

Choice points for a theory of intention

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Intentions figure centrally in several areas of philosophy, including discussions of the nature of action, practical rationality, communication, and more. But the literature on the nature of intentions is rife with disagreement. Here I will discuss the nature of intentions. Along the way I will cover a number of choice points for a theory of intention, including the relationship of intentions to plans, desires, and beliefs, the representational structure of intention, and the possibility that multiple types of intentions co-exist in human agency.

Phenomenon. This paper is concerned with the construction in (1a), in which an *um*-clause (roughly \approx English *in order*-clause) occurs with a modal, receiving a conditional interpretation akin to anankastic conditionals with a *want*-antecedent (1b). The *um*-clause occurs with both necessity and possibility modals. The necessity statement is true in a scenario where the A-train is the only viable option that will get you to Harlem. The possibility statement is true in a scenario where both the A- and the B-train will get you to Harlem. What matters in both cases is that taking the A-train will get you to Harlem. In the literature focusing on the right truth conditions for (1b), several analyses have been proposed to account for the meaning of (1a), reducing (1b) to (1a) (von Stechow et al. 2004; von Fintel and Iatridou 2005; von Stechow et al. 2006; von Fintel and Iatridou 2008).

- (1) a. Um nach Harlem zu kommen, musst/kannst du den A-Zug nehmen.
‘In order to get to Harlem, you have to/can take the A-train.’
b. If you want to get to Harlem, you have to/can take the A-train.

Previous analyses. Previous analyses treat *um*-clauses as a plain proposition that enters the restrictor of classic Kratzerian modals, whose quantificational domain is determined by a modal base and one or more ordering sources. von Fintel and Iatridou (2008) take *um*-clauses to denote a goal and treat them as a type of singleton ordering source of teleological modals with a circumstantial modal base. von Stechow et al. (2006) treat them as restricting the modal base of a similarity modal, in the same way *if*-clauses are taken to restrict (covert or overt) modals in a counterfactual conditional, without any reference to goals. I discuss two problems of these basic analyses.

Problems. The first problem is mentioned by von Stechow et al. (*ibid.*) and concerns the temporal/conceptual ordering of the *um* clause proposition and the modal prejacent.

- (2) a. # For kangaroos to have no tails, they have to topple over.
b. If kangaroos had no tails, they would topple over.

If the *um*-clause merely restricts a counterfactual modal in the fashion of an *if*-clause, nothing would prevent (2a) to come out as true. A purely conditional semantics cannot differentiate between necessary preconditions and necessary consequences of an *um*-clause (2b). But (2a) can only express a precondition.

The second problem was brought up by Nissenbaum (2005) and concerns the relevance of the modal prejacent for the realisation of the *um*-clause proposition. This shows up with possibility modals (and weak necessity modals like *should*).

- (3) # In order to get to Harlem, you can kiss Pedro Martinez.

One feels that (3) is odd because kissing Pedro Martinez does not contribute to getting to Harlem in any way. The problem occurs if we assume a standard compatibility semantics for possibility modals. A lot of things are compatible with the proposition expressed by an *um*-clause, but only those that contribute to the realisation of the *um*-clause proposition can occur as the prejacent of the modal.

Proposal. I echo the intuition portrayed in Nissenbaum’s (*ibid.*) analysis according to which the modal *in order*-construction should be linked to the Rationale Clause (RatC) *in order* of (4), which is deviant in the same way that (3) is. But my analysis differs.

- (4) # He kissed Pedro Martinez in order to get to Harlem.

I propose to treat the *um*-clause as a specialized modifier of modals. While restricting the modal base to worlds in which *q* is true, it also places a condition on the prejacent of the modal: *p* is an enabler of *q*, where enablement means that *p* contributes to the realization of *q* given a set of conditions. Thus, *p* contributes to, but is neither necessary nor sufficient for the realization of *q* (see e.g. Balkanski (1992)).

- (5) a. $\llbracket \text{um}_{\text{modal}} \rrbracket = \lambda q \lambda M \lambda R \lambda p \lambda w [M(\bigcap R \cap q)(p)(w) \wedge \text{ENABLE}(p, q, w)]$
 [with *M* the type of modals and *R* a modal base]
 b. $\llbracket \text{um zu } q \text{ can } p \rrbracket = \lambda w [\exists w' [w' \in (\bigcap R \cap q) \wedge p(w')] \wedge \text{ENABLE}(p, q, w)]$
 c. $\llbracket \text{In order to get to Harlem, you can kiss Pedro Martinez} \rrbracket =$
 $\lambda w [\exists w' [w' \in (\bigcap R \cap \text{get-to-h}) \wedge \text{kiss-pm}(w')] \wedge \text{ENABLE}(\text{kiss-pm}, \text{get-to-h}, w)]$

A similar condition has already been considered by von Fintel and Iatridou (2005) as a possible part of the meaning of teleological modals. I argue instead that there is evidence for a meaning contribution of *um*-clauses independent of the modal it combines with:

(i) The *um*-clause as a RatC. Without an overt modal, the *um*-clause acts as spelling out the rationale behind a matrix clause event. RatCs arguably also involve an enabling component (6) (Balkanski 1992). An agent intentionally pursues the matrix action (taking the A-train), while believing that taking the train would enable them to reach Harlem.

- (6) In order to get to Harlem, he took the A-train.
 \approx He took the A-train believing that taking the A-train would enable getting to Harlem.

(ii) Not a teleological modal construction. While *um*-clauses are commonly taken to express (hypothetical) goals, they need not occur with teleological modals. Epistemic modals can also be modified by *um*-clauses as long as the enabling condition is fulfilled (7a). If the enabling component is contributed by the *um*-clause and not the modal, we expect it to occur with modals of different flavors.

- (7) *After a bank robbery, we see a small hole in the wall.*
 a. Er muss winzig gewesen sein, um durch dieses Loch zu gepasst zu haben.
 ‘He must have been tiny to have fit through that hole.’

(iii) Existential teleological modals express compatibility with goals. Contrary to what we have seen in (3), we can actually express mere compatibility with goals with a plain *can* (facilitated with *even* or *still*). Only if we explicitly or implicitly include the *um*-clause, compatibility is not enough (8). This speaks in favor of making the enabling component part of the *um*-clause instead of teleological modality.

- (8) a. Even given your goal to get to Harlem, you can kiss Pedro Martinez. You will still make it to Harlem.
 b. # Even in order to get to Harlem, you can kiss Pedro Martinez.

The analysis solves the problems of previous analyses by including an enablement relation in the meaning of *um*-clauses. This relation is argued to be independently needed for *um*-clauses that occur without teleological modals.

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Words as intentional artefacts

This paper is about the metaphysics of linguistic entities, and it defends an original intentionalist account of words, inspired by Thomasson's (2003, 2007, 2014) theory of intentional artefacts.

An initially tempting theory is that words are brute acoustic types. But this is widely recognised to be false (see, for example, Kaplan, 1990 and Wetzel, 2008). Indeed, the physical form of an utterance is neither necessary nor sufficient for possessing the array of linguistic and sociolinguistic properties of a given word. In this respect, words are much like other human artefacts: the fact that something is a chopstick, a one-euro coin, or an utterance of the word 'cat' involves, in some sense, facts about people and the attitudes they bear to objects in their environment.

Thomasson (2007:52) argues that "artifacts and other social and cultural objects are 'creations of the mind', depending in certain ways on human beliefs or activities." Specifically, she claims that artefacts are partially constituted by their creator's intentions, and that the content of these intentions ties certain characteristics to the artefact. To illustrate, suppose there are two identical factories. The first produces plastic plates, the second Frisbees, but the Frisbees and plates are intrinsically indistinguishable. Plausibly, it is the intended function of the various items which makes them Frisbees or plates.

Though it is essential to a Frisbee that it is created with a certain intended function in mind, the relevant intentions are not self-realising. Frisbees require certain aerodynamic properties. If all you have is a puddle of melted plastic, you haven't made a Frisbee, whatever your intentions. But the successful realisation of one's creative intentions does not always consist in imposing specific physical properties. Thomasson (2014) stresses that many artefacts obtain their characteristic properties in virtue of the fact that their creators' intentions are recognisable to others. Consider a chess pawn: what makes a pawn a pawn? Certainly not its form. Pawns are things which play a certain role in games of chess. There is a typical pawn shape, but many pawns are atypical. (Some are cubes or people in costumes.) The typical pawn shape is one way of signalling that an object is intended to have the pawn role, but those intentions can be signalled in other ways. One can even make a penny a pawn by making an appropriate signal to one's opponent. Once one's intentions are clear, the penny becomes a pawn by tacit agreement. A similar story applies to wedding rings, foot-high fences, and many other kinds of artefacts. These items get their characteristic properties not from their intrinsic forms, but from the recognisability of their creators' intentions. Such artefacts are *essentially communicative artefacts*, and we can give an explanatory theory of words if we consider them as falling into this category.

Here is how the account works. A speaker intends their utterance to have certain linguistic properties. These may include semantic, syntactic, morphological, and phonological or orthographical properties, among others. The resulting utterance has to meet certain conditions in order for those linguistic intentions to be fulfilled. It meets these conditions if and only if it is such that it makes the speaker's linguistic intentions recognisable to other speakers. When the speaker's intentions are recognisable, the intended linguistic properties are successfully projected onto an utterance. Tokens of words and sentences are thus mind-external, concrete objects, but their characteristic properties are not among their intrinsic, physical properties. Rather, their linguistic properties are projected onto them via the recognisability of speakers' linguistic intentions. In this sense, words are mind-dependent.

Anyone who is disposed towards Thomasson's account of artefacts should feel tempted to apply the account to words. Indeed, words are paradigmatic examples of such artefacts. Further support accrues from the theory's ability to explain widespread intuitions. First, suppose there is an uninhabited planet with a lake, and near the lake a rock whose surface has eroded to form an intrinsic duplicate of some earthly carving of 'lake'. Is this an instance of 'lake'? The intuition that it is not is explainable on the artefactual theory of words. (Some people do not share the intuition. This can be explained away via

an independently plausible error theory, a move inspired by Juvshik, 2021). Suppose, second, that English-speaking pioneers arrive. They decide to treat the rock as a sign, and it goes on to serve generations of settlers in search of recreation. At some point, the eroded shape *becomes* an instance of 'lake'. What brings this about? The only things that have changed are the beliefs and intentions of humans, but that is enough to transform a rock into an inscription. This too is explainable on the artefactual account of words: it is a typical example of what Thomasson calls *minimal creation*, whereby a natural object is transformed into an artefact by a pure act of will, such as when a pebble becomes a paperweight. If a natural object can become a word by the mere addition of human intention, this implies that intentions can play a constitutive role in the creation of words. Suppose, third, that a Swedish inscription of 'god' (which is etymologically unrelated to the English word 'god' and means *good*) is removed from its context and used in an English inscription of 'a Roman god'. Plausibly, the inscription is now a token of the English word 'god'. The artefactual account can explain this as a process similar to minimal creation: the English speaker's intentions can transform an existing linguistic artefact, even without any physical intervention.

This paper goes on to highlight the advantages of my view over Kaplan's (1990) intentionalist theory, and discusses a range of objections to intentionalism about words, including its alleged circularity (Wetzel, 2008, Cappelen, 1999). I would reserve discussion of these issues for the Q&A, if delegates are so inclined. In my talk, I propose to showcase three further issues of interest.

The first is Cappelen's (1999) objection that intentionalism would make it impossible for language users to identify the words uttered by their interlocutors. I argue that this claim depends on an overly simplistic model of speech perception according to which words are identified by acoustic properties alone. This bottom-up model of speech perception is contested by psycholinguists, who have accumulated evidence that speech perception is sensitive to syntactic, semantic, pragmatic, and even visual cues. See, for example, Miller and Isard (1962), Warren and Warren (1970), McGurk and MacDonald (1976), and Marslen-Wilson (1987).

The second is Munroe's (2022) recent suggestion that what makes something a token of a given word is that its production is appropriately guided by a speaker's tacit linguistic knowledge, but where the mental states involved in the deployment of such tacit knowledge fall short of being intentions. Munroe has supported this view by appealing to slips of the tongue, and the verbal tics associated with Tourette's syndrome. I counter that the deployment of one's tacit linguistic knowledge is sufficiently intentional for the purposes of the theory of intentional artefacts. This is achieved by (i) deflating the sense of intention which is relevant to the theory of artefacts, and (ii) inflating our conception of our tacit knowledge of language. For (i), I argue that the intentions relevant to the theory of artefacts may be speedy and spontaneous, not consciously accessible, not intellectually articulable, and not the kinds of intentions which are correlated with moral responsibility. For (ii), I advert to Rey's (2020) representationalist theory of generative grammar. I also pose a challenge to Munroe: like me, he relies on intuitions about cases such as the eroded rock which looks like an inscription of 'lake'; however, if our tacit linguistic states cannot be described as intentions in even the deflated sense, then he cannot expect their importance to be revealed through conceptual analysis. If, on the other hand, our linguistic mental states are part of the very concept of a word, then they are sufficiently mentally available to play the role the artefactual theory of words requires them to play.

The third is a challenge to intentionalism from the field of generative linguistics. Philosophers and linguists in that field allege that linguistic entities are purely internal, mental features of individuals. The kinds of externalia with which the present theory is concerned are dismissed as either non-existent (Rey, 2020) or as explanatorily redundant (Collins, 2010, 2021). In response, I make a plea for linguistic pluralism, in which different explanatory tasks call for different kinds of linguistic entities, including mind-external, artefactual ones.

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Beliefs about actions

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In this paper, I look at the problems that the traditional analysis of rational *want* (Heim 1992; von Stechow 1999) confronts when we take into consideration recent observations that licensing of strong Negative Polarity Items (NPIs) and anti-licensing of weak Positive Polarity Items (PPIs) in the infinitival complement of *not want* are sensitive to the interpretation of an action as intentional versus accidental (Szabolcsi 2004; Goncharov 2020). The solution I propose is based on the recognition of two kinds of beliefs: *beliefs proper* that are affected by the fact that future is open and beliefs in a weaker sense, which I will call *beliefs'*, that are oblivious to the openness of the future. Adopting *beliefs'* as the basis for the modal base of rational *want* will allow us to solve the problems that the traditional analysis faces and clarify the connection between beliefs, desires, and reasoning about actions.