Tacit Reference: Some Remarks on Unarticulated Parameters

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§0. Introduction

John Perry introduced the idea of *thought without representation*. At first sight, this idea seems odd: we are surely used to consider that a thought about an object *is* a representation of that object. However, Perry's idea describes an important and pervasive phenomenon in language and thought. The study of this phenomenon highlights unexplored ways in which context contributes to the interpretation of our statements and beliefs, and points to central facts about our cognitive architecture.

The present paper contains only preliminary remarks on Perry's important paper "Thought Without Representation" (1993), and certainly not a definite assessment of his complex view. It is structured as follows. In the first section, I distinguish (following Perry himself) two cases of thought without representation. In the second section, I explore the possibility that some supposed instances of thought without representation really involve something like simplified views of the world. This possibility suggests that thought without representation is in fact simplified thought, which does not rely on unarticulated parameters. In section 3, I argue that this possibility is not obviously wrong, although it does not imply that the notion of thought without representation is useless. In section 4, I describe in more details the move from tacit to articulated reference, which is nothing like an ordinary inference. In the last section, I briefly compare my account with Recanati's.

§1. Two cases of thought without representation

As a first try, we might say that a thought without representation (TWR) is a thought whose truth-conditions involve semantic categories ("parameters") which somehow are not represented or articulated by the subject herself. To take two of Perry's own examples, the

belief "It's raining"[1] may be true iff it is raining where the subject is, as the belief "It's 8 P.M." may be true iff it is 8 P.M. in the time-zone in which the subject is, although the subject has not explicitly considered the relevant place or time-zone, which is left unarticulated.[2]

TWR's can be said to involve *direct reference* to unarticulated parameters, the relevant species of direct reference being *tacit reference* (Crimmins and Perry, 1993; Crimmins, 1992). Accordingly, I shall suppose in this paper a strong, intentionalist reading of Perry's notion; a subject who entertains a TWR bears an intrinsic *intentional* relation to an unarticulated parameter. Although the parameter is not explicitly represented by the subject, it is still a (tacit) *object* of her thought.

This rough characterisation of TWR surely needs further clarification. We do not know yet what it means for a parameter to be unarticulated. Let us focus on Perry's main example involving the thought expressed by "It's raining". Let us suppose that this thought is entertained by a subject who, somehow, means that it is raining in Palermo. It does not explicitly represent Palermo. Nevertheless, it is true iff it is raining in Palermo. The thought has Palermo as an unarticulated parameter.

An obvious question raised by this example is how the reference to Palermo is *provided*. What secures Palermo rather than, say, Timbuktu as the thought's unarticulated parameter? We do not want to say that it is *arbitrary* or just *convenient* to say that "It's raining" is true iff it is raining in Palermo. I shall call this *the determination problem*.

As far as the determination problem is concerned, the case of TWR's seems to be quite different from that of *indexical* thoughts like "It's raining *here*". Both cases involve context-dependent thoughts, but in the indexical case, the place where it is raining *is* articulated in the thought – roughly, it is the place where the subject entertains the thought. We now have many theories of indexicals which offer explanations of how the place is actually provided by the concept expressed by "here",[3] but none of these theories easily applies to TWR.

We can extract from Perry's essay a distinction between two cases of TWR's. In one case, the unarticulated parameter is determined simply by *other* beliefs and intentions explicitly about Palermo (1993: 210-1). For example, someone asks me "Is it sunny now in Palermo?" and I answer "No, it's raining". My answer is true iff it is raining in Palermo because it occurs in the context of previous, explicit reference to Palermo. Perhaps it is a case of *derived* intentionality: the fact that my thought is intentionally related to Palermo is

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[1] I shall occasionally use the phrase "the belief/thought 'It's raining'" instead of the more precise "the belief/thought expressed by 'It's raining'".

[2] Other examples of TWR's are given by Crimmins (1992: 18).

grounded on the fact that surrounding thoughts are *intrinsically* related to Palermo. This is what I shall call "case A":

> *Case A*: "It's raining" as connected with other beliefs and intentions about the place where it is said to be raining.

In case A, what is left unarticulated by the thought "It's raining" is really articulated elsewhere in the subject's intentional web, by other beliefs and intentions.

We have a second, more radical case of TWR when the unarticulated parameter "is relevant to a whole mode of thinking or discourse" (1993: 221). Perry says that the parameter is a constituent of a *practice*, or a *language-game* (1993: 212). What Perry means by these Wittgensteinian phrases seems to be this. Sometimes, my thought "It's raining" is embedded in an intentional system of transitions which involves relatively direct perceptions of the local weather and relatively direct actions on the local weather. For instance, I look out the window, think "It's raining", want to go out but stay dry, believe that if I take an umbrella, I will stay dry, and eventually go out with my umbrella. The causal and inferential role of my thought seems to be exhausted by its intervening between local observations and local actions.

I shall call such a system of transitions a *partial intentional web* (PIW). I call it "partial" because it involves only a limited range of ways of gaining information about the world, and a limited range of ways of acting on it. It is also partial in the intuitive sense that it does not necessarily involve all of the subject's conceptual resources. It only involves those that are relevant to deal with the complex yet straightforward transitions from perception of to action on local weather.

Perry's suggestion is that the thought "It's raining", as embedded in a PIW which involves perception of, and action on local weather, is true iff it is raining in a particular place, even though this place is left unarticulated. Let us call this "case B":

> *Case B*: "It's raining" as embedded in a partial intentional web dedicated to the negotiations with the weather where the perceiving and acting subject is.[4]

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[3] Cf. for instance Evans (1982) and Perry (1997).

[4] In this paper, I shall suppose that this place is where the perceiving and acting subject is, but using the terminology introduced later (§4), it is in principle possible to imagine practices which lock to other places than where the subject is.

In Perry's theory, case B is very different from case A. First, there may be no explicit intentions or beliefs about the unarticulated parameter. Second, even the disposition to provide expressions that designate the parameter is *irrelevant* to the fact that "It's raining" concerns Palermo. Accordingly, Perry gives different semantic treatments of these cases. In case A, "It's raining" expresses a complete proposition which contains as one of its constituents the particular place where it is raining.[5] In case B, it expresses an incomplete proposition, i.e. a propositional function from places to truth-values. So "It's raining" is true or false only *relative to* the place where the perceiving and acting subject is. In the former case, "It's raining" is *about* Palermo; in the latter case, it only *concerns* Palermo. Strictly speaking, it is only in case A that it is appropriate to talk about unarticulated *constituents* (of the proposition expressed). Nevertheless, I shall still use the term "unarticulated parameter" to cover both unarticulated constituents and entities which our thoughts concern in Perry's sense.

Sceptics about the notion of TWR will perhaps try to reduce cases A and B to the indexical case by claiming that the statement "It's raining" is *elliptical* for "It's raining here". But this is implausible. It is obviously implausible in case B, because the unarticulated parameter is not presented to the subject under any mode; hence there is no need for a term which expresses such a mode of presentation. It is no less implausible in case A, because there is still an indeterminacy as to which longer expression "It's raining" should be elliptical for. The subject may favour no one intention or set of intentions over the others, as long as the same referent is determined (Wettstein, 1981; Soames, 1986).

Let us suppose that the determination problem is relatively easy to solve in case A (even though it is not entirely obvious how the thought "It's raining" connects with the surrounding ones explicitly about Palermo). Rather, let us get a closer look on how Perry intends to answer the determination problem in case B (I've changed the example):

> It is simply that the perceptions that give rise to the beliefs that *It is raining* expresses are perceptions of [the local weather], and the activities, to which the beliefs gives rise, are suited to [the local weather] (1993: 212).

There are in fact two ways of interpreting Perry's answer here:

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[5] Perry favours a two-tiered semantic theory in which there is a distinction between (i) thoughts and beliefs as mental states and (ii) propositions as abstract entities which we can use for classifying mental states in terms of the objects and the properties referred to.

(i) The phrases "perceptions *of* the local weather" and "actions *suited to* the local weather" mean that Palermo is represented in the *contents* of perception and actions.

(ii) Palermo is not represented in the contents of perception and action, but it is somehow brought into the "teleology and the normative aspect" of the subject's thought (Blackburn, 1986: 159).

Ad (i): Essentially, this interpretation reduces case B to case A: the fact that "It's raining" is intentionally related to Palermo derives from the intrinsic intentionality of other mental states – in that case, perceptions and actions. If the contents of perception and action are taken to be conceptual (cf. McDowell, 1994), there is actually no substantial difference between cases B and A. If perception and action are ascribed non-conceptual contents, the situation is more interesting: the intentionality of a conceptual state ("It's raining") would derive from the intrinsic intentionality of non-conceptual states (perceptions of, and actions on, Palermo). But as I find the notion of non-conceptual content itself far from clear, I shall not explore this path here.

Ad (ii): This is the response that Perry seems to favour. The facts that perceptions are *of* the local weather and that action is *suited* to it are non-cognitive facts. Perry speaks of an "external guarantee that the weather information we receive about and our actions will concern our own locale" (1993: 216). The latter facts derive from the more fundamental fact that the perceiving and acting subject is where the rain is. Perry's response seems to be based on a purely externalist account of the way Palermo is secured as an unarticulated parameter.

In what follows, I shall explore further Perry's notion of TWR. In particular, I am interested in two potential worries with this notion.

First, we might wonder whether it presupposes the "language of thought" hypothesis. Perry himself considers belief states and their parts, i.e. concepts, as cognitive particulars. Then we can talk of the *constituents* of belief states. In case A, we might describe the thought "It's raining" as having *less* constituents than the (singular) proposition expressed. This description, though, presupposes something like a language of thought.

In case B, we envisage a thought which expresses an incomplete proposition. Now suppose that we reject the language of thought hypothesis. We might claim that thinking involves the exercise of several distinct conceptual *abilities*, rather than the instantiation of

particular *elements*.[6] The idea of exercising an incomplete thought, though, is not entirely clear. For instance, what does it mean to *exercise* the incomplete thought "Maria is kissing *x*", where *x* is left unsaturated? Thus, it appears that Perry's description of case B also presupposes something like a language of thought.

The second worry has to do with Perry's response to the determination problem. Many philosophers won't be convinced by its radically externalist flavour. The intentionalist reading of the notion of TWR suggests that there must be something in the *cognitive* facts themselves which at least indicates an intrinsic intentional relation to Palermo.

This constraint does *not* imply the internalist thesis that there must be a cognitive difference between a system which refers to something and a system which does not. It merely says that that there must be a cognitive difference between a system in which there is a *purported* reference to something (be it successful or not) and a system in which there is none. It seems to me that if the second constraint is not recognised, tacit reference will be too easy from a cognitive point of view and philosophically much less interesting.

My aim here is to provide the beginning of a limited defence of the notion of TWR which does not presuppose the language of thought hypothesis (but which is not incompatible with it) and which favours a more internalist response to the determination problem. I shall continue to focus on Perry's main example, although I hope that at least some of my remarks will apply to other examples as well.

§2. Simplified views

In this section, I shall discuss Perry's arguments for the claim that "It's raining" is a TWR. My main point will be that these arguments do not exclude an alternative account according to which at least some supposed instances of TWR involve instead what I shall call *simplified views* of the world. As we shall see in the next section, this account is not quite right as it stands, but it may contain an important grain of truth.

Perry's first argument is that we need a reference to the place where it is raining for specifying the truth-conditions of the thought "It's raining". His second argument is that we have to explain the fact that beliefs expressed by "It's raining" promote the subject's goals (for instance, the goal of staying dry) in the context of appropriate mental states. These arguments are related. The truth of a belief will normally contribute to the promotion of the subject's

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[6] Cf. Geach (1957) and Evans (1982: 101).

goals in the presence of other true beliefs. As Perry says, there is a connection between the semantic and the motivational aspects of beliefs (1993: 214).

However, Perry's arguments are not as compelling as they seem. First, it is not clear that we need a reference to the place where it is raining to specify the truth-conditions of "It's raining". Consider an alternative interpretation which takes "It's raining" at face-value, with a one-place predicate "It's raining at *t*" referring to a property of times. If this is the property referred to by this predicate, "It's raining" has the same truth-conditions as "It's raining everywhere", thus without any reference to a particular place. The thought "It's raining" would involve a concept of a meteorological phenomenon which affects the whole universe. "Either it's raining or it's not" would have the same truth-conditions as "Either it's raining everywhere, or it's raining nowhere". According to this interpretation, the property referred to by "It's raining" is a *different* property from the one referred to by "It's raining in Palermo". In the framework of singular propositions, utterances of "It's raining" express propositions which contain as constituents a time and a monadic property of times. They have determinate truth-conditions, and simply do not *need* a tacit reference to particular places.

Of course, a consequence of this interpretation is that utterances like "It's raining" are false, since rain actually does not affect the entire world, but only specific locations. This leads us to Perry's second argument. If thoughts expressed by "It's raining" are false, how can they promote our goals?

By hypothesis, the thought "It's raining" is embedded in a PIW, i.e., in relatively direct transitions from perception of to action on local weather. This PIW involves only a "limited repertoire of weather-sensitive actions" (1993: 215), as well as a limited range of ways of gaining information about the weather. Similarly, the relevant goals, which are determined by the desires internal to the PIW, are equally limited. In fact, they are so limited that a simple thought having the force of "It's raining everywhere" is quite enough to promote them. Of course, when we move to other places, or talk to people on the phone, the same goals might not be promoted. In these situations, we use more sophisticated thoughts, like "It's raining here", or "It's raining in Palermo".

In short, the alternative interpretation is compatible with the pragmatist principle that an action based on a false belief won't satisfy *any* desire or *any* goal (Ramsey's Principle[7]). Statements like "It's raining" are similar to "The sun is rising" or "The sun is setting".

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[7] Cf. Ramsey (1978).

Although these statements are strictly speaking false, they will systematically lead to effective action in most ordinary cases.

Perry is right when he says that the connection between the place where we receive information about the weather and the place where we act on it (e.g., by opening an umbrella) need not be co-ordinated by our beliefs. However, this is true not because our beliefs have a particular place as an unarticulated parameter, but because they do not refer to spatially located properties.

As it stands, the alternative interpretation is surely uncharitable to the subject. However, it contains an important grain of truth: *sometimes, we just sacrifice truth in the name of cognitive efficiency*. When only limited goals are concerned, efficiency suggests that simpler thoughts will "work" as well, i.e., will normally contribute to the satisfaction of desires, and the achievement of goals, within a given PIW. It is as if we temporarily adhered to a *simplified view* of the world which in a given context has no unwelcome pragmatic implications. In the case of "It's raining", we are behaving, in limited ways, *as if* we were living in a simpler world in which it is raining either everywhere or nowhere. This view does not need to be made explicit; it is manifested in our behaviour, and in the inferential role of "It's raining" in the PIW.

§3. Background conceptual abilities

The upshot of the previous discussion is that if the thought "It's raining" is interpreted only on the basis of its inferential role *within the PIW in which it is embedded*, as if it was independent from other beliefs and intentions outside the PIW, it means something like "It's raining everywhere". Let us call this *the prima facie interpretation* of the thought:

- *Prima facie interpretation*: "It's raining" is true iff it is raining everywhere.

According to the *prima facie* interpretation, "It's raining" is a complete, self-contained thought, with no tacit reference to a particular place. But the fact is that "It's raining" is *not* independent from the subject's beliefs and intentions outside the PIW. We certainly believe that rain does not affect the whole universe, that it has (vague) spatial boundaries, and so on. Our thought "It's raining" is not insulated from these beliefs, as if we had contradictory beliefs in different parts of our global intentional web. If someone asks us what we mean by "It's raining", we will surely answer something like "Well, I mean that it is raining *here*". We are

disposed to move, if necessary, from "It's raining" to a thought of the form "It's raining in *p*", where "*p*" is a singular concept referring to a particular place.

Let us say, by analogy with perception, that "It's raining" is embedded in a PIW which plays the role of a *figure* set against a *background* of other beliefs and intentions. Now the idea is that dispositional connections between figure and background entitle us to *adjust* our initial or *prima facie* interpretation and ascribe to "It's raining" different, more sophisticated truth-conditions. Let us call this *the adjusted interpretation* of the thought:

> • *Adjusted interpretation*: "It's raining" is true iff it is raining in *p* (where *p* is the place where the perceiving and acting subject is).[8]

So an argument for the existence of TWR's might run as follows. For some practical purposes, we spontaneously entertain the simplified thought "It's raining", whose inferential role in the PIW is similar to that of "It's raining everywhere" (*prima facie* interpretation). However, "It's raining" means more than that, since we must also take into account strong dispositional connections with the background. These connections show that it means that it is raining in some particular place *p* (adjusted interpretation). If this is what "It's raining" means, it is a TWR, for it has *p* as an unarticulated parameter.

We can imagine creatures, like Perry's Z-landers, who do not have the disposition to move from "It's raining" to "It's raining here", perhaps because they cannot understand the possibility that it's raining here without it raining elsewhere. They simply do not have the concept of rain as a relational property of times and places. For them, the thought "It's raining" is exercised against a different, less sophisticated background, which does not enable the theorist to go beyond the *prima facie* interpretation. In this case, there is no need to say that such a thought involves a tacit intentional relation to a particular place. It is more plausible to ascribe to the creatures a "primitive" view of rain.

A potential objection to this argument for TWR's is that it reduces case B to less interesting case A. The intentional relation to the local weather is in fact guaranteed by background concepts, of which "here" is an example. "It's raining" is a TWR, but the unarticulated parameter is articulated elsewhere in our conceptual scheme, i.e., in the background.

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[8] Cf. note 13 below.

As we shall see in the next section, this objection misrepresents the role of thoughts like "It's raining" in our cognitive architecture. First, let me briefly indicate two other ways of stressing the difference between cases A and B.

1. A reference to an object – be it tacit or not – requires a conceptual ability (Geach, 1957). This ability may be exercised or not. So one option is that my thought "It's raining" does not involve the *exercise* of any ability to think of the place of the rain as opposed to other places, although it involves the exercise of other conceptual or proto-conceptual abilities – those required to mediate the transitions between perception and action in a working PIW. The subject *actually* thinks "It's raining", but she is only disposed to think, e.g., "It's raining here".

We would have a mild contrast between cases A and B, since in the former case, what is left unarticulated by one thought is *actually* articulated in other, exercised thoughts and intentions.

2. According to the second option, there is a more important difference between cases A and B. First, we can distinguish between different *levels* of abilities – some abilities are so to speak more dispositional than others. To take an Aristotelian example, we can say that a dumb man both can and cannot speak, but in different senses of "can". There is a dispositional level at which the dumb man can speak while a dog cannot. There is a different, less dispositional level at which the dumb man cannot speak while a temporarily silent man can.

Now if the thought "It's raining" involves an intentional relation to a particular place, grasping it implies being able to grasp other thoughts, like "It's raining *here*". But there may be a sense in which the concepts which compose the latter thoughts *need not* be in the subject's conceptual repertoire. What is in her conceptual repertoire are conceptual abilities which are easily available without much reflection. Grasping the thought "It's raining" under its adjusted interpretation only requires that the subject be disposed to relate it to a particular place. This disposition may be such that the subject does not actually *possess* any singular concept of the relevant place. (For instance, she might be temporarily disoriented.) It is enough to require that she has a proper background of conceptual abilities – the general concept of an objective place, and maybe the concept of rain as a property of times and places – by means of which she *could* introduce in her conceptual repertoire a singular concept of the place where it is raining.

If we follow this line, there is a sharp contrast between cases A and B. In the former case, the unarticulated parameter is always articulated in the subject's conceptual repertoire, since a concept of it is involved in a thought actually grasped by the subject. In the latter case,

by contrast, there is room for saying that "It's raining" means that it's raining in a particular place, although the place is articulated neither in the thought nor in the general understanding needed to move beyond the *prima facie* interpretation.[9]

§4. Locking vs. tracking

In this section, I would like to say something more about the relationship between TWR's like "It's raining" and the background against which they are exercised. I shall make the following two points. First, the move from "It's raining" to "It's raining here" is nothing like an ordinary inference, contrary to most of the transitions within the PIW. Second, whereas any aspect of the thought's inferential role may be realised in the working PIW, the connections with the background *must* remain dispositional. If the connections were realised, the TWR will simply be destroyed. These points indicate that figure and background determine the interpretation of our thoughts in quite different ways.

The move from tacit to articulated reference involves an *expansion* of the original PIW into a new, more complex intentional web. An expansion means that although the expanded web still relies on the original ways of gaining information about, and of acting on the world, it mobilises new epistemic and pragmatic ways which control, and possibly modify the original transitions. Let me illustrate this point with respect to "It's raining".

The PIW in which "It's raining" is embedded *works* in the sense that its internal goals (which include not only actual goals but goals the subject might easily have) are or would be systematically achieved. In the normal case, its working depends at least partly on the fact that perception and action are both related to local rain in any nearby worlds. (At least, this is how we would naturally explain the PIW's pragmatic efficiency.)

As a result of this modal dependency (and of the fact that perception and action have the contents they have), there are laws linking the belief "It's raining" to the property of raining at a particular place. When this is the case, I shall say (borrowing a phrase from Fodor, 1996) that the subject *locks to* this property. By extension, I shall also say that she locks to the particular place about which she has perceptual information and on which she acts. In Fodor's theory, where representation is cheap, it probably follows that "It's raining" *represents* the local weather, but Fodor does not make the distinction between tacit and

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[9] Cf. McDowell's thesis that an egocentric perceptual information-link counts as a case of (demonstrative) acquaintance only "*in the presence of a general understanding* of how egocentric placing relates to the objective order" (1990: 257; my italics).

explicit reference. For us, "It's raining" *tacitly* refers to the weather where the perceiving and acting subject is, but only if the relevant dispositional connections to the background are in place.[10]

By contrast, consider the thought "It's raining here". It depends on the practical ability to orient oneself in one's environment, which itself involves what psychologists call a *cognitive map*. This ability enables us to *track* places over time, even if we have already left them. For instance, we are able to think of a particular place first as "here", then as "there", compensating for our change of place. So we cannot track a particular place if we do not have the ability to move from one place to another, or at least to gather information about such a movement.[11]

Now the point is that "It's raining" locks to, but does not track, local weather. Tracking is a more sophisticated achievement, which involves new ways of perceiving the world and new ways of acting on it. For instance, information about significant movements of our whole body through space is typically relevant when we think "It's raining here" – gaining it is one way of adjusting our cognitive map of the environment. Similarly, tracking, but not locking, involves the ability to act on *other* places than where we are at some given time. For instance, I can take my umbrella with me if I intend to go to London and know that it is raining *there*, although it is sunny *here*, in Palermo.

Now we see why the move from "It's raining" to "It's raining here" radically modifies the former thought. The thought "It's raining" is not sensitive to significant movements of the subject's whole body. In the PIW in which it is embedded, the transitions between perception and action are done irrespective of these movements. By contrast, the thought "It's raining here" *is* sensitive to significant movements of the subject's whole body, and the transitions between perception and action are controlled by information about these movements. For example, I can perceive something *here*, and act on that thing *there*, because I have compensated for my movement in space. In the expanded PIW, there is no thought with the inferential role of "It's raining" in the original PIW. The move from "It's raining" to "It's raining here" is fatal to the original thought, which cannot keep the same inferential role.

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[10] Fodor uses the notion of locking in a slightly different sense and with entirely different aims in view. First, he does not talk of being locked to particular things, but only to properties. Second, he thinks that locking is sufficient for concept possession. Third, he never takes into account the contribution of *actions* to their being laws like those linking "It's raining" to local rain. Normally, "It's raining" would not be tokened if it were unable to mediate perception and action in such a way as to systematically contribute to achieve the subject's internal goals.

[11] For a now classic account of thoughts involving spatial indexical concepts, cf. Evans (1982: ch. 6).

This also shows why the move from "It's raining" to "It's raining here" is not an instance of an ordinary inference. An inference is normally made *within* a PIW, and the conclusion does not destroy the premise's inferential role (even if the inference itself is relevant to such a role). The moral of this story is that the contents of our thoughts are not determined by inferential role only, but also by non-inferential links with background conceptual abilities.

Using the distinction between locking and tracking, we can formulate a tentative definition of an unarticulated parameter:

(UP) S's thought τ has *u* as an unarticulated parameter if and only if

    (i)   τ is embedded in a PIW by which S locks to *u*,

    (ii)   S is disposed to expand the locking PIW into a tracking PIW, and

    (iii)   if this disposition were realised, S would track *u* (other things being equal).

Clause (i) describes an external fact which contributes to explain the PIW's working. Clause (ii) corresponds to the dispositional connections with the background, which allow us to move beyond the *prima facie* interpretation of τ. Clause (iii) gives the basis of the adjusted interpretation of τ.

With UP, the determination problem is solved in the appropriate, internalist way because although the success of tacit reference partly depends on external facts (the locking), the referent is determined as that which the subject is disposed to track.

Of course, there are in principle many ways of expanding the locked PIW into a tracking PIW, as there are many ways of tracking a particular place – the move from "It's raining" to "It's raining here" is only one possibility.[12] It does not follow that there are alternative adjusted interpretations, as long as the (extensional) truth-conditions are preserved. Don't forget that as far as tacit reference is concerned, the referent is not presented to the subject under any specific mode.[13]

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[12] In most cases, tracking a particular place does not involve indexicals only, but also proper names; cf. Dummett (1993).

[13] The subject could also move from "It's raining" to "That is rain", thus tracking not only a particular place, but a particular *phenomenon* – the rain. Once again, it does not follow that there are many adjusted interpretations, since in the given context, "That is rain" is true iff "It's raining here" is true.

§5. A comparison with Austinian semantics

Compare my account of the move from tacit to articulated reference with Recanati's (1997). Recanati is centrally interested in establishing the appropriate semantic framework for TWR's (i.e. Austinian semantics), whereas I have concentrated here on more cognitive issues. His account involves (*inter alia*) the following points:

1. The move from "It's raining" to "It's raining here" involves a *change of representation*. These statements do not express the same representation, and do not state the same fact. The representation expressed by "It's raining", and so the fact stated, is less complex than the representation expressed and the fact stated by "It's raining here". "It's raining" involves a 1-place relation (a property of times), whereas "It's raining" involves a two-place relation (a property of times and places).

2. The move from "It's raining" to "It's raining here" involves a *change of context*. These statements are not interpreted with respect to the same partial situations. "It's raining", uttered in Palermo, is interpreted with respect to Palermo, whereas "It's raining here", uttered at the same place, is interpreted with respect to a broader situation, e.g. Italy.

3. Whatever is articulated in language and thought is extracted from a "paradigm" or contrastive set. So if I say "It's raining here", I implicitly contrast Palermo with *other* cities, e.g. in Italy.

I have vindicated something like the first point in this paper: at the level of *prima facie* interpretation, the move from "It's raining" to "It's raining here" can be seen as a move from a simplified thought to a conceptually more sophisticated one. At the level of adjusted interpretation, though, they have the same content in the sense of truth-conditions.

However, the main difference concerns the second point: in the present account, there is no need to invoke *partial situations* (contextually determined parts of the world) with respect to which "It's raining" should be interpreted.[14] At the level of both *prima facie* and adjusted interpretation, the statement "It's raining" involve complete thoughts and should be

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[14] The second point presupposes a central tenet of what Recanati calls "Austinian semantics": each statement implicitly refers to particular situations with respect to which they are true or false (cf. Barwise and Perry, 1983).

interpreted with respect to the whole world. I suspect that the same is true for "It's raining here", which is context-dependent but not situation-relative, but I won't try to prove it here.

The third point is an argument that Recanati puts forward for the second point. But my scepticism about partial situations does not mean that I reject Recanati's insight that contrary to "It's raining", "It's raining here" involves a contrastive set. I think that the insight follows from the distinction between locking and tracking. Locking does not require that the subject *contrast* a place with others, but tracking clearly does, since it involves a cognitive map in which several places must be represented. (My tracking a particular place involves at least a conception of *other* particular places.)

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