement (signaled by the expression "No" at the beginning of B's line) and as being faultless. Such data have been taken to form the basis of an argument in favor or relativism and against contextualism for predicates of personal taste. The argument has been that, since contextualism treats utterances such as those of A and B above as making the judges be part of the content of those utterances (so that the content of A's utterance will actually be that avocado is tasty for A, or for some other relevant person or group, depending on the version of contextualism at stake, and the content of B's utterance will be that avocado is not tasty for B, or for some other relevant person or group), it cannot make sense of the disagreement part of the data and thus fails to account for the phenomenon of faultless disagreement, leaving a crucial feature of this kind of expressions unaccounted for. In recent contextualist literature, however, the allegation that contextualism cannot account for faultless disagreement has been answered in more than one way. Thus, some authors simply go on and deny the data, claiming that faultless disagreement is not as solid a phenomenon as the relativist would claim. Other authors have rejected the relativist argument on the basis of using a too narrow notion of disagreement. It has been claimed that disagreement is a multifaceted notion, and the relativist's focus on disagreement as involving contradictory or contrary contents (or, indeed, content at all) amounts to overlooking other senses of disagreement, which when taken on board would not support the relativist argument. On the other hand, there are contextualists who accept the relativist notion of disagreement. Among them, some just bite the bullet, claiming that contextualism simply cannot make sense of faultless disagreement, but assuage the worry by usually accompanying

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[4] What follows should not be taken as an attempt to offer a thorough discussion of arguments in favor of relativism about predicates of personal taste. The following considerations serve at best as setting the stage for the discussion to come.

this sort of claim with the postulation of some form of semantic blindness, to the effect that the semantics of such expressions is hidden to normal speakers and, as a consequence, they are systematically wrong in judging as being the case what is not – for example, judging that there is disagreement in the exchange between A and B above when in fact there is none. So, according to those contextualists, the intuition of disagreement one has in alleged cases of faultless disagreement is to be explained away, rather than accounted for. But there are also contextualists that try to fix the problem by addressing it head-on: they claim and purport to show that, despite the relativist allegations, contextualism can after all make room for disagreement. This is a debate that has its amount of intricacy, and I will not enter it here; suffice it to say that the issues are not settled yet, and the weight of the argument from faultless disagreement is not something philosophers in the debate have agreed upon.[5] Nor are other arguments that have been adduced in favor of relativism and against contextualism more uncontroversial. For Kaplan (1989), the main argument for the introduction of parameters others than possible worlds in the circumstances of evaluation (time) is the existence of circumstance-shifting operators in natural languages. This argument, known as "the operator argument", plays a significant role also in David Lewis' (1980) semantics; however, it has been severely criticized recently (mainly in King (2003) and Cappelen & Hawthorne (2009)) on the basis that its proponents have assumed that the natural language expressions appealed to are best interpreted as operators and not, say, as quantifiers or modifiers in object language. So any attempt on the relativist part to offer a similar argument for the introduction of judges in the circumstances in order to offer a semantics for predicates of personal taste (such as that of Kölbel (2009) in connection to natural language expressions like "for John") has to face that criticism. Some other arguments, such as the right account of the behavior of predicates of personal taste in embeddings under certain propositional attitude verbs (Lasersohn (2009)) or, for relativism in general, considerations having to do with logical validity (Predelli (forthcoming)) need more consideration in order to be taken as tipping the scale in favor of the view.

Moving now to arguments in favor of contextualism about predicates of personal taste, it is maybe striking to note that there have actually been very few direct, positive arguments in favor of the view. Insofar as the issue has been considered, it has rather been assumed that predicates of personal taste are similar to more uncontroversial context-sensitive expressions. Contemporary treatments (such as those in Glanzberg (2007) or Cappelen & Hawthorne

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[5] For a discussion of answers to the argument from disagreement, in connection to Herman Cappelen and John Hawthorne's book *Relativism and Monadic Truth*, see [Author''s article 1].

(2009)) consist mainly in modeling the semantics of predicates of personal taste on that of such context-sensitive expressions and in defusing arguments for an opposite, relativist view. Recently, however, a powerful argument in favor of contextualism and against relativism about predicates of personal taste has been proposed. In his paper "Contextualism for Taste Claims and Epistemic Modals", Jonathan Schaffer (forthcoming) mounts an attack on the relativist view of predicates of personal taste and epistemic modals by raising a number of syntactic arguments against it. In connection with predicates of personal taste, the only type of expression I will be concerned with here, one of Schaffer's arguments starts from the observation that predicates of personal taste can be bound. A sentence like

(1) Everyone got something tasty.

has a reading according to which what each of the people in the domain of "everyone" got something tasty *for that person*. To make the case more vividly, Schaffer presents us with an elaborate background, which I reproduce here:

[I]magine that the Smiths go out for ice cream. Ma only likes chocolate, Pa only likes vanilla, Suzy only likes rum raisin, and Billy only likes mint chip. Today they are in luck. Each finds their favorite flavor. (Schaffer, forthcoming)

Full of enthusiasm, someone from the group then utters (1). Schaffer claims that the best explanation for the bound reading of (1), and for making sense of the contrast between (1) and a sentence like

(2) Everyone got something frozen

is to posit a hidden variable for the judge in (1)'s logical form. Thus, on Schaffer's view, (1) is to be rendered as

(3) Everyone$_i$ got something tasty for x_i.

This, in turn, has the consequence that "tasty" in itself has an argument place for the judge, which when not explicitly mentioned is provided by context.

This last step is something that Schaffer presupposes without much argument. And rightly so, since it squares with orthodoxy in both syntax and semantics. My strategy in what follows will be precisely to question this step. However, before doing that, I will connect the argument given by Schaffer with another one, found in another area of debate. This will allow us to better understand what are the presuppositions of Schaffer's argument and to formulate the argument in a clearer and more precise way.

3. The Binding Argument

The argument above is an instance of an argument that has appeared in the debate between truth-conditional semantics and truth-conditional pragmatics concerning the semantics of meteorological sentences such as "It is raining". Jason Stanley (2000) has noted that

(4) Every time John lights a cigarette, it is raining,

has a reading according to which the location of rain is bound by the quantifier "every time John lights a cigarette"; that is, the intuitive truth-conditions of (4) are that for every time t that John lights a cigarette it is raining at t at the location in which John lights a cigarette at t. Stanley claims that the truth-conditional pragmatic approach cannot deliver this reading, since the theoretical resources of the view are too poor. But more important for our purposes, Stanley also claims that once it has been established that the location of rain must be part of the logical form of (4), it also must be part of the logical form of the unembedded sentence "It is raining". This is the argument known as the Binding Argument, and for the case at hand it could be put as follows:

1. Truth-conditional pragmatics claims that in "It is raining", the location of rain is unarticulated (i.e., there is no argument slot for it in the logical form of the sentence).
2. In (4), binding occurs: the location of rain varies with the values introduced by the quantifier "every time John lights a cigarette".
3. There is no binding without a bindable variable.
4. Therefore, in "It is raining" there is a variable for the location of rain.
5. Truth-conditional pragmatics is mistaken, since the location of rain is articulated in the logical form of "It is raining".

Now, Stanley's Binding Argument was designed against truth-conditional pragmatics, but it is important to note that it equally works against relativism about locations. For, if correct, its conclusion will compel us to posit an argument place for locations in simple sentences such as "It is raining". Since on the relativist view as I understand it in this paper, locations are not part of the content of simple sentences such as "It is raining" (and, hence, not part of their logical form), but instead are part of the circumstances with respect to which utterances of such sentences are to be evaluated, any argument to the effect that locations must be part of their logical form should be addressed. A similar argument to the one above could be constructed having relativism about locations as the target:

1L. Relativism about locations claims that in "It is raining", the location of rain is part of the circumstance of evaluation.

2L. In (4), binding occurs: the location of rain varies with the values introduced by the quantifier "every time John lights a cigarette".

3L. There is no binding without a bindable variable.

4L. Therefore, in "It is raining" there is a variable for the location of rain.

5L. Relativism about locations is mistaken, since the location of rain is articulated in the logical form of "It is raining" (and hence, by *Distribution*, it is not part of the circumstance of evaluation).

Importantly, precisely the same kind of reasoning seems to be behind Schaffer's argument presented in section 2 in the case of predicates of personal taste. Schaffer's argument could be thus put as follows, with the target now being relativism about predicates of personal taste:

1J. Relativism about predicates of personal taste claims that in "Avocado is tasty", the judge is part of the circumstance of evaluation.

2J. In (1), binding occurs: the judge varies with the values introduced by the quantifier "everyone".

3J. There is no binding without a bindable variable.

4J. Therefore, in "Avocado is tasty", there is a variable for the judge.

5J. Relativism about predicates of personal taste is mistaken, since the judge is articulated in the logical form of "Avocado is tasty" (and hence, by *Distribution*, it is not part of the circumstance of evaluation).

4. Answers to the Binding Argument

4.1. Quantifying over contexts

Peter Pagin (2005) has proposed a solution to avoid the conclusion of the Binding Argument for locations that is compatible with the truth-conditional pragmatist approach. Pagin's proposal is to render the bound reading of (4) by quantification over contexts in the meta-language instead of quantification over locations in the object-language. An expression like "Every time" ^ s will thus be rendered in Pagin's system as

"Every time" ^ s is true at c iff for every context $c' \approx c/t + l$, s is true at c',

where ^ is the concatenation sign, s is a sentence, and $c' \approx c/t + l$ is to be read as "context c' differs from context c only with respect to the time and location parameters". The problematic sentence (4) is rendered as

"Every time" ^ "if John lights a cigarette, then it rains" is true in c iff for every context $c' \approx c/t + l$, if John lights a cigarette at $T(c')$ at $L(c')$, then it rains at $T(c')$ at $L(c')$

which gives the desired reading (where $T(c')$ and $L(c')$ are the time of the context c' and the location of the context c', respectively). As can be easily seen, on this account no special variable for location needs to be postulated in the logical form of the simple sentence "It is raining"; the variable for contexts takes care of the binding. A similar strategy could be then pursued to deal with the Binding Argument for predicates of personal taste.

In response to this strategy, however, Stanley (2005) has been quick to provide some potentially problematic cases for Pagin's view. Stanley's main complaint is that in those cases the entities that need to be quantified over are not the right entities to be contexts. Here are Stanley's examples, with their renderings on Pagin's view:

(5)   a. Whenever I'm politely listening to someone speaking, it starts to rain.
        b. "Whenever" ^ "if I'm politely listening to someone speaking, then it starts to rain" is true in c iff for every context $c' \approx c/t + l$, if I'm politely listening to someone speaking at $T(c')$ at $L(c')$, then it starts to rain at $T(c')$ at $L(c')$.

(6)   a. Whenever wind blows through a mountain pass, it starts to rain.

b. "Whenever" ^ "if wind blows through a mountain pass, then it starts to rain" is true in c iff for every context $c' \approx c/t + l$, if wind blows through a mountain pass at T(c') at L(c'), then it starts to rain at T(c') at L(c').

I think Stanley's examples pose a serious challenge for Pagin's account, but I disagree with Stanley about the view's prospects to deal with these examples. In his paper Pagin senses this kind of worry and tries to address it by appealing to what he takes to be an uncontroversial principle:

(I) s is true in c iff for all $c' \approx c/\text{I}(s)$, s is true in c' (where I(s) is to be read as "irrelevant for the truth of s").

Now, contrary to what Stanley claims, it seems to me that principle **(I)** successfully handles example (6a). In that case, the idea is that the speaker is irrelevant to the truth of the whole sentence. Since this is so, the speaker parameter is ruled out by **(I)**. On the other hand, though, in example (5a), the speaker is *relevant* for the truth of the sentence (since the sentence contains the indexical "I"), so it cannot be ruled out by **(I)**. This may not show that the account is wrong, but it certainly shows that it needs to be supplemented with a treatment of indexicals. Until this treatment is given, we should look somewhere else for a more complete solution.

4.2. Quantifying over indices

The second answer to the Binding Argument that I consider is that given by Peter Lasersohn (2008): quantification over indices. The trick is to "quantify directly over the individual index, setting and resetting its value in tandem with the variable introduced by a quantifier" (Lasersohn, 2008: 324). Lasersohn conducts the discussion in connection with example similar to (1), but the same strategy applies to (4) as well. Thus, in Lasersohn's system the quantifier "everyone" introduces both a pronominal element in the syntax (pro$_1$) and a sentence-abstract-forming operator that binds the index in the meta-language (μ_1). Lasersohn's example is

(7) Every man rode some ride that is fun,

which in Lasersohn's notation is rendered as

(8) [[every man]μ_1 [[some [ride that λ_2 [pro$_2$ is-fun]]]λ_3 [pro$_1$ [rode pro$_3$]]]]].

On the model of (8), our sentence (1) will be rendered in Lasersohn's system as

(9) [[everyone]μ_1 [[something] λ_2 [pro$_2$ is-tasty] λ_3 [pro$_1$[got pro$_3$]]]].

Without going into details, the important point to note here is that the quantification over indices in the metalanguage introduced by the operator μ precludes the need to introduce variables over judges in the syntax of (1).

I have much sympathy for Lasersohn's view, but I see at least two potential worries. One concerns a prediction that follows from Lasersohn's system, which is that sentence

(10) Each man gave a woman a fun ride and a tasty dish,

has no reading according to which the judge associated with "fun" and the one associated with "tasty" are different people (or, to be more precise, a different range of people: men for "fun" and "women for "tasty", for example). On the contrary, I think it is not very hard to construct contexts in which the judges for "fun" and "tasty" are different people. Imagine, for example, that (10) is uttered as part of a game for couples in which men try to entertain women – for instance by taking them to amusement parks or cooking for them. The winner of the game is the couple who makes the most of the time allotted, but winning does not require that the man and the woman both enjoy a particular activity. (I am focusing here on the case in which "every man" takes wide scope over "a woman", so that each man entertains a different woman, but nothing hinges on that choice; the example will have the same illustrative power if we opted for the reading in which "a woman" takes wide scope over "every man"). So, for example, a situation in which the man enjoys the ride but the woman he entertains does not is not ruled out by this setup. Nor is one in which the woman enjoys the dish but the man does not. Now, imagine that both these situations in fact obtain for each of the couples. To help make the intuition clearer, suppose that it is obvious to everyone that each man enjoyed the ride but none of the women did (say, for example, that none of them feels good after getting off the rollercoaster). Also, suppose that it is obvious to everyone that each woman enjoyed the dish, but none of the men did (say, for example, that none of them feels good after

finishing the dish).[6] It seems to me that under such conditions one (say, the host of the game) not only could felicitously utter (10), but (10) would be also straightforwardly true. We thus have a scenario in which the judges associated with "fun" and "tasty" are different people (each of the men with "fun", each of the women with "tasty"). Such scenarios are complicated, no doubt, but they don't seem incredibly difficult to construct, and certainly possible. So if intuitions are on the right track here, the fact that under Lasersohn's analysis the judges associated with "fun" and "tasty" cannot be different people does not speak in its favor.

The second worry concerns Lasersohn's treatment of prepositional phrases such as "for *x*", where *x* is a judge, and relates to a point made in section 2 in connection to the Operator Argument. In Lasersohn (2005, 2008), the expression "for *x*" is treated as an operator on predicates of personal taste that shifts the judge parameter in the circumstances with respect to which such predicates need to be evaluated.[7] Such a treatment seems indeed to be in line with treating "everyone" as quantifying over indices. Also, the fact that the account provides the right truth-conditions of sentence comprising "for *x*" constitutes a prima facie argument in its favor. However, I think more needs to be said in order to support the view. As noted in connection to the Operator Argument above, we need to be given strong reasons to the effect that expressions such as "for *x*" are best interpreted as circumstance-shifting operators rather than, say, modifiers. I conclude that, although what I have said here is not enough to rule out the view, Lasersohn's case would be certainly helped if such reasons would be provided.

4.3. Quantifying over situations

A third answer to the Binding Argument, although not explicitly proposed neither for locations nor for predicates of personal taste, could be extracted from the treatment given by Paul Elbourne (2005) to donkey anaphora. The solution proposed by Elbourne involves quantification over situations. In contrast to whole worlds, situations are spatially and temporally limited parts of worlds. However, in order to get around well known objections to the traditional notion of situation (such as those in Soames (1986)) a more fine-grained notion

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[6] One might worry about this transparency from the participants' part, since they could be tempted to fake enjoyment for the sake of winning the game. Imagine then that they are tested with some kind of device that unequivocally decides whether the enjoyment was real or not.

[7] Lasersohn's clause for "for" is the following:

If α is a term and β is an intransitive verb, then $[[\beta \text{ for } \alpha]]^{M,c,w,u,g} = [[\beta]]^{M,c,w,a,g}$, where $a = [[\alpha]]^{M,c,w,u,g}$
(Lasersohn 2008: 313),

where M is a model, c a context, w a world, u an individual and g an assignment.

has been introduced: that of a minimal situation. A minimal situation s such that p is a situation that contains just enough individuals, relations and properties to make p true. Also, we need the part-of relation (symbolized $\leq$) to which situations are subjected: a situation s is part of a situation s' if and only if s' contains all the individuals, properties and relations that s does (and possibly some more). Now, in Elbourne's framework a sentence such as

(11) In this village, if a farmer owns a donkey, he always beats the donkey and the priest beats to donkey too.

is rendered as

λs_1. for every minimal situation s_2 such that $s_2 \leq s_1$ and there is an individual x such that x is a farmer in s_2 and there is an individual y such that y is a donkey in s_2 and x owns y in s_2, there is a situation s_3 such that $s_3 \leq s_1$ and s_3 is a minimal situation such that $s_2 \leq s_3$ and the unique farmer in s_3 beats in s_3 the unique donkey in s_3 and the unique priest in s_3 beats in s_3 the unique donkey in s_3.

Simplifying slightly, our sentence (4) would be rendered in Elbourne's system as follows:

λs_1. for every minimal situation s_2 such that $s_2 \leq s_1$ and John smokes a cigarette in s_2 there is a situation s_3 such that $s_3 \leq s_1$ and s_3 is a minimal situation such that $s_2 \leq s_3$ and it rains in s_3.

Again, without going into details, the important point to note is that by quantifying over situations, the need to postulate an argument slot for locations in "It is raining" (and, perhaps, for time) is avoided. A similar treatment could be also given to (1).

I have no particular argument against using situations to account for our examples (1) and (4). Rather, what I want to point out is that the key concept in this account is that of a minimal situation. It is not clear, however, whether minimal situations are sufficient to allow a smooth rendering in the situation framework of all sentences. There are cases in which appeal to minimal situations is not helpful, because it is impossible to retrieve the minimal situations needed. Below is a sample of examples in which appeal to minimal situations fails:

(12)   a. When snow falls around here, it takes ten volunteers to remove it.

b. When a cat eats more than one can of Super Supper in a day, it gets sick.

c. Whenever there are between 20 and 2000 guests at a wedding, a single waiter can serve them.

d. Whenever nobody showed up, we canceled the class. (Kratzer, 2009)[8]

Without ruling out the account as a means to block the Binding Argument, I conclude that the view is not unproblematic. Until this foundational issue is solved, maybe we could look somewhere else for a different kind of solution.

5. Variadic functions

An alternative way of dealing with the Binding Argument (the one I favor) is by employing what François Recanati (2002) has called "variadic functions": functions from predicates to predicates having the role of decreasing or increasing the adicity of the input predicate. Technically speaking, the treatment involves defining a general variadic operator, **Circ**, and a host of specific operators of the same kind, for specific circumstances (location, time, etc.). Variadic operators are of two kinds: additive and recessive. What we need for our purposes are additive variadic operators. Additive variadic operators have a twofold role: on one hand, they increase the adicity of the predicate they operate on; on the other, they provide a value for the newly-created argument place. For the case of locations, we define a *locational* additional variadic operator, **Circ**$_{location}$. The effect of such an operator on a predicate P could be represented as follows (where *X* represents the arguments that P takes):

$$[\textbf{Circ}_{location:\ l}\ (\text{P})]\ (X) = \text{P\_in}\ (X,\ l).$$

Let us see, following Recanati, how this works with a concrete example. In the sentence "John eats in Paris", the phrase "in Paris" is treated as a additive locational variadic operator operating on the predicate "eat", transforming it from a one-place predicate into a two-place predicate; formally,

$$[\textbf{Circ}_{location:\ Paris}\ (\text{eats})]\ (\text{John}) = \text{eats\_in}\ (\text{John},\ \text{Paris}).$$

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[8] That is not to say that there haven't been attempts to offer a rigorous characterization of the notion of "minimal situation". See Kratzer (2002) for such an attempt. A discussion of Kratzer's view (or of other attempts) would leads is to metaphysical issues that are well beyond the topic of this paper.

The twofold effect of the variadic operator can be easily seen: on one hand, it increases the adicity of the predicate applied to ("eat"); on the other, it provides the value for the newly-created argument place (the value in this case being "Paris").

Now, in answering the challenge posed by Stanley, the suggestion is to treat quantifiers on a par with expressions like "in Paris", as additive variadic operators. Before getting to the problematic case, let us see how this works in a simpler case, the sentence "Everywhere I go, it rains". In this sentence the expression "everywhere I go" is treated as an additive locational variadic operator, functioning similarly to "in Paris" in the case before (with the notable difference that instead of providing a *specific* location as the value for the newly-created argument place, it provide a *range* of locations):

$$\textbf{Circ}_{\text{location: everywhere I go}} (\text{rain}) = \text{rain\_in} (\text{everywhere I go})$$

Returning to the problematic sentence (4), the treatment will be more complex, but the basic mechanism is the same. The extra complexity comes from the fact that the expression "every time John lights a cigarette" binds both the time and the location of the raining. Recanati's favorite treatment of the case is to claim that the expression "every time John lights a cigarette" should be treated both as an additive temporal variadic operator (which is articulated), and as an additive locational variadic operator (which is unarticulated) – the first creating an extra argument place for times in the predicate it applies to ("rain") and then binding it, and the second creating an extra argument place for locations in the predicate it applies to (again, "rain") and then binding it. Leaving aside the temporal case, the important idea here is that "every time John lights a cigarette" is treated as an additive locational variadic operator which functions in a similar fashion to "in Paris" and "everywhere I go". The effect of this locational variadic operator can be represented as follows:

$$\textbf{Circ}_{\text{location: every time John lights a cigarette}} (\text{rain}) = \text{rain\_in} (\text{the place at which John lights a cigarette every time}),$$

The upshot is thus that the employment of variadic operators allows Recanati to resist the conclusion of the Binding Argument. Specifically, the account permits the denial of the step from premises 1-3 to conclusion 4 of the argument, since binding is now accounted for by the specific effect of the variadic operator on the predicate. The relativist about locations could

use variadic operators in her defense against the Binding Argument as well: the account would thus permit the denial of the step from 1L-3L to 4L.[9]

Now, the move to be made in order to account for (1) is similar to Recanati's answer in the case of (4). What needs to be done is to define a specific additive variadic operator – call it a *subjectual* variadic operator – that would account for the semantic behavior of expressions like "for x", where x is the judge. Thus, in a sentence like "Avocado is tasty for John", the expression "for John" is treated as an additive subjectual variadic operator which functions as follows:

$$[\mathbf{Circ}_{\text{subject: John}} (\text{tasty})] (\text{avocado}) = \text{tasty\_for} (\text{avocado, John}).$$

Moving to the problematic example (1), the relativist could treat the expression "everyone" as an additive subjectual variadic operator, which functions similarly to "for John" (with the notable difference, again, that it is not specific judges that are provided as values for the newly-created argument, but a range of judges):

$$[\mathbf{Circ}_{\text{subject: everyone}} (\text{tasty})] (\text{something}) = \text{tasty\_for} (\text{something, everyone}).$$

This strategy thus accounts for the required readings of the problematic example (1) and renders unembedded sentences comprising "tasty" as not having an argument place for the

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[9] Recanati's actual diagnosis of the argument is that Stanley is committing "the binding fallacy": namely, that in the Binding Argument as presented above one assumption is missing, so that without the assumption in question the argument does not go through. Recanati states the assumption in connection to a different example than (4), but the same would hold for that example as well:

> (SUP) In "Everywhere I go, it rains", the sentence on which the quantifier "everywhere I go" operates is the very sentence "It rains" which can also uttered in isolation (and whose usual interpretation is said by some to involve an unarticulated location constituent). (Recanati, 2002: 329)

Recanati claims that the variadic functions approach is not committed to (SUP). It seems to me, however, that Recanati's diagnosis is not entirely correct. For the predicate that the quantifier applies to (the zero-place predicate "rain") is indeed the same predicate that appears unembedded in "It is raining" (again, the zero-place predicate "rain"), and hence (if one insists to speak about sentences) the two sentences are the same. It's just that in the process of interaction between the predicate and the quantifier the predicate changes the number of its argument places – from zero to one (disregarding for the moment the effect of time on the predicate, however that is construed). This, of course, is the effect of the quantifier interpreted as a variadic operator. What Recanati seems to have in mind when he speaks of the two sentences being different is what we get *after* the effect of the variadic operator in the bound case, which is indeed different from what we have in the unembedded case. But this seems to me to be trivially true: if we speak of sentences being different after the effect of the variadic operator, then of course they are different. But if we speak about sentences being different before the effect of the variadic operator, then the claim that they are different is false (since the predicate "rain" they contain is the same in both cases). In any case, regardless of this issue, the Binding Argument still does not go through, since conclusion 4 does not follow from premises 1-3.

judge in their logical form. The conclusion of the Binding Argument for predicates of personal taste is avoided by blocking the step from premises 1J-3J to conclusion 4J.

6. Further remarks, objections and replies

In this section I will make some further remarks on the account just given, consider some objections to it and offer some replies. First thing to note is that, in opposition to the three attempts to evade the conclusion of the Binding Argument surveyed in section 4, the variadic functions approach does not purport to replace quantification over specific parameters (such as locations or judges) by quantification over more encompassing entities (contexts, indices or situations). However, it manages to do so without succumbing to the conclusion of the Binding Argument, and hence defuse such arguments as those given by Stanley in the case of location and by Schaffer in the case of predicates of personal taste. Having said that, let me haste to note that the variadic functions approach is not *per se* an argument in favor of relativism and against contextualism, since some varieties of contextualism (for example, truth-conditional pragmatics and possibly some non-Stanleyan versions of truth-conditional semantics) are still viable options at this point. This paper's goal was rather defensive, purporting to show that the relativist has the means to oppose a powerful argument against her view, and, if the variadic functions approach is ultimately tenable, I think this goal is accomplished.

Another remark concerns example (10), the sentence "Every man gave a woman a fun ride and a tasty dish". I claimed that, if intuitions are on the right track, this example constitutes a potential worry for Lasersohn's account. It would certainly be a serious drawback of the variadic functions approach if (10) would be equally problematic for it. The question then is: does the variadic functions approach offer more intuitive results in the case of (10) than Lasersohn's view? My answer is that it does. It is easy to see that under the variadic functions approach, treating both occurrences of predicates of personal taste as being connected to a single judge is not forced on us. Since there are two quantifiers, "each man" and "a woman", and since they operate independently of each other, any of the various readings of (10), including the one I tried to make salient in the game example, are possible. They are possible simply by having one quantifier operating on one of the two predicates, and the other quantifier operating on the other predicate. Thus, the value for the judge parameter introduced by one quantifier (interpreted as a variadic operator) need not be the same as the value for the judge parameter introduced by the other quantifier. Now, it is true that some readings are more widespread than others, but the important point is that those readings are

allowed and easily accounted for under the variadic functions approach. In contrast, in Lasersohn's view some of the readings (including the one I tried to make salient in the game example) are excluded. Again, if intuitions are on the right track here, I take this fact to be a point in favor of the variadic functions approach, since with a bit of ingenuity any reading could be made salient by carefully constructing a suitable context like the one above.[10]

Moving now to objections to the variadic function approach, a few suggest themselves. A thought that naturally springs to mind is that the account is ad-hoc. Although I agree that at the moment the account doesn't have many applications, let me note that there have been similar proposals in the linguistics literature. Sally McConnell-Ginet's (1982) treatment of (some) adverbs is a case in point. Also, although the details are not worked out, besides locations Recanati (2007) has suggested treating tenses and temporal expressions as variadic operators. In addition, without actually providing the details, I submit that similar results can be obtained by applying the variadic functions approach to epistemic modals and knowledge attributions. The expressions that will be construed as additive variadic operators will probably include "according to *x*" and "by *x*'s standards". The general idea behind the approach is that some expressions should be treated as adjuncts, rather than as complements.[11]

A more serious objection to the variadic functions approach is the following. According to the view, quantifier phrases like "everyone" behave like variadic operators, having the double role of increasing the adicity of the predicate they apply to and providing the newly-created argument place with a range of values. The question that arises is whether the variadic operator effect of the quantifier is suitably limited. Such a limitation lacking, one could suspect the view of overgeneration. That is, one would expect the quantifier to apply indistinctly to all kinds of predicates, regardless of whether they belong to the class of predicates of personal taste or not, having the sought after effect in cases when it should not.

To make the point clearer, let's focus on a concrete example. Consider thus the comparison made by Schaffer in the paper mentioned between (1), reproduced here as (13) and (2), reproduced here as (14):

(13) Everyone got something tasty.

(14) Everyone got something frozen.

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[10] In any case, even if one does not agree with the intuitions in the game example, and thus sees no related worries for Lasersohn's view, my account could be seen as a less radical alternative to Lasersohn's.

[11] For a discussion about syntactic and semantic features of adjuncts and complements that allow us to draw a relatively clear distinction between them, see Dowty (2003).

For Schaffer, the reason why we get a bound reading in (13) but not in (14) is that "tasty" in (13) has an argument place for the judge, whereas "frozen" in (14) doesn't. It seems that under the variadic functions approach, this difference is hard to explain, given that the quantifier phrase is the one responsible with the introduction of the extra argument place for "tasty" in (13). If the entire job is done by the quantifier, the objection goes, then we should get a bound reading for (14) as well. But we don't, hence the view overgenerates.

Is there any way to explain this difference within the view proposed? I think there is. The proponent of the variadic functions approach is not committed to the claim that the entire effect of the variadic operator is produced by the quantifier phrase *on its own*. It is open to her to claim that the effect of the variadic operator is the upshot of the combination of the quantifier phrase and the predicate it applies to. The source of the effect of the variadic operator is equally distributed between the two components, the quantifier phrase and the predicate. After all, predicates such as "tasty" are special, in that they require a judge in order for us to be able to evaluate sentences containing them, whereas predicates such as "frozen" are not. Note also that Schaffer's explanation of the difference between (13) and (14) takes the effect of quantification to be produced by the interaction between the two elements, the quantifier phrase and the predicate it operates on. Under the variadic functions approach, the same holds: what the proponent of the variadic functions approach claims is that the way in which the two expressions combine is different from the way Schaffer thinks they do. Moreover, it is significant to note in this connection that expressions such as "for x", where x is the judge, don't combine with any predicate: that something is tasty for a certain person is common parlance; that something is frozen for a certain person is not. The fact that some predicates are special surely has something to do with their capacity to be combined with expressions like "for x" or "everyone" (in the latter case with the effect of being bound, of course). This fact is available to the proponent of the variadic approach as well as to anybody else.[12]

Finally, one might object that the prospects for the approach to be used in favor of relativism are dim, since the introduction an extra argument place for the judge variable in the logical form of sentences containing predicates of personal taste smacks of contextualism. I agree that the move is contextualist in nature, but it should be noted that the view still allows for unembedded uses of predicates of personal taste to appear without the need to provide a

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[12] One could legitimately complain that without providing all the details of the view, it is unclear how exactly the answer to such questions would fare. I take this paper to have a rather programmatic character. I have set up to work out all the gory details of the view in my [Author's article 2].

judge in the logical form of sentences comprising them. As said above, the approach has the consequence that the logical forms of sentences such as "Avocado is tasty" are still judge-free. Of course, here I haven't provided any arguments in favor of relativism and against a truth-conditional pragmatist view on predicates of personal taste, but neither is the option closed by allowing the judge to be part of the logical form of sentences comprising predicates of personal taste that are bound. My proposal should thus not be thought of as closing off the debate between relativism and its competitors; on the contrary, it opens it up, giving the relativist the right tools to enter the debate and to make her case as good as she can.

7 Summary and conclusion

In this paper I presented and answered a recent argument against relativism and in favor of contextualism about predicates of personal taste, modeled on a similar argument that has surfaced in the debate between truth-conditional semantics and truth-conditional pragmatics in the case of locations. This argument, known as the argument from binding (or the Binding Argument, as I called it) has been given a number of answers in the literature. In section 4 I surveyed these answers and I found that none of them is unproblematic. I then offered my own answer, which consists in applying the apparatus of variadic functions to the case of predicates of personal taste, taking my lead from François Recanati's application of the apparatus to locations. The conclusion of the paper is thus that, although the main answers to the Binding Argument are not entirely satisfactory, one is not forced to accept its conclusion. In the end I made some remarks on the view proposed, considered some objections and offered some responses.

References:

[Author's article 1]

[Author's article 2]

Cappelen, H. & Hawthorne, J. (2009) *Relativism and Monadic Truth*. (Oxford University Press);

Dowty, D. (2003). The Dual Analysis of Adjuncts/Complements in Categorial Grammar. (In E. Lang, C. Maienborn & C. Fabricius-Hansen (Eds.), *Modifying Adjuncts* pp. 33-66). Mouton de Gruyter.);

Elbourne, P. (2005). *Situations and Individuals*. (MIT Press);

Glanzberg, M. (2007). Context, Content, and Relativism. *Philosophical Studies*, 136, 1-29;

Kaplan, D. (1989). Demonstratives.(In J. Almog, J. Perry & H. Wettstein (Eds.), *Themes from Kaplan* (pp. 481-563). New York, Oxford: Oxford University Press.);

King, J. (2003). Tense, Modality and Semantic Values. *Philosophical Perspectives*, 17, 195-246;

Kölbel, M. (2009). The Evidence for Relativism. *Synthese*, 166, 375-394;

Kratzer, A. (2002). Facts: Particulars or Information Units?. *Linguistics and Philosophy*, 25, 655–670;

Kratzer, A. (2009). Situations in Natural Language Semantics. *The Stanford Encyclopedia of Philosophy (Summer 2009 Edition)*, Edward N. Zalta (ed.), URL = http://plato.stanford.edu/archives/sum2009/entries/situations-semantics/;

Lasersohn, P. (2005). Context Dependence, Disagreement and Predicates of Personal Taste. *Linguistics and Philosophy*, 28, 643-686;

Lasersohn, P. (2008). Quantification and Perspective in Relativist Semantics. *Philosophical Perspectives*, 22, 305-337;

Lasersohn, P. (2009). Relative Truth, Speaker Commitment, and Control of Implicit Arguments. *Synthese*, 166, 359-374;

Lewis, D. (1998). Index, Context, and Content. (In D. Lewis, *Papers in Philosophical Logic* (pp. 21-44). Cambridge University Press.);

MacFarlane, J. (2003). Future Contingents and Relative Truth. *The Philosophical Quarterly*, 53, 321-36;

MacFarlane, J. (2005a). Making Sense of Relative Truth. *Proceedings of the Aristotelian Society*, 105, 321-39;

MacFarlane, J. (2005b). The Assessment Sensitivity of Knowledge Attributions. *Oxford Studies in Epistemology*, 1, 197-233;

MacFarlane, J. (2009). Nonindexical Contextualism. *Synthese*, 166, 231–249;

MacFarlane, J. (forthcoming). Epistemic Modals Are Assessment-Sensitive. (In B. Weatherson & A. Egan (Eds.), *Epistemic Modality (in press)*. Oxford University Press.);

Pagin, P. (2005). Compositionality and Context. (In G. Preyer & G. Peter (Eds.), *Contextualism in Philosophy: Knowledge, Meaning, and Truth* (pp. 303-347). Oxford: Clarendon Press.);

Perry, J. (1986). Thought without Representation. *Supplementary Proceedings of the Aristotelian Society*, 60, 137-152;

Predelli, S. (forthcoming). Indexicality, Intensionality and Relativist Post-Semantics. *Synthese (in press)*. DOI: 10.1007/s11229-010-9728-0;

Recanati, F. (2002) "Unarticulated Constituents" *Linguistics and Philosophy*, 25, 299-345;

Recanati, F. (2007). *Perspectival Thought: A Plea for Moderate Relativism*. (Oxford University Press);

Schaffer, J. (forthcoming). Contextualism for Taste Claims and Epistemic Modals. (In A. Egan & B. Weatherson (Eds.), *Epistemic Modality (in press)*. Oxford University Press);

Soames, S. (1986). Incomplete Definite Descriptions. *Notre Dame Journal of Formal Logic*, 27, 349–375;

Stanley, J. (2000). Context and Logical Form. *Linguistics and Philosophy*, 23, 391-434;

Stanley, J. (2005). Semantics in Context. (In G. Preyer & G. Peter (Eds.), *Contextualism in Philosophy: Knowledge, Meaning, and Truth* (pp. 221-253). Oxford University Press.);

Stephenson, T. (2007). Judge Dependence, Epistemic Modals, and Predicates of Personal Taste. *Linguistics and Philosophy*, 30, 487–525.