Rozprawa

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# INTENTIONAL IDENTITY AND COORDINATION

SUMMARY: The concept of intentional identity has aroused considerable interests since Geach (1967). I argue, however, that the real import of intentional identity is still not duly appreciated. Drawing on three sets of close-knit data – intersubjective and intrasubjective intentional identity, along with cross-speaker anaphora, I submit coordination as the key to its proper understanding and propose a set of success conditions thereof.

KEYWORDS: anaphora, attitude ascription, externalism, intentional identity

## 1 INTRODUCTION

According to Geach (1967), the sentence "Hob believes a witch blighted Bobs mare, and Nob believes that she killed Cobs sow" is true given the relevant story. It is not prima facie obvious, however, how to analyze the Hob-Nob sentence using standard semantic tools: altering the scope of the existential quantifier results in either a *de re* or a *de dicto* reading; the former leads to a dubious ontological commitment, while the latter misconstrues Hob's and Nob's respective beliefs. As a result, the puzzle is commonly reckoned as a logical conundrum.

Nevertheless, intentional identity has a wide coverage. As Geach himself notes explicitly, "[w]e have intentional identity when a number of people, or one person on different occasions, have attitudes with

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a common focus, whether or not there actually is something at that focus" (Geach 1967, p. 627). Cases where the common focus is purely intentional are but one variant of the many permutations of intentional identity. Given Edelberg's (2006) helpful distinction between inter-subjective and intrasubjective intentional identity, several long-standing problems, including Kripke's puzzles about belief, fall within the scope of intentional identity. On the other hand, less investigated, but closely-related, is the phenomenon of cross-speaker anaphora, where "two or more agents discuss and exchange information about a subject they have agreed upon, when actually there need not be a real thing they are talking about" (Dekker, van Rooy 1997, p. 3).

In this paper, I argue that the real import of intentional identity has been under-estimated and that coordination is the key to its proper understanding. Drawing on the three sorts of data mentioned above, I propose a unified set of correctness conditions of coordination that is anti-descriptivist and externalist in spirit.

In what follows, I first examine Geach's intentional identity, together with some representative responses, and submit a pre-liminary general moral concerning coordination (Section 2). Next, I extend the discussion to intra-subjective intentional identity, which includes some well-known philosophical double visions and parasitic attitudes (Maier 2015), and then zoom in on cross-speaker anaphora and consider its contrast to the other two types of intentional identity (Section 3). I close by highlighting the advantages of addressing intentional identity in this holistic approach (Section 4)

## 2 GEACH'S HOB-NOB SENTENCE & COORDINATION

### 2.1 GEACH'S INTENTIONAL IDENTITY

Consider the following scenario:

Hob and Nob are residents of a town where witch superstitions are rampant. Hob and Nob live on opposite sides of the town; they have never encountered or heard of each other at all. They each read the local newspaper *Village Voice*'s story that "A witch has been terrorizing the town." Hob and Nob independently came to the conclusion that this is the cause of his friends' livestock problem. Hob and Nob have no particular witch in mind. As a matter of fact, there are no witches.

Given the scenario, (1) seems true:

(1) Hob thinks a witch blighted Bob's mare, and Nob thinks she killed Cob's sow.[1]

Traditional resources, however, fail to provide the truth conditions of the Geach sentence that seem so natural.

Suppose we analyze (1) by having the *existential quantifier* take wide scope relative to *belief*, as illustrated in (2):

(2)  $\exists x(witch(x) \land BEL(h, B(x)) \land BEL(n, K(x)))$[2]

(2) is problematic for two reasons. First, the truth of (2) entails the existence of something that satisfies all the relevant properties. But no real individual can meet that requirement. Accepting (2) would, hence, force upon us a problematic ontological commitment. Worse still, (2) does not even provide an accurate description of Hob's and Nob's mental lives, for neither Hob nor Nob has some particular witch in mind, yet the wide scope analysis entails specificity.

A second approach to intentional identity is descriptivism. The descriptivist program involves two critical moves. First, the descriptivist argues that the correct way to analyze the first conjunct of (1) is to let the existential quantifier take narrow scope; that is, the *de dicto* reading is the way to go.

(3)  a. (*de re*)      $\exists x(BEL\ (h, witch(x) \land B(x)))$
     b. (*de dicto*)   $BEL(h, \exists x(witch(x) \land B(x)))$

Since "a witch" and "she" are supposed to be about the same individual, "she" is anaphoric to "a witch" and the former refers to whomever the latter refers to. In order to capture the anaphoric relation, the pronoun "she" in the second conjunct is then treated as a variable,

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[1] Geach's original example is this: (G) Hob thinks that a witch blighted Bob's mare, and Nob wonders whether she (the same witch) killed Cob's sow. For simplicity's sake, the Hob-Nob sentence discussed in the literature is typically the one listed here, a close variant of (G).

[2] An alternative is (1\*): $\exists x(BEL\ (h, witch(x) \land B(x)) \land BEL(n, witch(x) \land K(x)))$. (2\*) faces the same difficulties as (2).

bound by the same existential quantifier that binds "a witch." Thus we have (4):

(4)    $BEL[h, \exists x(witch\ (x) \wedge B(x) \wedge BEL\ n, K(x)))]$

But (4) is false, based on the set-up introduced at the beginning. Hob has no belief whatsoever about Nob; he does not even know that this person lives in the village.

So, the descriptivist's second move is to convert the problematic anaphora into something the conventional theory can better manage, i.e. to reconstruct the anaphora as a definite description. Thus, we arrive at (5a) and the corresponding (5b):

(5)    a. Hob believes a witch blighted Bob's mare, and Nob believes *the witch that blighted Bob's mare* killed Cob's sow.
       b. $BEL[h, \exists x(witch\ (x) \wedge B(x))] \wedge BEL\ [n, \exists x(witch\ (x) \wedge B(x) \wedge \forall y$ $(witch\ (y) \wedge B(y) \rightarrow y = x) \wedge K(x))]$

Again this is incorrect, for nothing in the original story guarantees that Nob knows anything about Bob's mare. An alternative descriptive reconstruction is (6), yet it is still flawed because Hob and what Hob believes need not be part of Nob's mental life:

(6)    a. Hob believes a witch blighted Bob's mare, and Nob believes *the witch that Hob believes blighted Bob's mare* killed Cob's sow
       b. $BEL[h, \exists x(witch\ (x) \wedge B(x))] \wedge BEL[n, \exists x\ (BEL(h, witch(x)$ $\wedge B(x)) \wedge \forall y\ (BEL(h, witch\ (y) \wedge B(y)) \rightarrow y = x) \wedge K(x))]$

Though other descriptive paraphrases are certainly available, they all eventually run into similar troubles. What is problematic about (4) is that we cannot write into Hob's belief state any information regarding Nob; what is wrong with (5), (6) and the like is that we cannot include in Nob's mental state anything about Hob.

It might appear that descriptivism is curbed due to the lack of appropriate descriptions that accurately characterize the agent's mental life, but an even more serious problem is that when agents do associate the same or similar descriptions to a certain individual, intentional identity does not necessarily follow. Consider the case brought out by Pagin (2014):

(7)    a. Hob believes: the tallest witch in the world has brought about a storm.
       b. Nob believes: the tallest witch in the world has gold teeth (Pagin 2014, p. 99).

(8)    Hob believes that a witch has brought about a storm and Nob believes that she has gold teeth.

At first sight, the truth of (7a) and (7b) implies the truth of (8). Nevertheless, there are at least two reasons to be skeptical. For one thing, if Hob and Nob live in different communities and come to their respective beliefs independently, then (8) would have been false even if (7a) and (7b) were true.[3]

For another, the scenario that renders (7a) and (7b) true can be something like the following: Hob believes that his next door neighbor, Freya, is the tallest witch, and Hob believes that Freya has brought about a storm. Nob believes that his next door neighbor, Ingrid, is the tallest witch, and Nob believes that Ingrid has gold teeth. Freya and Ingrid are not identical, and so while Hob and Nob employ exactly the same identifying description – the tallest witch, they do not intend the same individual. Hence, the prospect of descriptivism as a solution to intentional identity is doubly jeopardized: not only is it difficult to come up with descriptions that suitably portray the agent's inner life, but shared descriptions are simply insufficient to ensure the agents are thinking about the same thing.

### 2.2 COORDINATION

Since the challenge presented by intentional identity is something that our conventional semantic tools cannot handle, the problem is commonly deemed a logical conundrum. Typical responses often resort to a broader domain of quantification. One line of thought is to explain the truth of (1) in terms of exotic objects, such as mythical objects, abstract objects, merely possible objects, or non-existents objects (e.g. Parsons 1974, Saarinen 1982, Salmon 1998, 2002, Priest

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[3] Burge (1983, p. 95–96) expresses something similar. This is in contrast to Crane's (2013) account of intentional identity, according to which similarity is paramount.

2005). The other prominent route is to quantify over intentions, par-
ticularly shared intentions among different agents (e.g. Cohen 1968,
Geach 1981, Edelberg 1992, Asher 1987).[4]

For example, take Edelberg's (1992) analysis, according to which
(1) is represented as follows:

(9)     $\exists\alpha\exists\beta[BEL(h, B(\alpha)) \wedge BEL(n, K(\beta)) \wedge \alpha \approx \beta]$

Here $\alpha$ and $\beta$ are variables ranging over belief objects or "person-
bound" mental images and "$\approx$" stands for the counterpart relation. So
(9) states that Hob and Nob each has a certain mental representation
(the belief objects) and that there is some relation between them.

Yet Edelberg's analysis and the like[5] are vulnerable to the following
criticism. First, the exact nature of the belief object (or mental repre-
sentation) seems hazy. If an account make recourse to such things, it
must explain what it means for an agent to believe, or more generally,
to entertain thoughts about the said entity. Second, the counterpart
relation is crucial, but what does it take for one agent's belief object
to be a counterpart of another agent's? To this question, Edelberg
(1992) claims that belief objects of different agents are counterparts if
and only if they play a "similar explanatory role" in the agent's belief
system. Still, it remains rather unclear what that amounts to. As our
earlier discussion of (7) suggests, two agents may construe their respec-
tive mental representation in very similar fashion, such that the belief
objects in question play corresponding roles in each agent's mental
life. For instance, we can explain Hob's and Nob's behavior towards
their neighbors in terms of the thought they each associated with their
belief object. While the belief objects appear to be counterparts, in-
tentional identity does not hold, simply because Freya and Ingrid are
not identical. A third problem concerns the derivation of the logical

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[4] To be sure, there are others who claim the apparent true reading of the
Hob-Nob sentence is but an illusion; there is in fact no Geachian reading (e.g.
Braun 2012). Yet others argue that it is the assumption that natural language
quantifiers are ontologically-loaded that renders the semantics of the Hob-Nob
sentence difficult (e.g. Azzouni 2012; cf. Crane 2013).

[5] According to Asher 1986, intentional identity reports are true if and only if
the links between discourse markers in the relevant agents' discourse representa-
tion structures (DRSs) obtain a certain specification. Here the nature of the links
is reminiscent of Edelberg's counterpart relation.

form. In the surface structure of (1), the noun phrase "a witch" lies in the scope of the attitude verb "believe"; however, in (9), it is the existential quantification (over belief objects) that takes the wider scope. What justifies this mismatch? If we are dissatisfied with the wide scope analysis illustrated in (2) or (2*), should we not also worry about (9)?

It seems that we are caught between a rock and a hard place. The dilemma is that we cannot rely on descriptivism and the conventional semantic apparatus, but expanding the domain of quantification seems risky.

The way out, I believe, is to remind ourselves of the generality of intentional identity and take a cue from a modified Hob-Nob scenario:

(10)   a. Hob believes that Hesperus is very hot.
        b. Nob believes that Phosphorus is very bright (Pagin 2014, p. 96).

Suppose (10a) and (10b) faithfully report Hob's and Nob's beliefs. Suppose further that Hob and Nob do not know each other, and neither of them knows that Hesperus is Phosphorus. It does not really matter whether Hob and Nob attach different descriptive content to (their mental representation of) the same heavenly body. As "Hesperus" and "Phosphorus" are co-referring, the truth of (10a) and (10b) is enough to make the Geach-style (11) true:

(11)   Hob believes a heavenly body is very hot and Nob believes it is very bright (Pagin 2014, p. 96).

Actual identity implies intentional identity.[6] Here the agents do in fact have attitudes towards a common focus, and there is a real entity at that focus. Thus, we may elaborate on Geach's informal definition of intentional identity: "[w]e have intentional identity when a number of people, or one person on different occasions, have attitudes with a common focus, whether or not there actually is something at that focus, *and whether or not the people involved realize this*."

One might think that this case is in sharp contrast to the original Hob-Nob sentence where the common focus is merely *intentional*.

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[6] I am grateful to Peter Pagin for making this point to me when I presented an earlier version of this paper at PhiLang 2017 in Lodz.

When there is an actual entity, the task is relatively straightforward, of course; what is baffling in the Geachian scenario is that there is nothing at the common focus. We cannot talk about intentional identity, or any kind of identity, if there is nothing whatsoever about which we can make the identity judgement.

However, it is not the case that there are no clear criteria for the identity claims. The examples examined so far demonstrate that even in cases of *merely intentional* identity, people do naturally make typically unanimous judgments. Most agree that the problem is not how people, laypeople and experts alike, do in fact make such judgements, but how theorists explain the reasons behind the judgements people actually make. These judgements are not arbitrary, and so long as we take them seriously, its is not difficult to see that the determining factor is always something factual.

To follow Geach's way of speaking, this means when there is something at the common focus, that very thing is the ultimate measure of intentional identity; when there is nothing at that focus, intentional identity is, and must be, grounded in something that we know of the agents and/or of their environment as a matter of fact.[7] For Geach's Hob-Nob sentence, intentional identity can "only make sense if the agent's attitudes are coordinated together, whether by means of communication or some other mechanism, in such a way that the two agents can be said to have the 'same' individual in mind'" (Asher 1987, p. 127). The source of coordination that validates a true reading of the Hob-Nob sentence is the fact that there is this newspaper article based on which Hob and Nob form their beliefs. The so-called counterpart relation should be understood in an externalist light as a necessary link between individual agents and the factual, causal mechanism. When the wide scope, *de re* reading is not available, we can opt for a realist *de origine* interpretation in the sense of Dekker and van Rooy 1997 and Zimmermann 1999.[8] That is, counterparts are not counterparts unless

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[7] This is known as the common source condition. See Moltmann (2006).

[8] In his discussion of the epistemic role of discourse referents, Zimmermann notices what he calls the intentional puzzle; he critically assesses a number of potential solutions, and argues that the "*de origine* solution," though not without its own drawbacks, is the most satisfying. According to the *de origine* solution, a discourse referent represents a source of the informational content of its information state.

they are caused by the same source. Therefore, should it be that Hob and Nob come to their respective beliefs about a witch by reading two different newspapers that are informationally independent, since their beliefs are not grounded in the common source, there is no intentional identity.[9]

This realist, externalist stance entails that not all coordination matters. For example, just as multiple agents can associate potentially drastically different descriptions to their intended object (e.g. (11)), an agent may also hold dissimilar, changing attitudes toward the same thing. Coordination of descriptions is beside the point. Besides, an agent's self-awareness of whether intentional identity obtains is irrelevant (e.g. (1)); it is in this sense that the agent's belief system need not coordinate with the reality.

So, despite the many controversies that Geach's intentional identity has triggered, the general morals are straightforward. What is surprising, however, is that the lessons have not been fully appreciated in the literature. As "[o]ne leitmotif in the philosophy of language and mind of the past fifty years has been its anti-descriptivism [,]" (Récanati, Murez 2016, p. 267) here we have another instance against descriptivism. Moreover, the anti-descriptivist move is motivated by externalism: ultimately, it is the external fact that decides whether intentional identity is sustained or fails. Meanwhile, not all expansions of the quantification domain are the same. While variables ranging over nonexistent or mythical objects do appear suspicious, it is not at all impossible to maintain a realist view towards intentions, mental representations, or possibilities, especially when they can be well-individuated.[10]

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[9] Zimmermann considers an example from Edelberg (1992) where two groups of astronomers independently observed a peculiar motion of super-clusters of galaxies and, despite calling it by different names, came up with basically the same explanation. As it turns out, the cause that both groups identified does not exist at all; the peculiar motions of the various super-clusters are each caused by independent factors. Edelberg's story is supposed to show that intentional identity does not require different agents' informational or intentional states to be coordinated through communicative endeavor; Zimmermann further argues that if we have a Twin Earth (Putnam 1975) version of the same story, then because the two groups observed in fact distinct phenomena, there is no intentional identity.

[10] An anonymous referee raised the worry that it is quite a challenge to provide a theory of the said individuation. I do not deny the difficulty in providing such a theory, but I think there are works in the literature that show some promise.

A realist extension of the usual domain along these lines is not only innocent but necessary. After all, we are committed to entities that can best explain the data in a systematic way. For the purpose of semantic theorizing, a wide scope analysis, when carefully qualified, can be part of our best analysis.

### 3 INTRASUBJECTIVE CASES & CROSS-SPEAKER ANAPHORA

#### 3.1 INTRASUBJECTIVE INTENTIONAL IDENTITY

So far, I have focused on Geach's intentional identity and diverged to its close variant only briefly; but intentional identity has a very wide coverage. For instance, consider:

(12)   Le Verrier believed that Vulcan is located between the Sun and Mercury, and many others believed they had seen it.

As it turns out, Vulcan does not exist, but that does not change the fact that there can be intentional identity regarding Vulcan. Crucially, scientific progress often relies on entertaining thoughts and investigating ideas that involve entities that may or may not exist; breakthroughs in technology frequently hinge on people working together to bring a previously non-existent object into being.[11]

What's more, as Edelberg (2006) correctly points out, intentional identity has both intersubjective and intrasubjective versions. My goal in this section is to lay out some representative examples of intrasubjective intentional identity and re-evaluate the realist, externalist conditions of coordination sketched in the previous section.

To begin, the philosophical literature is well stocked with an assortment of cases where an agent associates not just different, but

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See, for example, Asher 1987, Kamp, van Genabith, and Reyle 2011, Pagin 2014, and Maier 2015. Recent discussions on mental files (Récanati 2012, 2014, 2016) also shed light here: we can distinguish the information stored in a file, its *contents*, from the file itself. Files are not individuated based on their contents, but the causal relation that brings them about. The realist, externalist view of mental representations that I have in mind is comparable to what Récanati says of mental files.

[11] For example, a team of scientists and engineers worked for years, with a common focus of course, before AlphaGo became known to the public.

sometimes inconsistent predicates to the same thing without knowing it. This list includes Frege's puzzle, Quine's discussion of Ralph and Ortcutt, and of course, Kripke's puzzle about belief. For simplicity's sake, I center on Kripke's examples of Pierre and Paderewski:

(13)   Pierre thinks London is pretty, and he thinks it is not pretty (Kripke 1979).[12]

(14)   Peter thinks Paderewski has musical talent, and he thinks he doesn't have musical talent (Kripke 1979).[13]

These philosophical double visions provide support for our anti-descriptivist, externalist analysis. Obviously, the agent in question has attitudes about the same thing, despite failing to realize this himself. Since coordination works in a factual fashion and does not depend on the agent's inner awareness, intentional identity holds. To be sure, if Peter later found out that what he previously thought of as two people are one and the same, he would have to coordinate the content of his belief system accordingly. While this higher level coordination is demanded by rationality, it is not required for intentional identity.

On the other hand, there are cases of intrasubjective intentional identity that do not seem so philosophically baffling:[14]

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[12] Here is a brief summary of The Pierre Puzzle: Pierre is a normal French speaker living in France. He learns, in French, the name "Londres" as the name for London. He accepts, in French, many claims about the city, including that it is beautiful. So, in French, he says "Londres est jolie." Under unfortunate circumstances, Pierre is later moved to and confined in a rather unattractive part of London. He manages to pick up the local language through interaction with his neighbors, who speak no French. Pierre acquires "London" as the name for London, and thinks of it as not very pretty.

[13] The Paderewski Puzzle is the monolingual version of Kripke's puzzle about belief. Peter learns the name "Paderewski" as the name of a famous pianist. He later learns of someone called "Paderewski" and this person was a Polish national leader and Prime Minister. Since Peter doubts the musical abilities of politicians, he concludes that these are two different people who happen to share the same name.

[14] The following examples have been debated extensively in the literature of philosophical semantics and the intersection of semantics and pragmatics. Following Roberts (1996), they are often referred to as modal subordination, or intensional subordination per Moltmann (2006). As it turns out, it is extremely

(15)   Bill believed that Fred had been beating his wife and he hoped
       that Fred would stop beating her (Karttunen 1973, ex (42)).

(16)   Bill believes he saw a fish and wishes that he had caught it.
       (McKinsey 1986)

(17)   Alice fears there's a squirrel in her kitchen cabinets; she hopes
       to catch it alive and turn it outside (Roberts 1996).

(18)   Grandmom thinks a snake is in the barn, and she wants to shoot
       it (Edelberg 2006).

On the face of it, (15) through (18) are rather pedestrian. None
of them involves any mythical or non-existent creatures. These
examples strike one as unremarkable precisely because we use such
talk on a daily basis; they exemplify how we use folk psychology to
explain people's thought and behavior. For instance, the truth of (17)
can explain why Alice acts in an awkward way in the kitchen; the truth
of (18) can explain why an eighty-year old lady is taking a gun to the
barn. But, notice that it is conceivable there is in fact no squirrel in the
kitchen, in which case Alice's intended object does not exist. The truth
of (17) is independent of whether "a squirrel" denotes something, just
as Geach's Hob-Nob sentence can be true while "a witch" is empty.
There are also cases where the apparent descriptions do not cohere:

(19)   John thought he heard a woman's voice but suspected that it
       was not a woman's voice.

(20)   Arya wants to shoot and kill a werewolf, but she fears that she
       will only hurt it.[15]

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difficult to delineate the semantics for these sentences in a compositional way. Part
of the problem has to do with the lack of a satisfactory theory of presupposition;
other issues include the complex hierarchy between attitudes. Note that not all
combinations of attitudes are felicitous: a. John tries to catch a unicorn and wishes
to eat it. b. #John wishes to catch a unicorn and tries to eat it.

[15] The intended reading is where the indefinite "a werewolf" takes the narrow
scope; that is, Arya's desire is non-specific. Arya has a general desire to shoot and
kill one werewolf or another, and a subsequent fear about the same thing.

In (19), the agent appears to hold conflicting attitudes toward the same thing: on the one hand, John believed that he heard a woman's voice, but on the hand doubted that it is. The clash in (20) is subtler, however Arya apparently has two attitudes – a desire and a fear – toward the same thing. In terms of possible world semantics, in those of Arya's desire-worlds where she shoots and kills a werewolf, none of them is such that she just hurts it. So the specific content embedded in the scope of each attitude just does not match.

Again, these two sorts of data concerning intrasubjective intentional identity validate our criteria of coordination. First, they demonstrate the inadequacy of the descriptivist approach to intentional identity. Note that (15) through (20) are attitude reports of rational agents; even with tricky examples like (19) and (20), one would still confidently accept their truth without having to conclude that the agent's mind is confused or disturbed. Coordination in these cases does not require the agents to entertain thoughts about their intended objects in descriptions that are entirely consistent. This is so especially for *counterfactual* attitudes, such as wishing, pretending, and imagining, which are typically inconsistent with what the agents believe.[16] Note further, that all the cases of intrasubjective intentional identity examined here, including both Kripke's puzzles and the various cases of modal subordination, are anti-descriptivism. Whether or not the agent in question is aware of the identity of her intended objects, descriptivism fails to provide the desired explanation.

Furthermore, it is worth emphasizing that in (15) through (20), the agent's second attitude is always referentially dependent on their first attitude: Alice's hope to catch a squirrel is based on her fear that there is one in her kitchen, and Arya's fear that she only hurts a werewolf stems from her desire to kill one. Indeed, the referential dependency found in these phenomena of parasitic attitudes (Maier 2016) entails the need to specify a tracking device in our theory of mental representation, typically along the lines of a referential reconstruction of natural language terms as relating to specific entities (e.g. discourse referents) in the agent's information state.[17] As stated earlier, a well-

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[16] For more details, see Ninan (2008) and Maier (2016).

[17] See, for instance, Asher 1986, 1987, Dekker and van Rooy 1997, Kamp et. al. 2011, and Maier 2015, 2016.

structured theory of mental representation is in line with the realist stance, so the referential or *de re* element in the formal analysis is above reproach.

## 3.2 CROSS-SPEAKER ANAPHORA

Now I want to contrast intentional identity with the closely related phenomenon of cross-speaker anaphora, or what Dekker and van Rooy (1997) call "Hob-Nob situations." According to Dekker and van Rooy, these situations are "cases where two or more agents discuss and exchange information about a subject they have agreed upon, when actually there need not be a real thing which they are talking about" (Dekker, van Rooy 1997, p. 3). Defined as such, its resemblance to Geach's intentional identity is hard to miss.

Consider the following:

(21)   A: The man drinking a martini looks happy.
       B: He is not drinking a martini.

(22)   A: A man jumped out of the crowd and fell in front of the horses.
       B: He didn't jump, he was pushed (Strawson 1952).

(23)   A: A man is sleeping over there on a park bench.
       B: It is not a man, it is a woman and she is not asleep, she is just sunbathing.
       Besides, it is not a park bench. (Dekker, van Rooy 1997, p. 4).

In (21), we are reminded of Donnellan's "the man drinking martini;" (22) is a classic example from Strawson, and (23) its reinforcement. In each of the above examples, the second speaker does not agree with and corrects the predicative content the first speaker employs. Once again, the anaphoric pronouns and their antecedents are described in conflicting ways; as (23) shows, the second speaker may object to every piece of descriptive information that the first speaker mentions. Furthermore, it could be the case that both speakers are mistaken about the predication, or that there is nothing at their common focus, as in the case when both agents are hallucinating.

The situations exemplified by (21) through (23) are not odd or uncommon. They too are cases of intentional identity. Moreover, these

Hob-Nob situations support our externalist analysis of coordination, despite an important asymmetry.

Let me first highlight a number of key features of cross-speaker anaphora. To begin, the information exchange in these scenarios is intelligible because, regardless of the conflicting predication different speakers attributed to their common intended object, the referential intention remains stable. This is both an endorsement of the anti-descriptivist stance and a verification of the realist commitment. Again, when there is something at the common focus in these Hob-Nob situations, that very thing is the ultimate anchor for the multiple speakers' reference; it also serves as the measure of intentional identity. On the other hand, in cases where nothing exists at the common focus, the lack of an anchor means we must trace the agents' referential intention to an external, factual common source. Take (23) for example, we can imagine that both speakers are under the influence of drugs (or alcohol), and it is due to this common factor that they take themselves to be conversing about the same entity.

Crucially, however, cases of cross-speaker anaphora are special in that the second (or non-first) speaker bears the responsibility to preserve the first speaker's referential intention. While this responsibility is asymmetrical, we do not find any such thing among the array of intentional identity we have so far investigated. In other words, in-person communication places a unique demand on coordination: the second speaker is required to coordinate with the first in their referential intention. This reference-preserving intention is absent in the other cases of intentional identity.

## 4 CONCLUDING REMARKS

Philosophers have a long history of bemusement by reference and attitudes, and intentional identity is the perfect testimony to this bewilderment. Entertaining thoughts about entities and talking about them is such a familiar and fundamental part of our lives that puzzles thereof are both extremely intriguing and frustrating.

The ubiquity of intentional identity implies that foundational questions about human communication fall within the scope of its proper study. Drawing on the traditional problem of intentional identity, cases of intrasubjective intentional identity, and the deeply

connected phenomenon of cross-speaker anaphora, I propose a unified analysis of coordination that is key to the proper understanding of intentional identity. This understanding of intentional identity is holistic: it places the problem Geach first identified in a broader context and connects it to other interesting data whose inter- relatedness is under-investigated. The anti-descriptivism is validated because we can cluster diverse information and entertain distinct or even clashing attitudes toward the same entity in language as well as in thought. If reference is exhausted by the predicative information, there is no justification for how intentional identity can ever be established. In addition, the proposed condition of coordination makes no recourse to obscurity and sustains the externalist, realist spirit. While the analysis respects the fact that delineation of mental states often requires stipulating referential devices in linguistic and mental representations, finally, all the stipulations, be they pragmatic or not, must be grounded in external, factual terms.

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