MIGHT DO BETTER: FLEXIBLE RELATIVISM AND THE QUD

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Contextualism vs. Relativism

Contextualism Epistemic modals quantify over the possibilities consistent with a body of information determined by the context of utterance.[1]

Relativism Epistemic modals quantify over the possibilities consistent with a body of information determined by the context of assessment.[2]

These two views are standardly associated with different predictions. Suppose *Might* ϕ is uttered in c.

- *Simple contextualist prediction:* An assessor inhabiting a context c_a will tend to judge this utterance true iff ϕ is compatible with the information available to the c-relevant folks.

- *Simple relativist prediction:* An assessor inhabiting a context c_a will tend to judge this utterance true iff ϕ is compatible with *their* information in c_a.

Previous Work

Relativists often argue that contextualists make the wrong predictions about eavesdropper cases.

Contextualists point out that eavesdropper intuitions are often murky, and in some cases intuitions seem to clearly favor the contextualist (Portner 2009; Dowell 2011; Yalcin 2011)

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[1]Kratzer 1981; DeRose 1991; Dowell 2011; Dorr and Hawthorne 2013
[2]Egan et al. 2005; Egan 2007; Stephenson 2007a,b; MacFarlane 2011, 2014

Recent experimental work suggests that the simple relativist prediction is false, also calls into question simple contextualist prediction.

- *Knobe and Yalcin 2014*—participants given an eavesdropper scenario in which Fat Tony fakes his death; forensic expert says, "Fat Tony might be dead". Participants asked the extent to which they agree with the claim that what the forensic expert said is true (false). Relatively high rates of agreement with the claim that what he said is true and relatively low rates of agreement with the claim that what he said is false, though not as high/low as one might expect if contextualism were true.

- Further work by Khoo (2015) suggests that willingness to reject a modal claim (e.g., by saying "No") pulls apart from willingness to judge the modal claim is false.

Would like a view that predicts:

1. Many have "contextualist-friendly" intuitions about eavesdropper cases.
2. A substantial minority have "relativist-friendly" intuitions.
3. Some profess to having unclear or murky intuitions.
4. People are more inclined to reject an utterance of an epistemic modal when the prejacent is incompatible with their body of information than they are to judge it false.

Flexible Relativism

Basic idea: Retain relativist semantics for *might*, but deny that assessors will always rely on their own context of assessment when

evaluating a might claim. Instead, they have the option of deferring to other contexts of assessment, e.g. the speaker's.

When will assessors rely on their own context, and when will they defer? Answer:

QUD Constraint: When an assessor A in a conversational context c_A assesses an utterance of an epistemic modal for truth or falsity, they should use whichever of the admissible contexts of assessment is most relevant to answering the QUD in c_A.[3]

Explaining the extant data:

- When intuitions favor the relativist, the QUD in the context of assessment is naturally interpreted as concerning the truth of the prejacent of the modal claim.
- When intuitions favor the contextualist, the QUD in the context of assessment is naturally interpreted as concerning the speaker's competence in forming her original judgment.
- Variability in intuitions stems from different hypotheses about the QUD in the context of assessment; murkiness of intuitions stems from uncertainty re. the QUD.
- Acceptance/rejection of an utterance track judgments of truth/falsity in one's own context of assessment, whereas truth-value attributions can either concern truth/falsity in one's own context or truth/falsity in someone else's.

Testing Flexible Relativism

120 participants were recruited through AMT[4] and given a vignette that began:

> Fat Tony is a mobster who has faked his own death in order to evade the police. He secretly plants highly compelling evidence

of his murder at the docks. The evidence is discovered by the authorities, and the forensic expert, Ed, is summoned to the scene. After carefully reviewing the evidence he concludes, "Fat Tony might be dead."

Participants were randomly assigned to one of the following two conditions, each of which received a different continuation:

> QUD-PREJACENT CONDITION
> A week later, a detective is consulting her criminal informant about who was responsible for mob-style murder. The informant knows that Tony is alive.
>
> Detective: "We're trying to find the killer. We know that the victim was an enemy of Fat Tony. However, our forensic expert said, 'Fat Tony might be dead.' Is what he said true?"

> QUD-COMPETENCE CONDITION
> A week later, another forensic expert, Ted, is given new evidence that conclusively shows that Fat Tony is still alive. The police department is trying to determine whether the initial investigation was competent, and so sends a detective to interview Ted.
>
> Detective: "We're trying to figure out whether Ed's initial investigation was competent. On the basis of the initial evidence, Ed said, 'Fat Tony might be dead.' Is what he said true?"

In both conditions, subjects were asked:

> Which of the following responses would be correct?
>
> (a) "No, it's not."   (b) "Yes, it is."

41% of subjects assigned to QUD-PREJACENT CONDITION selected (b) ("Yes, it is"), whereas 66% of subjects assigned to QUD-COMPETENCE CONDITION selected (b). The difference between the conditions was found to be highly significant ($\chi^2(1, N = 116) = 7.50, p = .006$).

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[3]See Roberts 1996/2012 for an overview of the QUD framework.

[4]Many thanks to Josh Knobe for invaluable assistance with experimental design and analysis.

A Contextualist Explanation of the Data?

Natural thought: Perhaps when participants in the QUD-PREJACENT CONDITION select (a), what they intend to pronounce on is the truth of the prejacent, rather than the truth of the modal claim.

Way to test the Prejacent-Evaluation Hypothesis:

- Change the answer choice.
- Construct a case in which an assessor a is in a position to know that the modal claim is false (relative to c_a), but not in a position to know that the prejacent itself is false.

  - Constructing such a case requires switching from *might* to *probably*

Experimental Results

240 participants recruited through AMT and given the following vignette:

> John is worried he might have strep throat. He goes to his primary care physician and she runs an initial test that indicates that there is a 75% chance that John does not have strep. Based on the initial test results, John's doctor says: "You probably don't have strep throat. However, we should do a throat culture in order to be safe. If it turns out that you have strep throat, we should put you on antibiotics."

Subjects were randomly assigned to one of two conditions, and received a different elaboration of the case depending on which condition they were assigned:

> QUD-PREJACENT CONDITION
> John comes back two days later to find out the results of the throat culture, and sees a different doctor. The throat culture comes up positive, which indicates there is a 90% chance that John has strep throat. John has not yet seen the results of these tests, but his new doctor has. John asks the new doctor: "I'm trying to figure out whether I need to take antibiotics. My primary care physician told me, 'You probably don't have strep.' Is what she said true?"

> Which of the following responses would be correct?

> (a) "No, what she said isn't true"   (b) "Yes, what she said is true"

> QUD-COMPETENCE CONDITION
> John comes back two days later to find out the results of the throat culture, and sees a different doctor. The throat culture comes up positive, which indicates there is a 90% chance that John has strep throat. But now John wants to know whether his primary care physician made a mistake administering the initial test, so he asks: "I'm trying to figure out whether I can rely on my primary care physician. She told me, 'You probably don't have strep'. Is what she said true?"

> The new doctor reviews the initial tests, and confirms that John's primary care physician had not made any mistakes interpreting the results. Given this, which of the following responses would be correct?

> (a) "No, what she said isn't true"   (b) "Yes, what she said is true"

73% of the participants assigned to the QUD-PREJACENT condition selected (a), whereas only 18% of participants assigned to the QUD-COMPETENCE condition selected (a).

- Results count against the Prejacent Evaluation Hypothesis.
- Provides evidence that probabilistic modals are also subject to a QUD effect—difference between the two conditions was found to be extremely significant, $\chi^2(1, N = 225) = 68.49, p < .0001$.

Conclusion

- People's judgments about the truth-values of utterances of epistemic modals vary systematically with the QUD in the context of assessment.

- Flexible relativism predicts this variation, whereas standard versions of contextualism do not.

Does any other framework predict these results? Two options:

Cloudy Contextualism (von Fintel and Gillies 2011): holds that utterances of *Might* ϕ often do not express a single proposition, but rather "put in play" a "cloud" of propositions, each of which claims that ϕ is compatible with some group's information. One might supplement this with a QUD-sensitive pragmatic norm for appraising utterances of epistemic modals, e.g.:

QUD-Sensitive Appraisal Norm Suppose someone asserts *Might* ϕ in a cloudy context c, thereby putting in play propositions $p_1 - p_n$. Then a hearer H should appraise the utterance as true (false) in a context c' if the p_i that is most relevant to answering the QUD in c' is such that H thinks it is true (false).

Update Semantics (Veltman 1996): Holds that a BEP performs a "test" on a context (where a context = a set of worlds). The context passes the test iff it contains at least one world where the prejacent is true. Could supplement this with the claim that an assessor a will judge a modal claim to be true iff the *most relevant* context passes the test imposed by the modal, where here relevance is determined by the QUD in c_a.

Question: Any way of empirically distinguishing flexible relativism from these two alternatives?

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