Assessor-Relativizable Predicates*

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Goals

A large number of predicates optionally allow for modification by "to α ," where α is an assessor or judge: *tasty*, *fun*, *exciting*, *boring*, *scary*, *clear*, *obvious*, *evident*, . . .

Other predicates do not allow for this sort of modification:¹

(3) Her hair is
$$\begin{cases} long \\ green \\ synthetic \end{cases} \begin{cases} \#/? \text{ to } \begin{cases} him \\ Kelsey \\ any \text{ sober observer } \end{cases} \end{cases}$$
.

(4) His back is $\begin{cases} hairy \\ muscular \\ pale \end{cases} \begin{cases} \#/? \text{ to } \begin{cases} her \\ Jeff \\ all human beings \end{cases} \end{cases}$.

We refer to predicates that optionally allow "to α "-modification as ASSESSOR-RELATIVIZABLE

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¹Note that it is possible to coerce virtually any predicate into accepting "to α "-modification, e.g. *It's a chair to me!* Coercive uses of "to α "-modification are identifiable by their prosody—they require stress to be placed on α . Only ARPs are natural with prosodically deaccented "to α "-modification.

PREDICATES (ARPs). BARE ARPs lack "to α "-modification. PERSONAL ARPs have "to α "-modification.

We address the following questions about ARPs:

- \triangleright Other than allowing "to α "-modification, what behaviors do members of this class have in common?
- \triangleright What about the semantics of these predicates makes "to α "-modification possible?
- → How can the answers to the above questions be linked?

There has been a large amount of previous work on PREDICATES OF PERSONAL TASTE (PPTs) (e.g. Lasersohn 2005, Stephenson 2007, Anand 2009, Pearson 2013) and on PREDICATES OF CLARITY (e.g. Barker & Taranto 2003, Barker 2009, Wolf & Cohen 2011, Bronnikov 2008).

Our goal is to study the behavior of ARPs, and we propose a simple semantics that captures that behavior. If our proposal is compatible with a previous account of PPTs or predicates of clarity that can be extended to cover all ARPs, so much the better.

1 Empirical Generalizations

1.1 Speaker-Orientedness

Bare ARPs usually license inference to personal ARPs relativized to the speaker (5a), but this inference is never licensed for personal forms (5b).³

- (5) a. Deniz: This steak is tasty. → This steak is tasty to Deniz.

We refer to this generalization as the SPEAKER-ORIENTEDNESS of bare ARPs.

This inference disappears for bare forms of ARPs in contexts in which the speaker's assessment is somehow irrelevant:

- ▷ "Deep past" contexts in which the speaker's current assessment wasn't formed yet:
 - (6) a. Five thousand years ago, it was clear that the Earth was flat.
 - b. In the 1960s, flying in airplanes was very exciting.

²We refer to those predicates that take modification by the prepositional phrase "to α " as ARPs, although in some cases it is more natural for ARPs to be modified by the prepositional phrase "for α ," e.g. *This rollercoaster is fun for me*. We use the phrase "to α "-modification to refer in general to any modification that provides an assessor or judge.

³This is true for unembedded uses of ARPs; for ARPs embedded under e.g. *think*, the same inference goes through for the subject of *think*, not the speaker. Crucially, that inference disappears in exactly the same situations that the inference from bare ARPs to speaker-relativized ARPs disappears for unembedded uses.

- ▷ Contexts that make it clear that the assessment of a group the speaker doesn't belong to is under discussion:
 - (7) a. This cat food is tasty. Whenever I feed it to Spot, she eats the whole bowl.
 - b. In Nebraska, that idea is shocking.
 - c. Deniz: I'm thinking of watching *Mulan* with my three-year-old, is it too scary?

Phil: That movie is very scary. My kids had nightmares after seeing it.

We refer to this phenomenon as the CONTEXT-SENSITIVITY of speaker-orientedness.

1.2 Normative Force

In spite of speaker-orientedness, listeners are licensed to disagree with assertions of bare ARPs on the basis of their own judgment. This suggests that bare ARPs express something more general than the speaker's judgment.

In prolonged disagreements, speakers and listeners imply that the other's assessment is incorrect:

(8) a. Deniz: This roller coaster is fun!

Phil: What? It's not fun, it's terrifying.

Deniz: You're crazy.

b. Karl: It's clear that the mind is independent of the brain.

Daniel: Whoa, hold on a sec. That's not clear at all.

Karl: Daniel, you have no idea what you're talking about.

We refer to the intuition that speakers and listeners are accusing each other of having made incorrect assessments as the NORMATIVE FORCE of bare ARPs.

1.3 Non-Supervenience

Finally, it seems that bare ARPs need not express the judgment of any actual assessor. Consider the following cases:

- (9) a. Before Einstein, it was already clear from Maxwell's equations and the laws of mechanics that the speed of light is independent of the motion of the observer. But no one was smart enough to see it.
 - b. Van Gogh's paintings were just as beautiful when they were painted as they are now, but nobody appreciated them until after his death.
- ⊳ In (9a) and (9b), it is explicitly denied that any assessor at the relevant times found the proposition in question clear or the paintings in question beautiful.

Yet it can still be felicitously asserted that this proposition was clear and these paintings were beautiful at their respective times.

Also consider the following scenario:

Ana comes across documents alleging that a mathematician named Schmidt actually proved Gödel's Incompleteness Theorems (apologies to Kripke 1980). Gödel simply stole Schmidt's proofs and claimed the credit for himself. The documents would be easily identified as forgeries by an expert, but Ana has no expertise, and is convinced by them. Ana is the only individual in possession of these documents at the time.

In this scenario, we may judge (10a) to be true, but (10b) to be false:

- (10) a. It is apparent to Ana from the documents that Gödel was a fraud.
 - b. It is apparent from the documents that Gödel was a fraud.

We judge (10b) to be false because we are not convinced by the veracity of the documents (as the story instructs us not to be). But every single individual in the diagetic world who has access to the documents (i.e. Ana) is convinced by them.

Our judgments of the truth of a bare ARP in a world w and at a time t a need not supervene on the judgments of any actual assessors in w at t. We refer to this property as the NON-SUPERVENIENCE PROPERTY of bare ARPs.

2 Analytical Generalizations

Above, we've argued for four empirical properties of bare (but not personal) ARPs:

- ▷ Bare ARPs are (defeasibly) SPEAKER-ORIENTED.
- ▷ Bare ARPs have NORMATIVE FORCE.
- ▶ Bare ARPs display NON-SUPERVENIENCE on the judgment of actual assessors.

Our explanation for these properties, formalized below, proceeds along the following lines:

- ▶ Bare ARPs express the judgment of a NORMATIVE AUTHORITY. This accounts for normative force.
- ➤ This normative authority is an ABSTRACT AND IDEALIZED representation of judgment, not imbued in any actual human being and not a representation of any aggregate of actual human judgment. This accounts for non-supervenience.

- ▶ People tend to obey the PRINCIPLE OF PERCEPTUAL CHAUVINISM—a stubborn reluctance to accept that their judgment is out of step with normative authority. This accounts for speaker-orientedness.
- ➤ That reluctance disappears if it's indicated that the normative authority represents a group they don't associate themselves with. This accounts for the context-sensitivity of speaker-orientedness.

Our explanation for why these phenomena all disappear in personal ARPs is that overt "to α "-modification supplies some concrete assessor; the assessment of a normative authority only comes into the picture if no such concrete assessor is specified.

2.1 A Brief Digression: Lasersohn (2005)

Exactly which predicates qualify as predicates of personal taste is an interesting question. The status of predicates such as *good* or *beautiful* immediately raises fundamental issues for ethics and aesthetics; and indeed many of our options in analyzing predicates of personal taste in general may be seen as variants of ideas that have already been explored in these fields. But in such discussions, the main focus is naturally on the ethical or aesthetic theory, which the semantic theory serves merely to support, advance, or make precise. If one is studying semantics for its own intrinsic interest, it seems best to set such programs aside. Accordingly, we will concentrate here on relatively mundane predicates such as *fun* and *tasty*, and leave open the status of more philosophically "charged" predicates like *good* and *beautiful*.

This is not to claim that *fun* and *tasty* are devoid of moral or aesthetic content, of course. My point in remaining neutral as to the status of *good* and *beautiful* is not that these predicates are too complex to deal with here, or that the size of the existing literature is too large, but that a semantic theory should be motivated by (and evaluated on the basis of) semantic considerations, rather than by its implications for ethical or aesthetic theory.

(Lasersohn 2005: 644-645)

Our claim that ARPs express the judgment of a normative authority can be seen as putting the "moral and aesthetic content" of ARPs front and center in the semantics.

Following Lasersohn, as well as Coppock (to appear), we take the primary concern for the linguist to be speakers' "folk theory" of that moral or aesthetic content, as revealed in the empirical facts of how speakers use ARPs in discourse, rather than a normative theory of moral and aesthetic content of the kind developed by philosophers.

One of our central claims is that predicates of taste like *fun* and *tasty* pattern with more philosophically loaded predicates like *good* and *beautiful*, at least in the ways we've examined here.

3 A Simple Proposal

To provide a scaffolding for "to α "-modification, we assume that ARPs are at least two-place predicates, taking assessor and assessee arguments.⁴ The presence of the assessor argument makes "to α "-modification possible.⁵

Let *P* be an ARP, and let P(x, y) be a function that is true iff *x* is *P* to *y*.

(11)
$$\llbracket P \rrbracket = \lambda y \lambda x. \mathbf{P}(x, y)$$

"To α "-modification simply saturates the assessor variable:

(12)
$$[\![to \ \alpha]\!] = \lambda R.R(\alpha)$$

 $[\![P \ to \ \alpha]\!] = \lambda x.\mathbf{P}(x,\alpha)$

In the absence of explicit "to α "-modification, the assessor variable of P is saturated by the output of a function O applied to a contextually-specified kind k_c .

(13) $O_{\langle e,e \rangle}: kinds \rightarrow individuals$ O(kind) = the abstract (folk-theoretical) normative authority that is representative of the idealized perceptions of kind

If we're in a context c such that k_c is humans (plausibly the default case), then $O(k_c)$ will be a normative representation of an idealized human perceiver. If k_c is cat-kind (7a), $O(k_c)$ will be a normative representation of an idealized cat perceiver. If k_c is Nebraskan-kind (7b), $O(k_c)$ will be a normative representation of an idealized Nebraskan perceiver.

(14)
$$\llbracket P_{bare} \rrbracket^c = \lambda x. \mathbf{P}(x, O(k_c))$$

This proposal straightforwardly captures several of the empirical properties of bare ARPs noted above:

- ▶ Normative Force: a bare ARP's assessor is a normative authority.
- ▶ Non-Supervenience: a bare ARP's assessor is abstract and idealized.
- Context Sensitivity: a bare ARP's assessor is relativized to a contextually-relevant kind. (More on context sensitivity below.)
- Since each of these properties is tied to the default assessor in the case of bare ARPs, they do not hold in the case of personal ARPs in which an explicit assessor is provided.

⁴This is not a novel proposal—see e.g. Stephenson (2007), who treats bare PPTs as taking a covert argument. ⁵ARPs may be more complex in allowing for additional arguments. For example, in §5 we discuss a subclass of ARPs that allow for an optional evidence argument. However, All ARPs have at least an assessor and an assessee argument.

3.1 Accounting for Speaker-Orientedness & Context Sensitivity

We can cash out the principle of perceptual chauvinism in our kind-based analysis with the following generalization—in most contexts, an agent α believes that their judgments are in alignment with those of the abstract normative authorities for all kinds that α is a member of:

(15) ASSUMPTION OF NORMATIVE REPRESENTATIVENESS (first version) Let $B_{\alpha}(\phi)$ be true iff α believes ϕ . We say that α believes their judgments to be normatively representative of a kind k with respect to an ARP P iff $B_{\alpha}(\forall x(P(x,\alpha)\leftrightarrow P(x,O(k))))$.

In most contexts, we can assume that all agents α believe themselves to be normatively representative of any kind k s.t. $\alpha \in {}^{\cup}k$ with respect to all ARPs.⁶

We can infer from an assertion of a bare ARP that the personal ARP relativized to the speaker holds (5a), provided that the speaker believes that their judgments are normatively representative of the contextually relevant kind, following (15).

In contrast, we do not assume that speakers' assessments are in alignment with those of any arbitrary agent (5b) or with an idealized, normative authority of a kind that the speaker is not a member of:

- A sensible speaker might assume that their judgments are not in line with those of a normative authority representative of cats (7a).
- ▶ We would not assume that a speaker who is not Nebraskan (or who views themselves as an extremely atypical Nebraskan) would agree with normatively Nebraskan judgments (7b).
- ⊳ In (7c) the context makes it clear that the relevant kind is children, not adults, and so the (adu.lt) speaker need not be perceptually chauvanistic

3.2 Non-Speaker-Orientedness in "Deep Past" Contexts

To account for deep past contexts, we extend our definition of ARPs such that they are relativized to a time t. Let P(x, y, t) be true iff x is P to y at time t. Then we have:

(16)
$$[P] = \lambda y \lambda x \lambda t. \mathbf{P}(x, y, t)$$

We also extend the assumption of normative representativeness in the obvious way.

(17) ASSUMPTION OF NORMATIVE REPRESENTATIVENESS (second version) Let $B_{\alpha}(\phi)$ be true iff α believes ϕ . We say that α believes their judgments to be

⁶Where $^{\cup}$ is the 'up' operator that converts kinds into their corresponding properties (Chierchia 1998). When we say that a kind k 'includes' an entity e or that e 'is a member of' k, we mean that $e ∈ ^{\cup}k$.

normatively representative of a kind k at time t with respect to an ARP P iff $B_{\alpha}(\forall x(P(x,\alpha,t)\leftrightarrow P(x,O(k),t))).^{7}$

In deep past contexts (6a, 6b), bare ARPs are claims about the judgment a normative authority would have had at a time before the speaker had formed an assessment. In these contexts, (17) cannot be assumed.

3.3 Sustained Disagreements

In sustained disagreements like those in (8), interlocutors are both assuming (17) with respect to a kind that includes them both. This has the following consequences:

- Each interlocutor is committed to the other's assessment differing from that of a normative authority.
- ▶ This gives rise to the sense that each interlocutor is asserting that the other is mistaken, or normatively incorrect, in her judgment.

4 Comparison with Previous Approaches

In this section, we (briefly) compare this proposal with previous proposals for the semantics of Predicates of Personal Taste (PPTs) and assertions of clarity.

4.1 Judges and Salient Entities

Lasersohn (2005) and Stephenson (2007) propose mechanisms by which the assessor of a PPT can be identified with some contextually-determined entity.

Similarly, Barker & Taranto (2003) and Barker (2009) take bare uses of *clear* to depend upon some contextually-determined set of assessors.

- ▷ Lasersohn: assessor is determined by "judge" parameter
- Stephenson: assessor is determined by covert pronominal referring to a salient entity (potentially the judge)
- ⊳ Barker & Taranto, Barker: similar to Stephenson, but assumption is that covert pronominal typically defaults to including all discourse participants

These proposals face two key challenges:

⁷For simplicity, we do not relativize the belief operator B_{α} to a time, although there is nothing preventing this in principle. For present purposes, we are only interested in an agent's beliefs at speech time.

- ► They offer no obvious way of accounting for the non-supervenience property of bare ARPs, since all uses of PPTs or predicates of clarity reflect the assessment of some concrete assessor.
- ► Taking bare ARPs to be covertly relativized to some salient entity gives us no general explanation of normative force.
 - (8): if disagreement comes from each interlocutor taking themself to be the judge, whence the intuition that they are accusing each other of having made incorrect judgments? (cf. Stojanović 2007 on Lasersohn 2005)
 - (7a): if bare ARP → speaker-relativized ARP because the speaker's cat is taken to be the salient assessor, why is (18) possible?
 - (18) Deniz: This cat food is tasty. Whenever I feed it to Spot, she eats the whole bowl.

Phil: No way, it's disgusting, when I tried to feed it to Freckles she wouldn't even touch it.

See Anand (2009) and Pearson (2013) for more extensive criticism along these lines.

4.2 Quantification over Assessors

Anand (2009) and Pearson (2013) analyze PPTs as introducing quantification, while Wolf & Cohen (2011) do the same for *clear*.

- > Anand: generic quantification over situations involving normal perceivers
- ▷ Pearson: universal quantification over relevant assessors the speaker identifies with, following Moltmann's (2006, 2010) account of first-person genericity
- ▶ Wolf & Cohen: weighted average over assessments of all assessors, with weights depending on the quality of the assessor

These proposals can successfully account for non-supervenience and normative force as follows:

- ▷ Non-supervenience follows if quantification is allowed over non-actual assessors.
- Normative force follows if quantification is only over normatively qualified assessors.

However, these proposals also face the following challenges that are avoided on a non-quantificational analysis.

4.2.1 Explicit Dismissal of Others' Assessments

Speakers may explicitly discount the views of others when making bare ARP claims. This is prima facie evidence against a quantificational account.

(19) Phil: I don't care if everyone else in the world disagrees, this cake is delicious!

Of course, we could say Phil's claim in (19) is quantifying over the singleton set containing himself.⁸ But then the following exchange should be nonsensical:

(20) Phil: I don't care if everyone else in the world disagrees, this cake is delicious! Deniz: I don't care if everyone else in the world disagrees either, this cake is disgusting!

Phil: No, you're wrong!

Deniz: No, you are, you bozo!

Suppose their dismissals indicate that Phil and Deniz are restricting the domain of quantification in their claims to only Phil and Deniz, respectively. Then there should be no disagreement.

On our account, Phil's and Deniz's statements in (20) are expressing (conflicting) attitudes about the idealized, normative judgment of humans.

4.2.2 Responses to Disagreement

Assume a universal quantificational analysis of ARPs along the lines of Pearson (2013) and suppose that before (21), Deniz took Phil to be within the domain of quantification of his claim about the chili's tastiness.

(21) Deniz: This chili is tasty. Phil: No, it's not tasty at all.

Deniz must change his beliefs in response to this disagreement. The universal quantificational analysis predicts two possibilities:

- Deniz was incorrect to include Phil in the domain of quantification for his claim about the chili's tastiness.
- ▷ Deniz was wrong about the chili's tastiness.

However, the second type of response is rarely rational:

(22) Deniz: # Since I took your view to be relevant, it was false that the chili was tasty.

⁸However, Pearson's (2013) claim that *Soapy dishwater is tasty* is false even when asserted by a speaker who finds soapy dishwater tasty suggests that she does not believe other agents' judgments may always be dismissed.

On our account, (22) is ruled out so long as a speaker maintains that his or her judgments are more normatively representative than others'. A response like (22) is only valid if Deniz takes Phil to have more normatively representative tastes, e.g. if he is an expert chili-taster.

4.3 Situating our proposal

Our proposal can be seen as a blend of the two classes of proposals discussed above, that combines their strengths while dodging their shortcomings.

- ▷ As with judge-based approaches, we rely on contextual parameters that specify whose judgments are relevant.

5 Subclasses of ARPs

There is a subclass of ARPs that can take optional evidence arguments, in addition to assessor and assessee arguments.

(23) It is
$$\begin{cases} \text{obvious} \\ \text{clear} \\ \text{evident} \end{cases} \begin{cases} \text{to} \begin{cases} \text{me} \\ \text{you} \\ \text{everyone we know} \end{cases} \end{cases}$$

$$\begin{cases} \text{Crime and Punishment} \\ \text{The Brothers Karamazov} \\ \text{The Idiot} \end{cases}$$
 that Dostoevsky is a genius.

We call ARPs that take optional evidence arguments "evistemic" ARPs, in view of their tendency to have doxastic, epistemic or evidential meanings.

Not all ARPs that take clausal complements are evistemic:

Evistemic ARPs differ from non-evistemic ARPs that can take clausal complements in several respects.

Non-evistemic ARPs presuppose their finite complements (25), but evistemics do not (26):

- (25) a. It wasn't shocking that she didn't show up.
 - \rightsquigarrow She didn't show up.
 - b. Was it surprising that Donald was the only person to get two scoops of ice cream?
 - → Donald was the only person to get two scoops of ice cream.
- (26) a. It isn't clear (from the map) that this is the right way to go.

 √ This is the right way to go.

A tentative, informal proposal for the presuppositional contrast shown in (25) and (26):

- → All claims involving ARPs require evidence.
- For evistemics, this evidence may be stated explicitly. Non-evistemics do not allow overt evidence arguments because they presuppose the evidence to be some agent's direct experience with the assessee (cf. Anand & Korotkova 2017, Muñoz 2017).
- ▶ When the assessee of a non-evistemic ARP is a finite clause, the evidence is some agent's direct experience with a proposition being true in the actual world.
- ▷ If an agent has direct experience with a proposition being true in the actual world, then this proposition is true in the actual world.
- ▷ Because evistemic ARPs depend on evidence other than direct experience with the assessee, the above argument does not go through.

6 Conclusion

We've defined ARPs as the class of predicates that allow modification with "to α ," and have offered the following empirical generalizations about ARPs:

- ▷ Bare ARPs are (usually) speaker-oriented, whereas personal ARPs are not
- ▷ The speaker-orientedness of bare ARPs is context-sensitive
- ▷ The truth of a bare ARP claim does not supervene on the personal judgments of any assessors

We've offered a semantics for ARPs, inspired by previous approaches, that involves an assessor argument that defaults to a normative authority representative of a contextually-specified kind when no overt value is provided.

This analysis provides scaffolding for compositional interaction with "to α " and accounts for the empirical phenomena listed above.

Outstanding issues:

- ▶ How could we (more formally) account for the differences between evistemic and non-evistemic ARPs?

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