

Indexicality and Self-Awareness

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1. Introduction

Self-awareness is commonly expressed by means of indexical expressions, primarily, first-person pronouns like ‘I’, ‘me’, ‘we’, ‘my’, ‘myself’, ‘mine’ and so forth. While not all indexical contents are first-personal, indexical usage suggests a kind of reflexive awareness since its terms always convey information about the speaker. For example, hearing someone say: ‘you’d better be prepared; it’s hot here today’, I conclude that the referent of ‘you’ is being addressed by the speaker, hence, believed by the speaker to be subject to influence through communication. Moreover, for normal usage, I assume that the day in question is the very day during which the speaker made that utterance. Again, positional expressions like ‘next to’, ‘left of’, ‘beyond’, ‘later’ and so forth, typically convey the orientation of objects and events vis-à-vis the speaker’s position in time and space. Indexicals are always biographical, and therefore, from the speaker’s standpoint, autobiographical. If so, self-awareness is manifested or realized by the producer of any indexical utterance or any indexical thought. If indexicality graces every conscious state, in turn, then self-awareness is ubiquitous.¹

Does self-awareness accompany all indexically mediated states of consciousness? Answering this question—the main concern of this paper—requires close attention to the pragmatics of indexical usage and to distinctions among various notions of “awareness” and “self.” Among the important contrasts to be observed is between a *direct* awareness of, say, a

certain bell-like sound, and an indirect or *mediated* awareness of the bell that one thinks caused the sound. Again, I have never directly perceived George W. Bush, but I have seen images of him on TV and in newspapers, I have heard his voice, and I have winced at some of the statements he has made. I am thereby led to have thoughts about him and, in so doing, am aware *of* him in an indirect sense mediated by visual images and sounds.

A second contrast is between *conceptual* and *non-conceptual* awareness of something with respect to a particular concept, property, or classification it falls under. For example, an infant might be aware of a pain, a round object, or its mother without having a concept of *pain*, *roundness*, or *mother*, and perhaps a dog can be aware of its owner or the sun or without concepts of *ownership* or *the sun*. I have a conceptual awareness of this pen as a pen, though not, say, as something manufactured in Ohio, but insofar as I am aware of it then I am aware of something manufactured in Ohio. No doubt some sentient beings are aware of things they never conceptualize in any manner, e.g., their own heartbeat, the force of gravity, or life. Conceptualization typically follows upon felt contrasts and absences, and often, we fail to rise to the level of abstraction required for contrasting pervasive elements of experience.

We may also distinguish a *global* awareness of something X in its entirety from a *partial* awareness of X, viz., of a part of X. We have partial awareness of ourselves, say, of a bodily part like one's arm, a bodily event such as one's current indigestion, or one's observing Lake Michigan from atop the John Hancock Building in Chicago. A partial awareness of X might be nonconceptual if one does not realize that it is X's part that one is aware of, or, alternatively, there can be a partial conceptual awareness of X, e.g., of my house while gazing at the roof. Every awareness is global in that one is aware of an individuated content,

be this a physical object, a quality, a mental event, a proposition, etc., yet, partial insofar as that content is a part of an aspect of something else. For example, I can be globally aware of my right index finger, or, of a segment of its surface, and, at the same time, partially aware of my whole body.

There are also different degrees or levels of awareness. Perhaps the sharpest or most focused awareness of anything involves attending to it as an item of which we predicate something, an awareness that underlies reference, as when I refer to a person in saying ‘that man is coming over here.’ It is marked by representability of an item by a singular term, identification of it through a mode of presentation, and predication of some property to it. Not all awareness is referential. Suppose I point to a dot on a map and think, *that’s Berlin*; while I refer to the city, the dot is also salient in my awareness even though I do not refer to it in that thought. Again, watching a television interview with the current President of France, Jacques Chirac, I notice that his tie is blue and think that he is French. I am aware of the color *being blue* and of the sortal concept *being French* even though I do not attend to these properties as subjects of predication. They are *salient* within my conscious experience, but I am not referring to them via singular terms or thinking anything *about* them.

Something might be present in experience but not salient. As I read this paper, for instance, I am conscious of the individual words and, perhaps, the individual letters comprising those words. I am also aware of the shapes of the upper halves of each of the letters composing those words, though these shapes are not salient. I hear background noises as I compose this paper on my computer, say, the sound of a fan, or, I am aware of the chair I sit on, but, prior to thinking about that noise and that chair, I was not noticing them. I was *marginally* or *implicitly* aware of such items without focusing upon them. They were not

salient. Within such marginal awareness we can distinguish *constitutive* awareness of those factors within the contents we are attentively aware of (e.g., the shapes of letters as I read this paper, the individual lights as I gaze at a distant city from a hill at night), from *extraneous* awareness of factors that merely accompany a certain attentive awareness (thus, the perception of background noise or the feel of the chair as I concentrate on my computer monitor).

I use 'conscious' and 'consciousness' to indicate a property of certain psychological states whereby selected contents are highlighted, emphasized, or attended to, a property that admits of degrees. Since attention always requires contrast, we cannot be conscious of anything unless we have learned to oppose it to something even if one cannot distinguish it from everything else. Because we can be aware of distinct factors that lack salience and we are not attentive to, then 'aware' and 'awareness' designate a broader category of which consciousness is a species. Awareness is, thereby, stratified with respect to degrees of attentiveness. At one extreme is referential consciousness, while at the other, is marginal awareness folding into undifferentiated perception, for example, auditory reception of the sounds made by individual wavelets in listening to an ocean wave. The terms 'experiencing', 'perceiving', and their cognates designate an even broader category of feeling, taking in, or prehending stimuli, whether from within the body or from without, a process that need not be accompanied by awareness at all.² All awareness involves a unification of several stimuli into an awareness of one unitary content. For example, in hearing the word 'aluminum', the perceptions of individual phonemes are united into one auditory awareness of a word. The visual and tactile experiences of a aluminum pot blend together the activation of vast

numbers of exteroceptors and the information they deliver. The single thought that *aluminum is a metal* results from a combination of conceptualizations.

Finally, there is an ambiguity in talking about self-consciousness due to the different meanings of ‘self’. While all self-awareness is reflexive in that it involves a cognitive relation between an agent and itself, or some part or aspect of itself, the term ‘self’ is typically used to express that intimate self-awareness manifested by consciousness of oneself as *I*, *me*, or *mine*, as when one says ‘I can do that’, ‘she loves me’, or ‘this book is mine’. However, derivatives of ‘self’ can be used to report a purely reflexive relationship as when we say ‘the injury was self-inflicted’, ‘the horse hurt itself while galloping,’ or ‘John locked himself in the room by accident’. Here there is no implication of first-person awareness, not even when ‘himself’ or ‘herself’ are used to report what someone observes. A familiar story of Ernst Mach entering a bus in Vienna illustrates this:

. . . he saw a man enter at the same time on the other side and was suddenly struck by the thought, “Look at that shabby pedagogue coming on board!” – not realizing that he was referring to himself, because he had not noticed that opposite him hung a large mirror.

The pronoun ‘himself’ is used to report Mach’s reflexive awareness, but the narrative makes clear that Mach is not thinking of himself in first-person terms.³

Let us label this merely reflexive type of self-awareness *external*, for it is no different from the way in which we are aware of others, e.g., through sensory observation or second and third person thinking. By contrast, self-awareness mediated by first-person pronouns or concepts is a type of *internal* self-awareness inasmuch as it occurs through introspection, proprioception, interoception, or other forms of inner awareness. First-person awareness is internal awareness marked by the identificatory use of what I will call *executive* first-person

concepts (sections 4-5), but since internal self-awareness can be non-conceptual, then it is not necessarily first-personal (section 6). The internal/external contrast can be drawn whether we are speaking of self-awareness in global or partial terms; while observing my arm as *mine* or as *me* is a matter of first-person self-awareness, I might also notice that very same arm without realizing that it is mine or me, say, when I see it reflected in a mirror.⁴

With these distinctions, an account of how indexicals both reflect and shape our thinking is set forth in sections 2-4. In its terms, our capacity for first-person identification is explained in section 5. Finally, as a consequence of this account, section 6 defends the notion that self-awareness of a marginal, constitutive, non-conceptual, and non-first-personal sort is a feature of all indexically-mediated consciousness.

2. Identifying with Indexicals

Language is as much a means of thinking as it is communicating about the world. Our use of singular terms, in particular, reflects our *identification* of various items, viz., our picking out or distinguishing certain objects, events, properties, facts, etc., for the purposes of thinking and, perhaps, saying something about them. When we identify something we do so in terms of what is unique to it, by means of a distinguishing feature that serves as our mode of presentation. It need not be a permanent property; *being the tallest woman in this room* might serve to distinguish, but it is a transitory relational property, lost as easily as it is gained.

Identifying need not require an ability to *reidentify* in the same terms.

Indexicals are the preeminent instruments of identification, for purely qualitative discriminations are usually cumbersome or unavailable. We continually single out items as *this, that, these*, locate objects and events by means of *here, there, then beyond*, direct our

thoughts upon people through the mechanisms of *you, he, she, them*, etc. We also identify in terms of complex demonstratives, e.g., *those apples, that book, his hideous war*, and so on.⁵ Indexical modes of presentation cannot be generic indexical concepts, say, being *you*, since many items can fall under them relative to a given utterance, e.g., *You go there, but you come here!*

It is commonly held that indexicals tokens *refer* only through an interplay of their meanings with the contexts of utterance within which they occur. For example, given the meanings of the indexical type ‘you’ and ‘now’, the referent of a ‘you’ token designates the one addressed through its utterance, while with a ‘now’ token we refer to an interval that includes the time of the utterance. As John Perry puts it, “a defining feature of indexicals is that the meanings of these words fix the designation of specific utterances of them in terms of facts about these specific utterances” (1997, 594). So viewed, the context-sensitivity of indexicals is explainable in terms of what Perry calls *utterance-reflexivity* (597), a semantic dependency of indexical token upon context because values are determined given the meaning of the words uttered, in contrast to the pre-semantic use of context in deciding what words and meanings are employed (Perry 2001, 40-44).⁶

Utterance-reflexivity extends beyond pure truth-conditional semantics. It also characterizes the ways in which indexicals are *used* to identify items and to communicate about them. For example, if you tell me,

(1) I’ll bring you a glass if you remain sitting there.

it is not enough that I grasp the meanings of the component expressions to understand what you are saying. I can interpret your utterance only because I know that you uttered the sentence, when and where you uttered it, and, perhaps, something about your gestures and

bodily orientation. I work *from* my grasp of the meanings of your ‘I’, ‘you’, and ‘there,’ and my perception of relevant contextual parameters *to* the determination of your referents using, for example, a rule that this approach identifies as the meaning of ‘I’, namely, any token of ‘I’ refers to the producer of that token (Searle 1984, 223; Kaplan 1989a, 520; Perry 2000, 338; Ezcurdia 2001, 203). You realize, in turn, that I am guided by the meanings of your indexicals in exploiting context and identifying your referents through modes such as, *being addressed through the utterance of ‘you’ in (I)* and *being the speaker of (I)* (Perry 2000, 338).⁷ The modes of presentation are themselves utterance-reflexive, since to identify through them we must grasp facts about particular utterances, and because indexical identification requires such modes then we may also speak of the identificatory procedure as being utterance-reflexive.⁸

Some qualifications are needed. If a caller hears the words “I am not here now” on an answering machine, presumably the recorder of the message intended the caller to interpret ‘now’ as the time during which the message is heard—the decoding time, rather than the encoding time—‘here’ as the locale that the caller thinks he has connected with, and ‘I’ as the person the caller hopes to speak with. The caller does not rely on contextual cues picked up from the context in which the utterance was recorded—*when* or *where* it was recorded, or, for that matter, *who* uttered the recorded words—but from the context in which the utterance is decoded. The appropriate contextual parameters here are things like the number dialed, the name the caller associates with that number, additional recorded information (if any), etc., the identity of the speaker’s voice, social conventions associated with recorded messages, etc. Though the simple linkage of ‘I’, ‘now’, and ‘here’ with the speaker, time, and place of utterance-production is broken, the decoding context is still appropriately labeled a “context

of utterance,” for the one who set up the recording on that machine assumes that the caller will rely on the said information, gathered from perceiving the utterance, in order to interpret the indexical tokens.⁹ Accordingly, one interprets indexicals through roughly the following procedure: (i) one perceives an utterance that mobilizes the meanings of the perceived indexical tokens; (ii) these meanings guide one’s determination of relevant contextual information; and thereby, (iii) one accesses relevant modes by which one identifies the referents.

3. Contrasting Interpretive and Executive Identification

Does this utterance-reflexive view of indexicals support the idea that indexical usage is always accompanied by self-awareness? Although a first-person identification is not featured in the content of every indexical thought, since identification requires awareness of the utterance in its context, and since the speaker himself or herself is part of that context, then a speaker is unable to use indexicals without self-awareness. One need not conceptualize oneself qua speaker; perhaps one is proprioceptively aware of oneself as utterer, e.g., through “awareness of one’s chest moving, the tingling of one’s throat, the touch of the tongue on palate, one’s mouth filled with air, the resonance in one’s head” (de Gaynesford, forthcoming, section 84). Consequently, indexical usage apparently implies that the speaker has at least an implicit internal self-awareness.

Unfortunately, the ubiquity thesis cannot be defended in this manner. One can *think* in indexical terms without uttering anything at all, in which case, indexicality cannot be explained in terms of the properties of utterances. The standard utterance-reflexivity view is suitable only as a picture of what happens while *interpreting* an indexical utterance.

Obviously, utterances must be produced before they can be interpreted, and linguistic production is no more blind to semantics than is interpretation. For instance, as a speaker hoping to communicate with,

(1) I'll bring you a glass if you remain sitting there,
you know what you are talking about prior to my interpretive machinations. Do your terms reveal specifically indexical identifications guided by indexical meanings? It would seem so; the senses of 'I', 'you', and 'there' in (1) might have been as instrumental in your picking out particular persons and a place as it was in mine. Sometimes a speaker has no means of identification other than what an indexical provides, for instance, when a demonstrative like *that* represents the only way of picking out what suddenly looms into visual or auditory awareness: *What is that?*, or, when a kidnapped heiress locked in the trunk of a car thinks, *It is quiet here now*, without any other means of locating herself.¹⁰

Indexical meanings are instrumental in guiding thought even when no tokens are uttered. Indexical thinking is prior to linguistic processing. We can think in terms of *this* and *that*, *it* and *there*, have *now or never* sentiments, without saying anything at all. Even if we subsequently utter indexicals to convey our thoughts, the identificatory procedures we use qua producer differ from those employed by an interpreter. You did not arrive at the identifications you express with (1) by doing what I, the interpreter, had to do. You did not have to first perceive your own tokens and then interpret them by recourse to the context of their utterance in accordance with the familiar utterance-reflexive rules. The tokens were *inputs* of my interpretive process, but *outputs* of the executive process whereby you identified something indexically and then attempted to communicate about it. I could not interpret unless I first perceived your tokens, but you did not identify these tokens or their

utterances before producing them. Nor did you begin with a thought that I am likely to have ended up with, e.g.,

(2) He'll bring me a glass if I remain sitting here.

So, my identifying something by *interpreting* your utterance differs—in terms of cognitive procedure—from your identifying it in the course of producing or *executing* that utterance. In particular, although utterance-reflexivity was a feature of my interpretation, of my consumption of your utterance, it was *not* a property of your own indexically-mediated identifications.

Three differences between executing and interpreting indexical identifications have been noted. First, while interpretation is utterance-reflexive, execution is not. Second, tokens are causal inputs to interpretive identification but outputs of executive identification. Third, while interpretation is subsequent to the interpreter's perception of an utterance, execution is not. Even if indexical tokens are conceived as mental representations, the thinker who initiates an identification does not first become aware of these tokens and then interpret them by recourse to some sort of context in which they occur. At best, such mental tokens occur simultaneously with the producer's identifications, not antecedently as causal inputs.

A fourth difference is this. One who executes an indexical reference has room for a creative employment that an interpreter lacks. Interpreting someone's "This book has been invaluable!" requires exploiting the meaning conventionally associated with 'this'. Yet, within certain limits, the speaker has an option about which meaning to use, e.g., "That book has been invaluable," to make the same point. Again, noticing a person approaching in the distance I think: *That person is running*, but I might have thought instead, *That man is running*, or, *He is running*. Or, a modest person might prefer self-congratulations in the

second-person, *You did wonderfully!* rather than, *I did wonderfully!* It is a fact about communication in general that a speaker has a choice that is not there for the interpreter, and for this reason the speaker's identification is *executive*.¹¹

A fifth difference is that a speaker might have no means of identification other than what an indexical provides, for instance, when a demonstrative like *that* or a demonstrative phrase, *that over there*, represents the only way of picking out what suddenly looms into visual or auditory awareness. Consider the kidnapped heiress; her indexical representations are *autonomous* inasmuch as their having the content they do does not depend upon her possessing other ways of distinguishing or describing what she is thinking about. In *this* sense she does not know what time it is since she cannot specify it in terms other than 'now' (Kaplan 1989a, 536). Yet, the very fact that she is able to draw a contrast, that she knows it is quiet *now*, as distinct from quiet *then* (say, when she was abducted, or when the car was speeding down the roadway), reveals that she is discriminating between her present temporal location and other times. More dramatically, suppose she were drugged and placed in a large, silent, fully darkened, weightlessness chamber; regaining consciousness, she finds herself floating, bewildered, with no idea where she is beyond what she thinks with *It is quiet here now*, a thought that would undoubtedly be true.

Autonomy marks a real divergence between interpretive and executive procedures. An interpreter's cognitive movement from token-perception to determination of a referent could not be achieved without independent familiarity with the candidates. I must be able to identify what you are referring to *independently* of interpreting your (1), and this is why what I think is better represented by (2) than by (1). While interpreting indexicals is always a non-autonomous context-dependent process of mating tokens to independently identified items

(Millikan 1993, 269-271), the heiress did not entertain her thought by way of perceiving indexical tokens and attending to their context in order identify what she did.¹²

Finally, while both executive and interpretive identification are guided by indexical concepts, the difference in their procedures mandates a like difference in the concepts associated with one and the same indexical type. Suppose you listen to an audio tape you know was recorded on April 10, 2004, hear a voice saying, 'It is raining today,' and identify the day referred to by employing something like the following utterance-reflexive rule:

Take the referent of a 'today' token to be the day on which its utterance is encoded. In so doing, you do not identify April 10, 2004 as *today* in the manner the speaker did, and, unlike you, the speaker did not pick out a duration as the day in which a particular 'today' token occurred. The schema, 'being the day on which utterance *U* of 'today' occurred,' that specifies the concept guiding your interpretation, is not even similar to the concept, *being today*, that guided the speaker. Both you and the speaker employ concepts associated with the type *today*, but you are thinking of that particular day differently. I cannot think of a given day as being the day on which a certain utterance occurred without conceiving of that utterance, but I can think, *What lousy luck we're having today*, without considering any utterance whatever. Again, when my friend yells, "I am here" in response to my "Where are you?" I pinpoint his locale, but not by executing *I* or *here* identifications. I understand that with his 'here' token, for instance, my friend is referring to the place he occupies during his utterance, a locale that I likely identify as *there*. My understanding of how another's 'here' works in communication guides my resolution of his token, but that's not what guided his own identification of his locale. If meanings govern the uses of linguistic types, yet both speaker and interpreter were guided by one and the same meaning, then we could not explain

these differences in identificatory procedures. Consequently, the meaning of an indexical type utilized in executive identification must differ from the meaning used in interpretation.¹³

4. Indexical Execution as Perspectival

If utterance-reflexivity is not the key for understanding executive identification, what cognitive mechanisms are involved? How is it guided by indexical meaning in the exploitation of context? How is it context-sensitive?

An alternative approach seizes on the fact that items are identified indexically in virtue of thinkers' unique standpoints or perspectives, since a difference in perspective is why you think (1) whereas I think (2) in processing one and the same utterance. Indexicals are context-sensitive for a thinker because shifts in perspective generate distinct individuating modes and, typically, distinct referents, but the contexts are constituted by elements of psychological states that give rise to utterances, and not by the utterance parameters of interpretation. Utterance-reflexivity, then, is only one kind of context-sensitivity; what we might call *perspectival-reflexivity* is another, since what is identified indexically cannot be divorced from particular perspectives.¹⁴

Here are the essentials of one perspectival approach (Kapitan 2001). The first thing to note is that executive identification is not perspectival because it is made from a particular spatial or temporal standpoint(s); all identifications occur from the thinker's unique standpoint. Rather, relations to the speaker's standpoint are constitutive of the identifying mechanisms employed. If with

(3) You should be prepared; it will be hot here today

I address Henry in Chicago on morning of July 12, 2006, my words reveal my relations to a particular person, time, and place. I must be *in* Chicago, *addressing* Henry, *on* July 12, 2006, and it is in virtue of these facts that I can identify what I do *as* I do. In this sense, my words are autobiographical—biographical for my listeners—while the same is not true of an utterance of,

(4) Henry should be prepared; it will be hot in Chicago on July 12, 2006

or, for that matter, for the demonstrative,

(5) He should be prepared; it will be hot there then

even though I might be identifying the very same person, place and time.

Second, perspectival identification requires a spatial or a temporal array of *immediate data* (objects, events, qualities, etc.) of which one is directly aware to varying degrees. Different modalities of consciousness, auditory, visual, tactile, imaginary, dreamlike, memory, proprioceptive, and so on, are associated with diverse arrays of data, even when contemporaneous. For example, the spatial and temporal ordering of sounds one hears during a certain interval is an auditory array that might be simultaneous with a visual array of colored shapes. The data are ordered in terms of either their spatial, temporal, or spatio-temporal positions, each of which is partly fixed by the presented distance and direction from the *point of origin* of the identifying act.¹⁵ Any such array constitutes a *perspective*, properly speaking, allowing us to speak of both the point of origin—typically presented as *here* and *now*—and the position of every other item within it as being *within* the perspective. Thus, a perspective is an combination of distinct factors into the unity of one experience from a given standpoint, a “prehensive unity” to use Whitehead’s term (1925, chp. 4).

Given that the arrays of different modalities can be co-present within an interval of awareness, then distinct contemporaneous perspectives can be integrated into more comprehensive unities. Such integration is critical for behavior that relies upon cues from one or more sensory modality, so that an agent might rely on the fact that a visual *there*, say, converges with a tactile *there*. The maximally integrated perspective during any interval is the totality of immediate data co-presented in a single episode of awareness. How comprehensive it is depends on the extent of a subject's co-awarenesses through distinct modalities.¹⁶

Third, a *position* is either a volume, a duration, or a pair of such, of arbitrary extent, fixed by a distance, direction, and size of an immediate datum relative to the point of origin. Each datum is in a position, and if we think of an experience as a process of unifying diverse stimuli, then, in its initial stages, it involves a transference of data to the point of origin, more noticeable in auditory perception than in visual (Kapitan 1998a, 35-39). As such, each immediate datum has a *vector* character (Whitehead 1978, 55, 237-239), and each *this*, *that*, *then*, *there*, etc. are vector-contents located at particular places in a perspective. Sometimes, it is the spatial position alone that distinguishes the items identified, as reflected by the use of 'you' in,

(6) You, you, you, and you can leave, but you stay!

or 'this ship' in,

(7) This ship [pointing through one window] is this ship [pointing through another window].

Sometimes, temporal factors play a more prominent individuating role, as in anaphoric reference expressed through ‘the former,’ ‘the latter,’ ‘the previous one,’ or, when through a single window a person thinks the non-trivial,

(8) This ship [observing the bow go by] is this ship [observing the stern go past].¹⁷

Fourth, executive identification also depends on how a thinker conceptualizes the identified item. Since I can be in Chicago on July 12, 2006 without identifying either the place or time as *here* and *today*, then, to think (3) I must encounter my own standpoint as being *here* and *qua today*. Hence, it is not only an item’s position vis-à-vis the thinker that anchors indexical identifications. Even if Henry kept the very same position within my perspective, I might have identified him demonstratively as *he* rather than as *you*, or as *that man*. To identify indexically is also to distinguish an item as experienced or as thought in a particular manner, in which case executive meanings function as forms or ways that items are apprehended and cognized. Each such form imposes constraints upon what can be singled out, and while most constraints are a matter of spatial and temporal relations between identifier and identified, as with (3), others deal with intrinsic sortals, e.g., only events or intervals can be *then*, and only a man can be a *that man*.¹⁸

Constraints are vague for deictic uses of the pronouns like *he*, *she*, or *it* and the demonstratives *that*, *those*, *beyond*, etc. Perhaps nothing more than location distinct from the point of origin is imposed, though the *this/that*, *these/those*, and *here/then* contrasts suggest that relative proximity is also a factor. Similarly, in non-demonstrative uses of *I*, *here*, and *now*, what is identified is located within a four dimensional array of space-time positions that includes the point of origin of the perspective, while *I* carries the additional constraint that the identifier is the same as the identified. The indexical *you*, on the other hand, restricts the

temporal location of the identified item to times that are simultaneous with or subsequent to the identifier's temporal locus. Also, what is picked out through *you* must be something that the user believes is susceptible to communicational influence, though it need not actually *be* so susceptible. Thus, despite an executor's leeway as to which indexical form to use, once a choice is made, anarchy is not the rule.

Fifth, an item acquires an indexical status by being identified indexically; a person becomes a *you* by being addressed and a *that man* by being demonstrated. Indexical status is wholly a contingent and extrinsic feature of an entity. No object in the external world is intrinsically a *you*, a *this*, a *here*, or an *I*, for satisfying an indexical mode is invariably a relational property of an item possessed only in relation to an experient subject who distinguishes it as such. Since these relations can rapidly change, and since a subject might quickly cease to so classify an object, then indexical status is also ephemeral (Castaneda 1989a, 69). However, given that an act of identification can endure over an interval, two tokens of 'I' in a given utterance can be associated with one and the same mode. Also, because objects can move within a single perspective, then a dynamic *this*, *that*, *he*, etc. can be associated with an ordering of positions.

Sixth, while what is identified indexically need not itself be an immediate datum of direct awareness, access to it is parasitic upon some such datum. When I gaze at a dot on a map and think,

(9) That city is north of Prague.

I am identifying a particular city, say, Berlin, but I am directly aware of the dot. The latter is the *index* of my executive act, namely, what I explicitly "latch on to" in the course of picking something out (Anscombe 1975, 54) and of which I am *globally* directly aware.¹⁹ Each index

is an individuated item at a position, or, in the case of a dynamic referent such as a person moving across my field of vision, an item(s) at an ordering of positions. Identification is *direct* when the identified item is the index, as when I compare two colors in my visual field and think *this one is darker than that one*. The identified item is then itself positioned within the perspective. Identification is *deferred* when made indirectly through an index, as with my reference to Berlin in (9) in terms of the dot on the map. The dot is not a logical subject in the thought I express with (9), though it might well be identified indexically in a distinct thought, e.g.,

(10) The city represented by that dot is north of Prague

to which I am committed by virtue of my deferred identification in (9). Both direct and deferred identification are perhaps present in,

(11) His mother is rich

which I think while picking out a man in the room through *his*. Even tokens of a simple indexical can reflect a deferred identification, for example, when I remember that *this has a nice beach* while noticing another dot on the same map. Similarly, ‘today’ might have deferred uses insofar as the index of a *today* thought is a much briefer interval, or again, ‘we’ for one who is speaking of a group only some of whose members are present. A more difficult example is,

(12) I am parked out back.

While there are undoubtedly communicational uses of this sentence, were it to represent an executive thought then it would most likely be elliptical for,

(13) My car is parked out back.

If so, then ‘I’ in (12) embodies a deferred identification, for just as it is not claimed that a dot on a map has a nice beach, so too, I am not thinking that it is myself who is parked at a certain place.

Seventh, executive identification is secured through an *orienting relation* or “relation of contiguity” (Nunberg 1993, 19-20) between the identified item and the index, a relation the executor must grasp. In the Berlin example, the city is related to the dot through a representational relation, as is more clearly shown in (10). On other occasions a causal relation is involved, as in, *This fellow is clever*, having just read an essay on indexicals, namely, the relation of authoring such and such paper. A relation of temporal precedence is evident in the case of ‘yesterday’ and a part-to-whole relation may be relevant for *Today has been rainy* or *This town is boring*, where, the indices associated with ‘Today’ and ‘this town’ are temporal parts of more extended entities. The *orientation* of an identified item is a relational property determined by its orienting relation to an index, e.g., being the city represented by that dot. When identification is direct, the orienting relation is identity and the orientation is the property of being identical to the index.

Where Y is an agent, o is a spatial-temporal locale occupied by Y , and m is a modality of consciousness (visual, auditory, etc.), then the triple (o, Y, m) determines a *perspective* of Y at o . The locale o may itself be analyzed in terms of a pair (t, v) consisting of a time (duration) t and a place (volume) v , or, through an ordering of such pairs $\langle (t, v), (t', v'), \dots \rangle$ when the agent and immediate data are in motion relative to each other during the course of the experience. Letting ‘p’ be a schema for representations of locale coordinates, viz., a time t , a place v , or a pair (t, v) , or a sequence of such pairs, determined by a presented distance and direction from o , then each index $d(p)$ within the perspective (o, Y, m) is analyzed as d as

located at p , viz., $d\text{-at-}p$, or, $d\text{-from-}p$. Thus, as with each immediate datum, an index is a vector.

Suppose an item X is identified by means of index $d(p)$ and executive form k within a perspective (o, Y, m) . If the identification of X is deferred, then X is picked out by means of a relational property $R[d(p)]$ fixed by an orienting relation R linking X to $d(p)$. The mode of presentation, can then be represented by $k(R[d(p)])$. If the identification is direct, then the orienting relation R is identity and the mode can be represented equally well by $k([d(p)])$. Every indexical form can then be represented as a partial function from sets of immediate data and orientations to individuating executive modes. All executive modes are “object-dependent” in the sense that their existence depends upon the existence of the indices. Modes of direct identification are also referent-dependent in the sense that they would not exist apart from what satisfies them, their referents, but the modes of deferred identification have a being apart from the items that might satisfy them.

A few examples serve to illustrate the pattern of analysis. Consider my use of the second person pronoun in uttering

(3) You should be prepared; it will be hot here today

while talking on the phone to Henry. The relevant perspective associated with my ‘you’ is fixed in terms of me, my position, and the auditory modality. If the reference is deferred, and the index is the sound of a voice located in the phone’s receiver at point p , viz., [sound at p], then Henry’s orientation is the property of *producing* the sound at p . By adding the indexical form *you*, we arrive at this picture of my second-person individuating mode:

you (producing [sound at p])

through which I identify Henry. Suppose that instead of (3), I had uttered,

(14) You should be prepared; it will be hot in Chicago on July 12, 2006

while thinking,

(15) He should be prepared; it will be hot here then.

My executive individuating mode for Henry would then be:

he (producing [sound at *p*]).

Alternatively, if the gender conveyed by ‘he’ belongs to the orientation and there is a neuter form common to both ‘he’ and ‘she’, representable as ‘*s/he*’, we get this mode:

s/he (male producing [sound at *p*]).

It is an open question whether this is the same as,

that (male producing [sound at *p*]),

which more fully reveals the demonstrative character of ‘he’ and ‘she’. On the other hand, if

(3) reflects a *direct* second-person identification, say, if I am looking at Henry while

addressing him so that Henry himself, from the given perspective, is the index, then my

identifying mode would fit this schema:

you ([Henry at *p*])

If my perspective is determined by a point of origin (*t,v*)—representable to myself through a particular (*now, here*) pair—then the following depict the modes associated with my use of ‘today’ and ‘here’ in thinking (3):

today (being a day that includes [*t*])

here (being a city that includes [*v*])

Similarly, if the temporal identification in (15) is indexical, and I am uttering (14) on July 12, 2005, then the correlated mode might be something like,

then (being a day one year later than [*t*])

If we balk at accepting volumes or durations in themselves as immediate data, but insist instead that an additional factor d be included, say, a colored expanse, a sound, or an episode of consciousness, then the immediate data associated with my ‘today’ and ‘here’ can be depicted as $d(t)$ and $d(v)$, with the modes fitting the schemata,

today (being a day that includes [$d(t)$]),

here (being a city that includes [$d(v)$]),

and

then (being a day one year later than [$d(t)$])

respectively.²⁰

These examples reveal the reflexivity of executive identifications. In every case, the indexical content is singled out in virtue of its relation to a perspective—a prehensive unity—even though that perspective is not itself represented. Each of the components of an executive mode is an ingredient in what the thinker grasps in executing an indexical reference, but third-person descriptions of the agent Y , his or her spatio-temporal standpoint o , and the modality of consciousness m —however critical for accurate interpretation—are external to the executor's cognitive significance (McGinn 1982, 209; Corazza 1994, 325). Nor does the executor have to identify his or her act of thinking (speaking) in order to pick something out; not all the necessary conditions for identification are internal to the cognitive processes involved.

5. First-Person Identification

I have assumed, throughout, that indexical identification operates through modes or presentation, and that the first-person constitutes no exception. Philosophers are divided on

this issue, but I am persuaded by three considerations. First, there is no thought *about* an item without identifying it. Second, we identify something in terms of what is unique to it and, hence, by contrasting it with other items. Third, I can think about myself through first-person mechanisms, whether linguistic or conceptual. However, since thinking of myself qua *I* is not the same as thinking of myself as a producer of such and such tokens, whether mental or linguistic, then a different analysis is needed for the executive first person modes.

One consequence of the foregoing account of indexicals is that satisfying an executive mode is a contingent relational property of an item possessed only relative to a particular perspective, not an intrinsic property or a natural kind. In this respect, the *I* modes are no different from other indexicals; just as nothing is intrinsically a *this* or a *you*, so too, nothing is intrinsically an *I*, and insofar as being a *self* is nothing more than to be identified qua a first-person concept, then there are no intrinsic or natural “selves.” The *I* lives only within episodes of self-consciousness (Sartre 1957, 45; Castañeda 1999, 242, 270)

Yet, this description is misleading in one critical respect. While some indexicals are promiscuous, for instance, *it*, *this*, *that*, others discriminate; only an event or a temporal interval can be a *then*, only a plurality can be a *those*, and, most glaringly, not everything can be identified as an *I*. Why so? Why does the executive *I* concept apply to some things but not others? More figuratively, that makes me an *I*? Perhaps this. Since being identified in a first-person way is precisely what confers the status of *being a self*, then to be a “self” just is to be reflexively conscious via an executive first-person form. It follows that whatever is so identified is an experiencing subject and, as executor of an identification, an agent. So, nothing is an *I* except a reflexively identifying active experiencer (Castañeda 1986, 110, Perry 2002, 190).

Fair enough, but this solution generates another question. The executive *I* concept can only be used to identify oneself. Why this constraint? Why can one apply the executive *I* concept *only* to oneself, whereas one can apply *you*, *he/she*, *his/hers*, etc. to others as well as oneself? What makes me unique with respect to what I can identify in first-person terms? It is obvious that being a reflexively identifying active experiencer, while necessary, is not enough to distinguish our privileged first-person identification of ourselves alone. We routinely identify other people in such terms. With *you*, for instance, we typically address those that we take to be reflexively-aware and capable of responding to or being influenced by what we say. Thus, if I address Henry as ‘you’ in my utterance of (3), I believe that he will think something like,

(16) I should be prepared; it will be hot here today,
thereby assuming that in processing my ‘you’ he refers to himself. Consequently, being a reflexively identifying active experiencer does not provide a sufficient contrast to set apart an executive *I* identification from a *you* identification.

Perhaps we must add that what allows me to identify only myself through an executive *I* form is that I am aware that I occupy a privileged *position* with respect to myself, thereby making the contrast rest on spatial and temporal differences. But do I always discriminate my own position so finely? Others can be here now too, say, a group of people that I identify as *we*, or, a particularly intimate *you*. Why can’t I be aware of some such intimate *you* qua *I*? Less whimsically, any center of bodily experience can be a point of origin, the eyes, the nose, the tip of the right index finger. Is there any precisely defined position that is exclusively *my* locale? Yes, I am here now, but so are my eyes, my nose, my right index finger. Are their locales parts of a larger volume that constitutes *my* position? Suppose I suffer from Alien

Hand Syndrome and disavow ownership of certain limbs (Marcel 2003, 76)?. It seems unlikely that my position or my mode of *I* identification would change. More importantly, the phenomenon shows that the position of body parts cannot determine my own position unless I recognize them as *mine*, but then first person awareness is already presupposed in drawing contrasts in terms of position.

Perhaps we have a primitive sense of *my* position that provides the material needed to generate an *I* identification. But this would require that a sense of *mine* is more basic than that of *I*, seemingly putting the cart before the horse. First-person possessive concepts, pronouns and phrases are mechanisms for representing what stands in unique physical, social, and normative relationships to oneself, since to view something as *mine* derives from a sense of how an item stands with respect to *me* (Evans 1982, chp. 7). Thus, ‘mine’ is shorthand for ‘belongs to me’ while ‘my car’ is ‘car I own’ or ‘the car I am now driving.’ The first-person plural similarly gives way to a description containing a singular first-person pronoun, so that the nominative ‘we’ is shorthand for descriptions such as ‘my family’, ‘the people in this room with me’, ‘the members of my department’, etc. In short,

Here another proposal for explaining one’s privileged identification with *I*; there is a difference in the internal awareness of myself and the awareness that anyone else can have of me. I view the organism that I am “from the inside,” through introspection, proprioception, or visceral interoception, whereas I cannot be directly aware of anyone else in these ways. In so doing, I am *directly* aware of something *as* experiencing, and if I conceptualize what I am aware of—which is what I do in first-person identification—I cannot help but think of that something as a subject, that is, as an experiencing or thinking thing or process, a *res cogitans*, albeit physical. This is a direct access that is privileged in that no one else has it to that

something, myself. Observing how you wrinkle your brow, lift your eyebrows, and move your eyes, I might also conclude that you think too, like me, but this is an *indirect* mediated awareness of you as a consciously experiencing, feeling, and thinking being. Watching you move about and speak, I am directly aware of you as an active organism before me in the room and pestering me with questions. But I am not directly aware of you as experiencing. The solution to the problem of privileged access, then, is that the index of an executive first-person identification can only be something, that is, oneself, as experiencing, for only it is a subject of which one alone is directly aware.²¹

A further problem now arises; what exactly *is* the index of an executive first-person identification? That is, what is this *something (oneself) as experiencing*? In the case of (16), is it Henry himself, the person, the whole organism? If this were the case, then the executive mode of presentation when Henry makes a first-person identification could be depicted as,

$$I ([\text{Henry at } (t,v)])$$

and first-person identification would be direct, not deferred. Can the index be Henry himself? This depends on what Henry, the whole person, is. Is he a single enduring organism wholly present at a given time, or, a temporal sequence of person-stages? Either alternative seems an unlikely candidate as an index, for through what mode of direct awareness could one be aware of the whole persisting organism? Sensory? But then others could similarly aware, leaving us without an explanation for the privileged use of the first-person (Shoemaker 1994, 87). Through some type of inner awareness then? But inner awareness tends to be selective and focused on particular physiological and psychological events and states. Unless we are willing to describe both index and referent—the person—as an enduring soul wholly present at any given moment and defend some account of how one is directly aware of a soul, then

the hypothesis that the index is the whole organism, or the entire person, of which one is globally and directly aware, is not promising.

Perhaps the index is an individuated *part* of the entire organism, a part of which the agent alone can be directly aware. Perhaps this part is a particular state of the organism, say, a bodily feeling of hunger or of desiring to eat blueberries, or a believing that Berlin is north of Prague, states individuated by their content as well as their form. Yet, how could such states occasion my *I* identification? If I myself, qua *I*, am a constituent of them, viz., *I am hungry, I desire to eat blueberries, I believe that Berlin is north of Prague* (Peacocke 2001, 240), then I am already thinking of myself in first-person terms and we would back with the original problem of explaining how we initially arrive at first-person identification. If I am a constituent qua some non first-person mode, say, *the author of this paper*, then how do we get from that to first-person identification? If I am not a constituent, yet such states occasion my *I* identification because I understand them be *my own*, then I am once presupposing first-person identification. Plainly, it is difficult to explain first-person identification if the index is a particular experiencing state like a pain, a desire, a belief, or an effort.

We are at a critical juncture; the index must be something to which the agent alone has privileged access, yet, it cannot be the entire organism nor a single experiencing state of the organism. What other candidates are there? Here's a further proposal. The index is a prehensive unity, moreover, a comprehensive unity made up of the maximally integrated perspective and the associated emotional, conative, cognitive reactions of which one is co-aware during a given interval of first-person awareness (cf., Castañeda 1999, 244, 263; Lockwood 1989, 88-89). This unity is always there in every episode of indexical awareness, however thick or thin it might be, for immediate data and the associated reactions exist only

as part of a unified whole. This whole is not always itself salient, but just as one can be aware of individual vector contents, so too, one can become aware *of* an assemblage of contents from a point of view. In that event, the unity can be an index of a first-person identification. Particular states of experiencing and reacting are seen as belonging to it, not to something else, and consequently, it is viewed as both a receptor of stimuli, and the seat of reaction to that stimuli. It then becomes the “me here and now,” a “self,” of which I, and I alone, am directly aware.²²

If this is accurate, then taking the index of first-person identification to be some such comprehensive unity C existing over a temporal interval t , and whose spatial point of origin is v , we have this analysis of the executive I -mode that guides Henry’s first-person identification:

$$I ([C \text{ at } (t,v)]).$$

So understood, what Henry identified in (16) is the same as the index and the first-person identification is direct. This analysis works if it makes sense to say that “me-now”—a person-stage perhaps, or, a “self” of relatively short duration—is an entity that can be identified and referred to. However, it cannot exhaust first-person thoughts since we also identify ourselves in first-person ways as enduring beings, as in, *I have been lecturing in Paris for twelve years*, or *I am gradually losing weight*. How do we understand my first-person identification of the persisting organism that I am? It must be deferred, though the index can be the same as in the direct case. What differs is the orientation; the persisting I is not identical to the index, but “has” or is “constituted by” such indices. If so, then the relevant mode of presentation is representable as,

$$I (\text{having } [C \text{ at } (t,v)])$$

where 'having' expresses the compositional tie between the comprehensive integrated unities and the persisting *I*.

There are, then, two ways of thinking of oneself in first-person terms; as a brief unity of vector contents and associated reactions, and, as an temporally extended organism to which such momentary unities belong. The former is direct, the latter deferred.²³ There is a subtle reciprocity between these two types of *I* identification. Thought about an enduring self, a person, an organism, is derivative from direct awarenesses of integrated unities each of which is salient by way of contrast with something else, be it a person, an object, an event, etc. (Castañeda 1999, 275-277). By noting certain similarities in the patterns of experiencing, emotion, effort and reaction among these unities, we form the notion of an enduring locus of experience and action. The executive *I* concept is the indexical method of keeping track of this persisting self through these salient indices. However, it is something we gain upon noticing the similarities in the patterns, in which case all first-person identifications depend upon our *first* having a sense of the enduring organisms that we are. This does not preclude indices of first-person identifications from themselves being identified as *Is*, but there is no identification of these as such apart from a concept of a persisting entity with which they are associated, whether as stages, states, or aspects.

6. Indexicality and the Ubiquity of Self-Awareness

Some philosophers, for instance, Susan Hurley (1998, chp. 4)), maintain that the perspectival consciousness of agents involves self-consciousness, for no sense can be made of perspective-bound intentional agency unless the agent has information about its own states and position. Hurley emphasizes that this primitive self-awareness is both non-conceptual

and a constant factor in all consciousness (1998, 135). Because of the link to intentional agency, Jose Bermudez argues that the non-conceptual contents of proprioception are first-personal (1998, 115-122), and, combining both views, Dan Zahavi (2000b) pushes a particularly strong form of the ubiquity thesis: all experience includes perspectival (egocentric) awareness of a first-person elements.²⁴

There are reasons to be skeptical of the claim that all perspectival awareness has first-person content. First-person identification or classification requires a sophisticated focus on the being that is at the center of the blooming buzzing mass of perceptions, thoughts, desires, and efforts. It is the product of a considerable abstraction and, therefore, highly conceptual. It is not ubiquitous; it cannot be expected of beings that lack concepts but who are otherwise sentient and capable of purposeful activity. Even when a highly specialized action occurs, working out a difficult mathematical proof, or performing the opening movement of the *Hammerklavier* sonata, it is doubtful that self-identification is also occurring. The agent is likely to be concentrating on the symbols and the abstract contents, or upon the keys and the musical lines, and self-identificatory gaze at a co-conscious complex over an interval would be more of a hindrance than a help (Marcel 2003, 69).

Undoubtedly, the somatic proprioception of a particular physical center of feeling and reaction that happens to be identical with oneself is a type of internal self-awareness. Purposeful action involves desires and aversions together with the proprioceptive information for satisfying them, but the information needed need not be packaged in first-person terms. It is sufficient for successful action that it be reflexive. That direct proprioceptive awareness and other forms of inner awareness are exclusively of a *unique* center of reception and reaction—the comprehensive unity one is at a given time, or, the persistent self that “has”

such unities—obviates the need for any separate first-person representation. If there were many such contemporaneous centers, one would need a way of distinguishing one of them as privileged, and this would open the door to a first-person reading of the representation. But if an inner awareness of a unique center of reception and reaction is all that's required, then representation in a first-person way is not secured. There are, then, no grounds for concluding that action requires a nonconceptual awareness of an *I*, *me*, or *mine*.²⁵

This said, it remains that all indexical awareness reflects the subject's own standpoint and, to that extent, involves a degree of self-awareness. Indexical thinking and experience involve a direct awareness of something, an index, in a position, and since a position is defined in terms of perceived direction and distance from a point of origin, every index is a vector content. But no vector is isolated; perspective is never absent from our indexical awareness. Absorbed in a piano performance, none of the immediate data—a key here, this chord just played, that phrase soon to come—exists alone in the pianist's awareness. Each vector content is felt as embedded in a larger whole centered around a point of view, for there could be no specific position unless there were at least one other position to contrast it with, and this is determined by an ordering of immediate data. There is no *over there* without what would qualify as a *here* or a different *there*; no *then* without a potential *now* or another *then*. An integration of vector contents is always present in our indexical experience even when it lack salience. That perspectival prehensive unification from a point of view often escapes notice is precisely *because* of its ubiquity. My point is that we must be at least marginally aware of it if any particular executive identification is to occur.

In sum, there is no indexical identification without a vector as index, and there is no such vector without its being felt as embedded within a perspective. Hence, the perspective itself

is a content of awareness. It is not our invention. How we conceptualize it and the vectors embedded within it is our contribution, and the modes of executive identifications are the fruits of our own attentive efforts. There is no escaping the fact that in indexical thought and experience we never catch the universe devoid of a point of view, for we are always at least implicitly aware of a centered integration of data. It is only a feat of highly abstract thinking that allows us to contemplate things in any other way.

Accordingly, if this comprehensive unity is what I *am* throughout its endurance (note 22), then I am directly aware of myself during the interval of any indexical thought. If it is but *part* of what I am, then there is at least a direct partial self-awareness in every instance of indexical awareness. The awareness may only be marginal, and I need not be distinguishing this unity in order to be marginally aware of it. Nor do I have to have to think, *this unification is mine*, for no unification is ever presented in awareness that is not mine. Apart from first-person identification, such implicit direct awareness is of a reflexively identifying active experiencer even though it is not conceptualized as *I*, a *me*, or *mine*. It is internal because it involves a unique direct awareness that is constitutive of indexical awareness of anything. *If* such perspectival unification is ubiquitous to all states of consciousness then all consciousness is “irreducibly perspectival” (Lockwood 2003, 456-459), and we are always self-aware so long as we are aware of anything at all.²⁶

Notes

1. This conclusion is drawn by Manfred Frank (1995, 49-50). Other recent advocates of the ubiquity of self-consciousness include, Eilan 1995, 341; Gennaro 1996, 17; Hurley 1998, 135; Kitcher 1999, 372-373; Damasio 1999, 19; Kriegel 2003, 125. Colin McGinn advocates a restricted form of the ubiquity thesis to the effect that all indexical awareness involves self-awareness: “to think of something indexically is to think of it in relation to me, as I am presented to myself in self-consciousness” (1983, 17). Alfred North Whitehead was among those who advocated the indexical nature of all thought: “Explicitly, in the verbal sentence, or implicitly in the understanding of the subject entertaining it, every expression of a proposition includes demonstrative elements.” (Whitehead 1978, 43)

2. I follow Leibniz who similarly distinguishes perceiving and awareness, and from whom the wave example comes (*New Essays on Human Understanding*, book two, chapter ix). The term ‘prehending’, and its description in terms of feeling and appropriating a datum in a certain way (form) are Whitehead’s (see 1925, 90-97 and 1978, 19-20, 219-220). Whitehead took the term from ‘apprehending’ and also characterized it as “apprehension that may or may not be cognitive.” Prehensions are the basic ingredients of each experience, and can be physical or conceptual depending on their contents. Experiencing is the process of integrating prehensions and, hence, what is prehended, into the unity of one outcome, namely, a state with content (see also Leibniz, *New Essays*, book two, chapter ix). Not all experience is conscious; instead, consciousness, when it occurs, is a later phase in experiential integration that can be described as “the acme of emphasis” (1933, 231, and see 1978, 161-162 for a

more detailed description of consciousness). The term ‘consciousness’ is “notoriously ambiguous” as Uriah Kriegel points out (2003, 103), partly because it has both ordinary and theoretical uses.

3. This passage is from Frank 1995, 42. John Perry also gives the Mach example as a case of one’s knowing something about the person one is—and in that sense, is a kind of self-knowledge—though it is not what we would ordinarily call “self-knowledge.” See Perry 2000, 332-333, and also Perry 2002, chp. 10 and 192-193, where ‘self-knowledge’ is confined to what is expressible in first-person terms. The occurrence of ‘himself’ in this text is not that of a quasi-indicator, namely, as a device for reporting one’s indexical reference or identification. See Castañeda 1967 and Kapitan 1998b for an exposition of Castañeda’s theory of quasi-indicators

4. A distinction between internal and external self-awareness was emphasized by Castañeda in his early work on indexicals in the 1960s, though he conflated first-personal and internal self-awareness. For his mature view, see Castañeda 1999, chapter 10. As will be apparent, my approach to indexicals and self-consciousness owes much to Castañeda’s work.

5. Not all uses of the pronouns like ‘you’ and ‘now’ are referential. They are used *schematically* or *attributively* when a speaker utters them to cause hearers to identify what is as yet unspecified by the speaker, for example, when someone records a list of instructions containing, “Now you must press the right button.” Both ‘now’ and ‘you’ are here used with the intention to induce references to *whatever* time the utterance is heard by *whomever* heard

it. This use of indexicals is discussed in Nunberg 1993, Recanati 1993, chp. 16, and Bezuidenhout 1997. Classifying an expression type as *indexical* is specifying a manner in which tokens of that type can be used, or, alternatively, a way in which their referents are “determined.” Some types play more than one indexical role, e.g., ‘now’ and ‘here’ have both demonstrative as well as non-demonstrative uses that are covered by different semantic rules (Smith 1989).

6. See also Perry 2000, 322-323, where indexicals are said to be utterance-reflexive because the “truth-conditions of an utterance containing an indexical, considered with just the meaning and not the context fixed, will be a proposition about the utterance of the indexical.” The construal of indexicals as utterance-reflexive or token-reflexive is commonplace, and is evident in accounts that differ from Perry’s own, for example, Millikan 1993, 266-267, Searle 1984, 221, and Recanati 2001, 656. Garcia-Carpintero 2000a, 116-117, speaks of indexicals as *case-reflexive*, where cases are instantiations of linguistic types, that is, events rather than enduring objects.

7. A demonstration is not always needed to identify the referent of demonstratives; what’s required is that the context makes salient a referent. If some fellow is making lots of noise in a pub, and I turn to you and say “What a lout he is!” I need not demonstrate anything if I can tell from your expression that you are already annoyed by the sound. Pointing is just one way of making things salient (Predelli 2001, de Gaynesford, forthcoming). The process of identifying a thing does not imply the abilities to articulate descriptive knowledge of the object or to *reidentify* it. I might demonstratively distinguish a brown bird against a green

background, though not against a suitably textured brownish background a moment later—hence, camouflage protects. Flying in a plane above the clouds I might pick out a place only once as a *there* without ever being in a position to distinguish it again, or perhaps I slip into a state of devastating amnesia immediately after reacting to a massive explosion with “What was *that?!?*” In each of these cases I identify a thing, though I am unable to reidentify it.

8. An indexical meaning, accordingly, can be viewed as a “binary condition of designation on objects and utterances” that yields a reflexive content-fixing mode of presentation when the utterance parameter is specified (Perry 1997, 597). Garcia-Carpintero 2000b, 40, points out that an individuating mode can be immediately generated out of the threefold context-character-content distinction (Kaplan 1989a) by instantiating the quantifier in the linguistic rule associated with character, e.g., the referent of a ‘you’ token is *whoever* is addressed through that token. The mode is individuating, associated with the expression as a matter of conventional rules, and “epistemically diaphanous” (viz., known by speakers as part of their linguistic mastery).

9. The contrast of *decoding time* with the *encoding time* can be found in Filmore 1997, 61. Here, the notion of a *context of utterance* is construed broadly to include the environs of the utterance, e.g., the speaker, time, place, the accompanying gestures, etc. in short “whatever parameters are needed” (Kaplan 1989b, 591. Perry 1997 and Stalnaker 1999 also use broad notions of context. Predelli 1998, 401-403, argues that the use of indexicals in recorded messages is evidence against the “traditional view” of indexicals according to which indexicals “are always correctly evaluated by taking into consideration the context of

utterance (or inscription)” and looks, instead, to a context “intended as relevant by the speaker.” However, since an interpreter can ascertain the speaker’s intentions only by relying on cues embedded within the circumstances in which the utterance is perceived, then it is still a context of utterance that is the interpreter’s route to determining what it is the speaker is referring to. Corazza et al 2002 points to the importance of the *conventional aspects* of a setting of an linguistic interchange as playing a role in determining the referent of an ‘I’ token. On the consumerist model. the conventions more accurately determine a referent than the producer’s intentions – e.g., Ben might write a note “I’ll be back shortly” and mistakenly attach it to Joe’s door. The intended referent of ‘I’ is Ben, but the conventionally determined referent is Joe.

10. The example of the heiress is from Kaplan 1989a, 536, though he uses it to make a point about reference, not identification. In both of these examples of autonomous usage, nothing need be uttered. Even when demonstrative utterances are made, they are not wholly driven by the need to communicate. For example, Piaget’s research shows that small children will utter demonstratives in contexts that would normally require gestures but apparently without sensing the need (Filmore 1997, 60).

11. The use of ‘executive’ is borrowed from Castañeda 1986, 111; 1989a, chp. 4, though it also occurs in de Saussure 1959, 13.

12. Ezcurdia 2001, 190-198 argues for the autonomy of the first-person, and criticizes Millikan 1993. Those impressed by the image of *consumption* as the key to understanding the

representative functions of language (e.g., Kaplan 1989b, 602-3, and Millikan 1993, 86-88) have neglected the executive aspect of language use. Born into linguistic communities, we are constantly exposed to words with prepackaged meaning before we utter them or think in their terms. Yet, consumption of language, like consumption of canned goods, requires commodity production and exchange; "language must be spoken before it is heard and interpreted" (Castañeda 1989b, 116). We *use* indexicals creatively to articulate the details of our immediate experience, and we do so in virtue of their publicly accessible meanings. The child who has advanced from babble to demonstratives like 'dat' manifests a creative act of distinguishing something within sensuously delivered material; he or she "consumes" in acquiring the capacity to use an indexical type meaningfully, yet "produces" the demonstrative token in order to pick out and express what it cannot distinguish by other means.

13. Communication is achieved through a *coordinated meaning duality* that affects the identificatory uses of every indexical expression and is built into the tacit knowledge that constitutes a user's linguistic competence. In addition to the peculiar sorts of context-dependence that govern their identificatory and communicative uses, it is what distinguishes indexicals semantically. Frege hinted at the duality of 'I' in his 1918 essay "The Thought: A Logical Inquiry," and John McDowell, in addressing Frege's concerns, suggests that communication might occur through a "correspondence" of thoughts rather than "shared" thoughts (McDowell 1998, 222-223). Noam Chomsky generalizes the point by denying that "successful communication" requires "shared meanings" (Chomsky 2000, 30). The duality view of indexical meaning is hinted at by Castañeda 1983, 323-325, when he wrote that the

semantical rules governing singular reference serve “two crucial purposes,” namely, (1) to provide criteria for application of singular terms by a speaker and, (2) to provide criteria for an interpreter. See also Castañeda 1999, 269-270.

14. Perspectival approaches to indexicals have been developed by Russell 1948, part 2, chapter 4; Castañeda 1967 and 1989a; Evans 1982, chp 6; McGinn 1983; and Hintikka 1998. John Lyons contrasts the “standard view” of deixis that dominates linguistics textbooks with an alternative view, one that takes the “egocentricity of the deictic context” as “rooted in the subjectivity of consciousness” (Lyons 1995, 311). He notes that the latter has so far had “little effect upon what may be regarded as mainstream semantics. But there are signs that the situation is changing in this respect.” The opponents of this approach generally acknowledges that indexicals play a unique role in our psychological economy, but are wary of the perspectivalist’s acceptance of subjective, irreducibly perspectival features of the world (for example, Perry 2000, chapter 1, Millikan 1993, chapter 13; and Lycan 1996, 56-68).

15. The phrase ‘point of origin’ appears in Castañeda 1977 and Evans 1982, 154, to designate the locale of the thinker within his or her own egocentric space. Other writers speak of the ‘locus’ of the speaker (Hintikka 1998, 208), the ‘zero-point’ of a locutionary act (Lyons 1995, 304). There is some debate about the perspectival character of proprioception. José Bermudez (1998, 153), argues that the spatial contents of somatic proprioception “cannot be specified within a frame of reference that takes the form of axes centered on an origin.” To the contrary, Anthony Marcel (2003, 84-86), in speaking of the proprioceptive awareness of

agency (54), argues that “the only spatial description common for all body parts and for external locations is an egocentric one” (84).

16. See, for example, Castañeda 1977, *passim*, and Bermudez (1998, 141) who, citing Ayers 1991, claims that “our perception of the world is cross-modal.”

17. The importance of spatial and temporal locale in describing indexicals was emphasized by William James, who wrote that the expressions ‘I’, ‘here’, and ‘this’ are “primarily nouns of position” (James 1904, 86). Castañeda spoke of demonstrative or indexical properties as properties that “fix” positions in spatio-temporal fields (1977, 320). See also, Evans 1982, chp. 6.

18. One can misidentify in the course of picking something out. Suppose I think *that woman is an alto*, but the person I pick out is a man, not a woman. How did I succeed in identifying if my mode of presentation was not satisfied? The answer is that some discriminating feature *of the item identified* was operative in my thinking, perhaps one that might be more accurately conveyed by ‘that person’ rather than ‘that woman.’ Let us say that a mode M1 is *implied* by a mode M2 if something were M2 then it would be M1. Mode M1 is *operative* in X’s identification of Y at t just in case there is a salient mode M2 by which X distinguishes Y at t such that (i) M1 is implied by M2, and (ii) X is committed at t to the conditional: if something were M2 then it would be M1. Identification requires only that some operative mode is uniquely satisfied by what is identified.

19. The term ‘index’ was introduced by C. S. Peirce who used it to classify a sign that refers to an object in virtue of being Physically connected with” or “really affected by” that object (1998, 5, 291). My usage follows Nunberg 1993, which distinguishes between a *deictic* component and a *classificatory* component of indexicals, both of which are distinct from the referent, and employs ‘index’ to represent the “thing picked out by the deictic component of an indexical” (p. 19). Fauconnier 1985, 3-5, makes a more general distinction between the *target* of any indirect reference and the *trigger*, viz., the item that gives access to the target.

20. As indexical, ‘now’ designates a time (a duration) only as a (temporal) position within a perspective, but it should not be assumed that a direct *now* identification requires a bare duration as an index. See, for example, Quentin Smith 1989, 176-179, who describes the cognitive significance of ‘now’ in terms of the moment that has presentness and that includes the complex psychological event composed of my present experiences.

21. The ‘oneself’ in ‘oneself as experiencing’ is not a quasi-indicator used to display first-person usage (see note 3), for this would presuppose what we trying to account for. Instead, ‘oneself’ is used in a purely reflexive sense, so that one might also describe the index in terms of “something as experiencing” where the something in question happens to be the same as oneself.

22. Compare Whitehead 1958, 224: “My present experience is what I now am.” William James was no doubt correct in that diachronic consciousness appears as a continuous “stream” even though there is a noticeable succession of individual states within it (James

1890, chp. xi). Perhaps experience is ultimately granular, as Whitehead contended, but nothing prevents us from focusing upon certain gross segments selected through our own focused self-awareness. Thus, the index of a first-person identification is a portion of the stream thick enough to be a salient comprehensive unity.

23. Marcel (2003, 50-51) also speak of self-awareness in the occurrent and the long-term sense of “self”. Similarly, Strawson 2000 describes our experience of *I* as being sometimes of a momentary “subject of a unitary experience” and sometimes of a “persisting human.” Other contrasts are likely operative in singling out a persisting self, notably, between oneself and others.

24. There is some dispute about what is involved in non-conceptual thought or awareness. Arguing against Hurley, Noë (2002) finds a level of conceptuality to be present in primitive self-consciousness, holding that one does not have an experience of an F without a concept of F, but that having a concept does not require possessing criteria for applying it. I agree that identificatory and predicative thought about an item requires conceptualization of it, but not all thought about an F requires a concept of F, and not all awareness of an item is identificatory and predicative (see section 1).

25. Millikan 1993 makes this point, and see also O’Brien (2003, 380), who contends that the self-awareness need for action might be of a primitive sort that is not first-personal. Marcel 2003, 76-78 argues that not all proprioception yields a *me* or *mine* awareness, citing the Anarchic Hand phenomenon in neurological patients who disown the actions of their own

hand. See also Lewis 2003, who points out that infants behave intentionally prior to any self-representations, and that the idea of “me” is acquired around 1.5 years of age. Bermudez’s insistence that primitive self-consciousness is first-personal is driven by his desire to resolve what he calls a “paradox” of self-consciousness generated by the theses that (i) the only way to explicate a capacity to think certain sorts of thoughts is by analyzing the capacity for a canonical linguistic expression of those thoughts, and (ii) mastery of first-person pronouns requires the capacity to think ‘I’ thoughts. His solution is to show that a primitive capacity to think ‘I’ thoughts is independent of the capacity to use first-person pronouns (p. 290). But Bermudez assumes throughout that having concepts is a matter of having linguistic capacities. On the view set forth here, executive identification with the *I* concept is independent of any communicative capacities and, to that extent, prior to the expression of first-person pronouns. The use of *executive* indexical concepts does not depend on linguistic capacities, although the use of *interpretive* indexical concepts does. The paradox can be avoided, then, without acknowledging nonconceptual ‘I’ thoughts. It should be noted, finally, that it would make no sense to argue that there is nonconceptual *mediated* first-personal awareness of the self. No awareness of anything is both nonconceptual yet mediated, since mediation is a matter of conceptualization.

26. [acknowledgements]

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