Person, context and perspective

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It is argued that the indexicality of first person pronouns arises from a restriction on the pronouns themselves, as opposed to any operator that binds them. The nature of this restriction is an asyntactic constant function selecting an entity or entities from the context of utterance (following Kaplan 1989). Constant function pronouns do not require an antecedent, neither an operator nor an argument, although this does not prevent them from participating in bound readings if an appropriate antecedent is introduced. The notion that agents of contexts and agents of propositional attitudes are versions of the same operator-variable relation is thus rejected, along with certain less fine-grained versions of the nature of *de se* interpretation. Consequently, indexical pronouns such as first person ones contrast with logophoric pronouns, which are necessarily operator-bound by perspectival operators introduced by propositional attitude verbs. Scope-sensitive properties of operator-binding and the perspectival interpretations that are imposed on logophoricity distinguish the latter from constant function phenomena, which are sensitive neither to scope, as it is usually treated, nor perspectival shifts. Constant function phenomena are also detectable as restrictions on third person forms, and two such examples are lightly explored: the English generic pronoun *one* and the proximate/obviative distinction in languages like Fox.

1.0. Introduction

In this essay I defend the thesis that the indexicality of first person pronouns is a restriction on the pronouns themselves, as opposed to any operator that binds them. The nature of this restriction is a constant function selecting an entity or entities from the context of utterance of a sort I will describe (following Kaplan 1989). This means that constant functions are essentially asyntactic, so that the pronouns they restrict never require any antecedent, neither an operator nor an argument (although this does not prevent them from participating in bound readings if an appropriate antecedent is introduced). Purported parallels between agents of utterance and propositional attitude agents will be rejected, and as a result, indexical pronouns such as first person ones will be contrasted with logophoric pronouns, which are necessarily operator-bound by perspectival operators (introduced by propositional attitude verbs like *think*, *believe* and *say*). The scope-sensitive properties of operator-binding and the

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perspectival interpretations that are imposed on logophoricity distinguish the latter from constant function phenomena, which are sensitive neither to scope, as it is usually treated, nor perspectival shifts. Finally some evidence is provided to show that third person nominals can be restricted by constant functions, and two such examples are lightly explored: the English generic pronoun *one* and the proximate/obviative distinction in languages like Fox.

2.0. First Person, bound or free

It is not always easy to tease apart the source or nature of the relation between two forms such that it can be said of them that they are identified with one another in some way. The term I will henceforth use for this vague, pre-analytic empirical notion is COCONSTRUAL. The issue we must eventually get at is whether the coconstrual that arises while a single speaker utters more than one first person pronoun is the result of one sort of mechanism or another - variable binding versus a constant function relation. Some varieties of what I am calling coconstrual are illustrated in (1) (and for further examples, see Safir 2004a, to appear b).

(1) a. Rufus is Alex. (Covaluation)
b. The president's press secretary is not about to make the president look bad.
c. I walked in. I started an argument. (Independent covariant identity)
d. Purvis praised himself. (Dependent identity)
e. Everyone loves his mother. (Dependent identity)
f. Who did Dahlia see *t*? (Operator dependence)

When (1a) is uttered, it could be the case that the speaker knows that Rufus is the same individual as Alex and this is informative to the addressee who may have different information associated with (or different ways of picking out) Rufus than he/she has associated with Alex. The identity asserted in (1a) then involves merging one's 'Rufus' file with one's 'Alex' file. In the case of (1b), the same description picks out the same individual as long as we are talking about the same president, but the morphology of *the president* does not insure that the presidents involved are the same (the first president may be that of the U.S., the second that of France). Even replacing *the president* with the proper name, *George Bush* does not change these obser-

vations, since the first Bush may be George W., the second one, his father. Thus in (1b) we have a case of covaluation as well, pragmatically inferred where it holds, but not asserted or enforced by rule. By contrast, (1c) picks out the speaker in the context every time, and as long as the speaker does not change, every mention of the first person will be assigned the same value (and if another speaker, speaker B, uses the first person, then every mention by speaker B will yield the same value). In this case, independent covariation is a form of covaluation enforced by morphology rather than by assertion or pragmatic accident. Notice that it is unnecessary for the second mention of *I* to refer back to the first or be compared with it. Indeed if the second sentence of (1c) were uttered without the first, no different or special device is required to pick out the speaker in the context, and so no 'anaphoric' reference (referring back) is required for either mention in (1c). By contrast, (1d) only allows a value for *himself* to be computed if it is a function of the value of its antecedent, *Purvis*, with which it must then covary. While (1c) is a form of 'covariant identity', (1d) is what I will call 'dependent identity'. I take the quantifier bound reading of (1e) (where mothers covary with the child that loves them) to be another case of dependent identity, where the pronoun depends on the variable in the position of the quantified antecedent; The latter relation is exemplified in syntax by the dependence of a trace on its wh-phrase operator, as in (1f).[1]

It may be remarked that I avoid the term 'coreference' (see Safir, to appear b). I do so because neither covariant nor dependent identity is necessarily coextension, as Jackendoff (1992) has shown. For example, suppose that Marlene, upon her visit to the wax museum, is shocked upon seeing her wax likeness (2a), or that I have come to see my own likeness (2b).

(2) a. Marlene did not expect herself to be so unstylishly coiffed.
b. I did not like the way I looked. I needed a touch up around the ears.

Marlene is not the statue, but the statue is a token of her identity, and as such, can be bound in an anaphoric construction. By contrast, the second sentence in (2b) is not syntactically bound (since it has no sentence internal antecedent and so it cannot be c-commanded by its antecedent), yet the same 'proxy reading' is possible, such that a representation of X is referred to as covariant with the identity of X.[2]

These issues should be kept in mind in light of the fact that first person pronouns, like second and third person ones, can have a

dependent identity reading in certain contexts, as has always been obvious for reflexives like (3a). Cases like (3b) were pointed out by Heim (1993).[3]

(3) a. I praised myself.
b. Only I think I am smart.

The self-form of the first person pronoun is always understood as bound in every usual sense by the subject in examples like (3a). Under the bound reading for (3b), no one else thinks of himself/herself as smart, whereas under the reading where the second *I* is not bound, no one but the speaker thinks the speaker is smart. The different readings of (3b) arise because there are two possible LFs, one where the embedded *I* depends on the first one, and the other where the embedded *I* does not depend on the first one. Although it is not crucial to the main point of this paper, even if the contextual restriction of a first person variable is suppressed in the bound reading, it is not clear that bound overt first person pronouns are reduced to empty variables, as I discuss briefly below.

Another interesting case is (4), which I have constructed from a class of hypotheticals first introduced into the literature by Lakoff (1968) and explored in Safir (2004a) as 'guise readings'.

(4) If I were any one of you, I would think I was smart.

Although other readings are possible, assume that the subject of (4) is the viewpoint of any one of the addressees inhabited by the consciousness of the first person utterer. The bound reading for cases like (4) is one where the speaker's consciousness inhabiting the viewpoint of any one of the addressees, would be a person who thinks of himself as smart. Under the free reading for the subject of *be smart*, all of the addressees, should they be inhabited by the speaker's consciousness, would have the same thought, namely, that the speaker is smart. Once again, the difference in the LFs that captures the difference in the readings is expressed as whether or not the *I* of *I was smart* depends on the *I* of *I would think* (on the role of dependency relations in LF, see Safir 2004a, 2004b). In the free reading for (4) (or (3b), for that matter), it is still the case that the speaker's consciousness is invoked for both pronouns, whether in the guise of another (as in (4)), or as an integrated whole.

One way of modeling this property is to assume person, number and gender are restrictions on pronouns (associated with phonological features), and that pronouns are to be treated as definite descrip-

tions (see Safir 2004a, 2004b, to appear b and Schlenker 2003, and references cited there). Full definite descriptions can be employed as variables, as Lasnik (1976) has shown. In (5), for example, the epithet *the nasty little adolescent twerp* acts as a bound variable, with the consequence that the negated existence does not range over toddler twerps, or charming little twerps but only the nasty little adolescent ones.[4]

(5) *No schoolkid's* mother would ever say (about *him*) that she thinks *the nasty little adolescent twerp* is unlovable.

The difference between full definite descriptions and pronouns is that pronouns are *reduced* definite descriptions, a closed class consisting only of grammatical features (and constant function restrictions, if these are not instantiated for interpretation by the features themselves) and no idiosyncratic lexical content. This results in differing behavior for Principle C effects – full definite descriptions are grouped with names, not pronouns – as explored in Safir (2004a).

It will probably bear repeating as the presentation continues, but my discussion here distinguishes the fact that there is a bound reading of (3b) from the broader claim, which I reject, that first person pronouns are always bound variables of some sort, bound by a contextual operator or a first person (coordinate of such an) operator. It has been argued by Irene Heim, as reported in von Stechow (2002), and Schlenker (2003) (see also Rullman 2004, for discussion), that the features of bound pronouns are entirely supplied by their highest antecedents (by an agreement or feature transmission mechanism), such that any features the pronouns bear are deleted or at least not distinctly interpreted. For the examples in (3b), this would mean that the embedded *I* would lose its first person features for the purposes of interpretation, so as to permit the inference that anyone other than me is not an x such that x thinks x is smart. Although I have doubts that the notion 'features' is sufficiently nuanced (see especially discussion in section 6), whether or not I adopt this claim about cases like (3b) does not bear on whether or not *I* is a bound variable of an operator even in simple sentences like *I left*, where, on the theory Heim is reported to hold, *I* would then inherit its features from the purported presence of the operator that binds it.

Quite apart from the latter distinction, there are empirical reasons to doubt feature agreement/erasure for bound pronouns, however. Under the feature transmission theory, we might as easily expect that overt singular pronouns could be interpreted as plural where the

antecedents demand it. For a sentence like *Each boy told his girlfriend that they should not waste any time*, neither *she* nor *he* can be the overt bound pronoun in place of *they* and get the bound pairs reading. If, however, pronouns have no properties but those of their antecedents in the semantics, then there is no account of why the overt singular pronouns *she* and *he* preclude the plural reading and why the plural *they* cannot be used for the singular readings that are acceptable bound readings if *he* or *she* is used. By contrast, if overt pronouns are restricted to be plural or gendered even when bound (allowing for the use of plurals for gender avoidance or with abstract distributors, as discussed below), then a straightforward account is available for the requirement that the overt bound pronoun of the split antecedent must be morphologically plural, since the pairs in question are pluralities; only plural pronouns can be anaphoric to them if the morphological plurality of these pronouns is fed to interpretation (see Schlenker (2003) and Rullman (2004) for further challenges to feature transmission).

Now consider some cases where feature erasure does some work. The bound reading of *their* for *Everybody should watch out for their belongings* interprets *their* as semantically singular, at least for many speakers of English (not me). I suspect this is not good evidence for feature erasure because these appear to be cases of gender avoidance for the most part, where the plural is the best neutral pronoun that will do (e.g., if *everybody* quantifies over a set of women, is *their* still preferred to *her*?). It seems, moreover, that the relevant interpretation is easier with *their own* (even I accept this) as opposed to just *their*, while *her own* sounds focused in some way, perhaps asserting that an additional property holds of the set, namely, all are female. Perhaps there is a silent non-focusing *own* that can function as a distributor where *their* is semantically singular. More challenging cases are those like *They all think they are smart*, which permit a distributive bound variable interpretation that is singular, i.e., for all x, x thinks that x is smart (see Rullman 2004: 161, for a first person example). Once again, I must appeal to some sort of distributor. However, from the feature transmission/agreement perspective, the optimal bound variable sentence would presumably be *They all think he is smart*, because the bound reading is semantically singular, but this does not even have a bound reading. Singular pronouns, unlike *they*, would presumably fail to agree with the plurality of *(they) all*, but this is not semantic agreement under the bound reading. Either we must assume that syntactic and semantic agreement are unrelated, which appears to be the weakest position, or else that some dis-

tributive operation on the second *they* yields a singular interpretation, in which case there is no need to ignore or discard the plurality of the overt pronoun.

The cases that are purported to require the feature transmission and the deletion of features on the variable are instances where an unpronounced parallel proposition could not preserve the person, number or gender features of the spoken pronoun. The ellipsis case involves instances where first person features, for example, can be suppressed, e.g., *I can do anything I want, while others can't* allows a parallel bound interpretation (for many people) such that *others* can't do what *they* want (see Rullman 2004:162). If the ellipsis were copied, so the reasoning goes, the features of *I* would frustrate the bound reading. However, Fiengo & May (1994) have proposed elsewhere that elided nominals can be replaced with unmarked pronouns ('vehicle change'), and when this happens, it bound readings for the elided forms without preserving whatever amounts to the first person feature, as Schlenker (2003: 92) has also observed for these cases.[5] If the elided form does not undergo vehicle change, then the feature remains and the bound reading is not sensible. Justifications for vehicle change are independently motivated for Principle C effects (as pointed out by Fiengo & May) and strict readings of some reflexive antecedent sentences in ellipsis sentences as well as for a number of reconstruction effects (see Safir 2004b).

Another case raised by Heim concerns the presuppositions involved for *Only I ate my wheaties*. It must turn out that there is no *x* other than me such that *x* ate *x*'s wheaties, and for this to be possible, the first person restriction (or feature) must be suppressed. However, the context alternatives for *only* sentences are not constructed as overt syntactic forms, and as silent forms, they would allow vehicle change of the bound pronoun (again, as argued by Schlenker 2003: 92). Thus vehicle change for bound variable pronouns, an independently motivated device, is what does the work of stipulated feature agreement/deletion in Heim's theory, and it does this work without erasing overt features that can often bear interpretive consequences, as in the case of split antecedents.

Returning now to our claim that first person context sensitivity is a restriction on the pronoun itself, whether overt first person pronouns are dependent (bound) or not, the restriction that holds of them, that they must pick out the speaker in the context of utterance, remains unchanged, even if the bound readings they support introduce implications (under vehicle change) about what holds of those who are not to be described by the first person. What I have in mind is stated informally in (6).

(6) A first person restriction picks out the identity value [6] of the agent of the utterance in the context of the utterance.

Thus a bound first person pronoun gets its interpretation two ways, both from its antecedent (with any additional presuppositions thereby imposed) and directly from the context of the utterance.[7] Where the bound interpretation is distinguishable from the function of (6), we see cases like (3b) and (4) and strict/sloppy contrasts under ellipsis for *I can do what I want but others can't*.

One issue that arises in this context is whether or not the property of picking out the speaker in context can ever be *shifted*. That is to say, is it ever possible that first person restriction on pronouns to act as a variable itself, available to be bound by some context operator that does not yield the speaker in the context of utterance as its value? I believe the answer to this question is 'no', as sections 3 and 5 are designed to show. Constant functions are constant because they always find a referent through the context of utterance and no other context – their syntactic position is irrelevant to how they find their antecedent, unless they are dependent on some other first person pronoun (as in (3a,b) and (4)). If it is true that the constant function restriction for first (and second) person is not to be construed as a variable, it is natural to ask whether there are other forms that have the same sort of constant function restriction. I argue that the answer to this latter question is 'yes' in section 6.

3.0. Perspectives vs. contexts

It has been suggested from time to time (see particularly Kuno 1972, Schlenker 1999, 2003) that the agent of propositional attitude (**PA**) verbs has something in common with the agent of the context of utterance, particularly when the PA verb is one of saying. In particular it has been suggested by Schlenker (1999, 2003) that PA verbs introduce perspectival operators with time, world and agent (and addressee) 'coordinates' and that the operator in question is of the same sort as a context operator, introduced at the top of a sentence, that has the same coordinates. While I agree that some sort of operator intervenes between a PA verb and its complement sentence, there is reason to reject the view that the perspective of the agent or experiencer of a PA verb should be conflated with the agent of utterance in context, as contexts and perspectives are not the same thing.

When I am speaking or narrating, the first person pronoun must

pick me out as the speaker, unless I directly quote someone, in which case I give up my identity and speak as if I were someone else.

(7) a. Cassandra said, "I foresee disaster."
b. Agamemnon replied, "But you are Ken, who cannot see the future."

Thus it is clear that I can use a first person pronoun without any self-reference in (7a), but only at the cost of entering into a world in which I speak as Cassandra, in which case I, the utterer of (7a), cannot be identified as anyone but Cassandra by speakers in that world. As the infelicity of (7b) indicates, I am not in the context in which Cassandra speaks, and so reference to me is 'out of context.' If we set aside cases like (6a), then it is uncontroversial that first person in English always refers to the speaker in the context of utterance.

There is a difference, however, between a context of utterance, on the one hand, as in (7a) where the context is ancient Greece and the speaker is Cassandra, and a perspective, on the other, where it could be said of tennis star Pete Sampras as in (8a) that, in his own reckoning, Sampras thinks he can defeat me.

(8) a. Sampras thought he could defeat me.
b. Sampras thought, "I can defeat him."

However, the direct quote of Sampras in (8b) requires the person referring to the actual speaker (the one who is quoting Sampras) to shift to third person, since in the world where Sampras is the speaker, the actual speaker is not the speaker. Yet it is possible, as in (8a), to report the perspective of the agent of a PA without shifting the context of speech, or the agent of that context.

As Schlenker has shown, developing Banfield's (1982) description of free indirect discourse (**FID**), it is possible to shift temporal and modal indexicals.

(9) Early last year, Roddick began training for the tournament that took place this spring. I remember how intense his eyes were on that last day, so intense I could almost see him thinking. Today, he would not be defeated.

This sentence permits a reading where *today* is the day of the tournament, which, with respect to the moment of utterance, is in the past, as are the worlds in which he is not defeated. However, even in FID

sentences, first person picks out the agent of the context, not Roddick, whose perspective is reported (see Sharvit 2004, for similar sentences, and an insightful analysis of FID with references).

(10) Early last year, Roddick began training for the tournament that took place this spring. I remember how intense his eyes were on that last day, so intense I could almost see him thinking. Today he would defeat me.

Thus shifts of perspective that affect time and modality, even for a matrix sentence, do not shift the antecedent of first person to be that of the perspective-holder.

In what follows, I argue that the distinction between context and perspective is further illustrated by the contrast between (a) first person sensitivity to the context of speech, which is a morphology blind to intervening changes of perspective in picking the agent of utterance, and (b) sensitivity to perspectival operators, which any pronoun morphologically marked for LOGOPHORICITY can be sensitive to. Logophoric pronouns, in the languages that have them, are not required to consistently pick the same agent of a perspective if they are in the scope of more than one perspectival operator, thus they permit ambiguities that first person pronouns, or constant function restricted pronouns, cannot permit. While this difference could be expressed by fashioning a special operator for first person that binds pronouns in such a way that no intervening operator is relevant, the point I am addressing is that if we place the right sort of restriction on first person pronouns, then *the way such a purported operator would differ corresponds to a natural property of constant functions that restrict pronouns*. Put another way, constant functions that restrict pronouns are a better device for modeling the interpretation of indexical pronouns (like first person) than any specialized operator introduced just for that purpose.

3.1. De se *readings*

One apparent similarity between contexts and perspectives involves what have been called *de se* interpretations (originally by Lewis 1979). It is sometimes said that *de se* readings of pronouns, self-conscious self-reference on the part of a reported speaker (see Lewis 1979, Chierchia 1989), bear a strong similarity to indexical

pronouns like first person, because first person pronouns inherently involve conscious self-reference to the speaker. For example, some have purported a parallel between I-sentences and *de se* beliefs. In Kaplan's (1989) example, (11a), it could be the case that Pavarotti has perceived that the pants he is wearing are on fire, such that if you asked him what was going on, he might reply (11b).

(11) a. Pavarotti believes his pants are on fire
b. My pants are on fire!
c. That guy's pants are on fire.

Alternatively, Pavarotti may be standing in a row of people looking in a mirror that only shows them from the waist down, and Pavarotti may see pants on fire without realizing they are his own, in which case he might respond as in (11c). The pants are Pavarotti's in both interpretations, and so there is a sense in which both readings are *de re*. However, the *de se* reading is the first one, where Pavarotti might express his belief with an 'I-sentence'.

Some have exploited this similarity to argue that the *de se* readings found in certain third person relations between pronouns and their antecedents can be thought of as 'shifted' versions of first person pronouns (most explicitly, Kuno 1972). Reasoning along these lines, the perspective of a reported speaker should be formally represented as a shifted version of the way the perspective of an actual speaker would be represented. Hence first person pronouns and pronouns interpreted *de se* should be captured by the same formal device - a bound variable relation. In this section I argue that the evidence from *de se* interpretation does not support such a move, removing what appears to be the only plausible evidence to assert that first person pronouns must always be bound by operators (rather than occasionally, as in bound interpretations for (3b) and (4)). Instead I argue that the three pronoun-antecedent relations that result in what have been characterized as *de se* interpretations arise for different reasons from independently motivated devices.

One fact is quite clear, however: The *de se* relation can coexist with first person reference that picks out the utterer in context, not the perspective-holder, as in (12).

(12) Pavarotti thinks that his pants match my shirt.

In (12), *my* still refers to the utterer in context, even if *his* is interpreted *de se*. Thus whatever it is that permits the *de se* reading does

not require the first person pronoun to shift as it must in the reports of direct quote/thought as in the Sampras sentence (8a). In other words, if there is an operator introduced by the PA verb *thinks*, a popular view I also hold, then it cannot bind the first person pronoun in (12), nor would *my*, replaced by a third person pronoun, refer to the agent of the context.

Let us examine more closely the sorts of distinctions between *de se* and *non-de se* readings using (13) as a model for a test to be applied to languages in which, unlike English, there are pronouns morphologically sensitive to the difference.

(13) *Oedipus* thought *his* mother had never met *his* father.

This statement could be true or false depending on who Oedipus takes his father and mother to be. Imagine Oedipus, married to Jocasta, getting along just fine before all was revealed. However, the narrator is telling this story from a position of omniscience, and so can either use *his mother* and *his father* either as descriptions that Oedipus might have used for the step-parents Oedipus knew under these descriptions before all was revealed, or the narrator could be using these descriptions to refer to Oedipus' biological parents, whom Oedipus knew nothing of and whom he never would have described as blood relatives. If the description *his mother* in (13) refers to Oedipus' wife Jocasta (unbeknownst to him, his biological mother) then it is not a use of the pronoun *his* that reports what Oedipus knew about himself – it is not *de se,* limiting that term to conscious self-reference. Under the *de se* reading, *his mother* describes Oedipus' adoptive mother. The use of *his* in *his father* could refer either to Oedipus' adoptive father – a possible *de se* reading – or the man that actually was his biological father unbeknownst to him – the one he killed on the road – the non-*de se* reading. The *de se* reading for both instances of *his* is not what Oedipus thought, since he knew that his adoptive parents were acquainted. If both pronouns are non-*de se*, then that describes a belief Oedipus had, because he did not know that the man he had killed on the road was Jocasta's husband. If the first pronoun is *de se* and the second is not, then (13) describes a belief Oedipus had, because he did not believe his adoptive mother knew the man he killed on the road. However, if the first pronoun is not *de se* and the second is *de se*, then this also describes a belief that Oedipus had at that point, since his biological mother and his adoptive father had indeed, never met. As a further note to avoid confusion, the *de se*/non-*de se* distinction is not one between readings that are bound and those that are not, as Chierchia (1989) and Huang and

Liu (2001) have pointed out. For example, the same ambiguities arise for the bound reading in (14).

(14) *Anyone in Oedipus's position* at that point in the story would presumably think that *his* mother had never met *his* father.

Now it has been observed that logophoric pronouns (**LP**s) require *de se* readings. This fact has been discussed by Chierchia (1989, e.g., for Italian *proprio*), Schlenker (2003) (and references he cites) as well as in work by Adésolá (2001, 2004). Contrary to some descriptions in the literature, Adésolá reports that Yoruba permits a non-logophoric pronoun to be coconstrued with the matrix subject, but the logophoric marked one is still distinguished insofar as it must be *de se*. The verb meaning 'believe' selects for the logophoric complementizer *pé*.

(15) a. Olú gbàgbó pé ilé rè ti wó.
Olu believe that house he(w) ASP fall
b. Olú gbàgbó pé ilé òun ti wó.
Olu believe that house he(s) ASP fall
Both: 'Olu believes that his house has collapsed.'

As Adésolá remarks, "...a strong pronoun [*òun*] is used when self-reference is intended by the reported speaker (or believer) [15b], while a weak pronoun [*rè*] is used when the reported speaker (or believer) does not know that he was in fact referring to his own house [15a]." The weak pronoun does not have to refer to Olu, but the strong one must.[8] (Thus the antilogophoric generalization, that the use of a non-logophoric pronoun cannot effect coconstrual with the agent of the attitude, is overstated, at least for languages like Yoruba, contra Pulleyblank 1986 and Manfredi 1987, 1995).

The role of *de se* readings for logophoric interpretation can be further illustrated with Icelandic translations of the Oedipus example (13). Some evidence that the pronoun *sig* in its various Case and gendered forms is logophoric pronoun in subjunctive contexts is presented in section 4, but the interpretive distinction that matters for our discussion can be illustrated in (16). In local (clausemate or infinitive complement) contexts in Icelandic, the possessive pronoun *hans* is for the most part in complementary distribution (for bound readings) with the anaphor *sín* (which agrees with the possessum in case, number and gender here). This suggests that *sin* is an anaphor in competition with the pronoun (for a general approach to such competitions, see Safir 2004a), but in subjunctives, where *sín* is

logophoric (see Reuland and Sigurjónsdóttir 1997), both forms can be used and still permit coconstrual with the matrix subject. This would appear to permit the four translations in (16a).

(16) a. Ödipus hélt aD móDir sín hefDi aldrei hitt föDur sinn.
Oedipus thought that mother SIN had-Subj-past never met father SIN
b. Ödipus hélt aD móDir hans hefDi aldrei hitt föDur hans.
Oedipus thought that mother his had-Subj-past never met father his
c. Ödipus hélt aD móDir sín hefDi aldrei hitt föDur hans.
d. Ödipus hélt aD móDir hans hefDi aldrei hitt föDur sinn.

Ideally, if Icelandic is like Yoruba, then *sín*, which is the otherwise anaphoric possessive form that acts as a logophor in subjunctive contexts, requires a *de se* interpretation and the potentially independent pronoun *hans* does not. This is exactly the result that one informant responded with, setting aside a complication I will get to presently. The first informant found (16a) as both *de se* (corresponding to Oedipus' stepparents – 'step-step'), (16b) as both non-*de se* (corresponding to Oedipus' biological parents – 'bio-bio'), (16c) as step-bio, and (16d) as bio-step. A second informant differed from the first in finding that an anaphoric reading for *sín* always preempts a logophoric reading – an effect the first informant noted, but found he could abstract away from. In other words, for the second informant, the potential local antecedent of *sín* (i.e., where 'his mother' is the antecedent of *sín*, not Oedipus) always blocked the logophoric reading we are testing. However, even the second informant required (16c) to have the step-bio interpretation (although the step-step interpretation for (16b) was also degraded for him because he found coconstrual with Oedipus difficult). At minimum, then, even the second informant finds the *sín* form necessarily *de se*, and this is enough to support our more particular claim about morphology sensitive to *de se* readings.[9]

There are now some terminological questions about whether or not *de se* is the best name for the reading to which pronoun morphology is sensitive. It is the empirical distribution of this marking that has guided my usage of the term *de se*, and it is for this reason that I speak of it the way I have. If *de se* corresponds to CSI-value as described in (17), then the terms are interchangeable, but I will not assume interchangeability.

(17) Conscious self-identification (**CSI**) value: A pronoun has CSI-value if the identity value of the pronoun corresponds to the identity that a speaker or a propositional attitude agent consciously regards himself to have.

With (17) in mind, let us consider an extension of the term *de se*, originally proposed by Chierchia (1989), to the bound reading for null infinitival subjects (PRO) associated with a variety of control relations (for more recent versions of this claim, see von Stechow 2002, Higginbotham 2003, and Schlenker 2003). One reason that reading arises because controlled PRO in the relevant infinitival complements seem to express beliefs that the PA agent could describe with I-sentences (see Chierchia 1989:8, who presents this as one approach, not the one he adopts, to characterizing *de se* beliefs).

(18) a. John expects to win
b. John openly expressed his expectation, 'I will win.'

In keeping with our empirical approach (at this point) to these questions, we must ask if this is the right characterization of the facts, both with respect to whether a *de se* reading of controlled PRO is taken to be a CSI-value reading and with respect to whether I-sentences provide the right sort of test.

To put my cards on the table, I am aiming to show that the analysis of *de se* readings of control complements cannot provide a model or corroboration for any account of *de se* readings of tensed clauses, and more specifically, control does not support the I-sentence test for *de se*, not, at least, if CSI-value is the right characterization of *de se*. Rather I will argue that the purported *de se* reading arises as a byproduct of the choice of controlled PRO antecedent, rather than any aspect of the mechanism of control. The CSI-valued reading for first person sentences is ensured thanks to the operation of constant functions, since I-sentences always involve an agent who knows he is referring to himself; That is, sentences like *I think I am smart* do not require the intervention of perspectival operators to insure that the agent of utterance is self-consciously referring to himself because both pronouns directly pick out the agent of the context. Thus the logophoric CSI-valued reason is the only one that crucially arises from binding by a perspectival operator.

Consider the statements in (19) and (20).

(19) a. Oedipus tried to commit patricide (and succeeded).
b. Oedipus wanted/hoped to commit incest.

(20) a. Oedipus attempted, 'I will commit patricide.'
b. Oedipus had a desire/hope, 'I will commit incest.'

It is indisputable, that from the omniscient speaker's perspective, (19a) is an accurate description of what Oedipus tried to do, but it is certainly obvious that (20a-b) do not report what Oedipus intended, desired, or hoped before he knew his parentage. Yet (19a-b) are accurate reports of what Oedipus tried, desired and hoped on the basis of what the omniscient reader knew at these various points in the story (e.g., precede all of (19a,b) with "although he did not know it at the time"). For example, Oedipus *did* intend to kill the man who he met on the road, who later turned out to be his biological father, his desire for Jocasta *was* incestuous, and in hoping to marry Jocasta he *did* have a desire to marry his mother. It is not the case that Oedipus would ever have described what he wanted as "I will commit incest", because he didn't know that the event/situation/relationship he wanted would have that description. In hindsight, however, that is how Oedipus could describe his desires in self-accusatory fashion.

In other words, there are controlled PRO readings that can be characterized as *de se* in the sense of having CSI-value readings, where the propositional attitude-holder is conscious of how the event he is involved in is described. However, there are also readings, those described from the perspective of the omniscient reader/storyteller, where the controlled PRO fails to have a CSI-value, and moreover cannot be paraphrased as shifted first person reports. If there is some sense of *de se* that can extend to unconscious coconstruals (e.g. "immunity to error through misidentification," as in Shoemaker 1968), then *de se* is a broader term that does not correspond to what the choice of a logophoric pronoun is sensitive to.

The argument that control interpretations lack CSI value can be brought from a slightly different angle. From the perspective of Freudian psychoanalysis, Oedipus had an unconscious desire to commit incest. For all of the control verbs involving internal psychological states that could be unconscious, it then becomes possible for agents of propositional attitudes to have desires, intentions and hopes that are never what they would consciously assert in a first person statement. This may be a fairly occidental way of treating folk psychology, but what matters for the arguments presented here is that English usage permits control structures to describe unconscious propositional attitudes.

This is not to say that there is no difference between overt dependent pronouns and PRO where both are possible, just that the relevant difference is not directly about conscious self-reference. Control by an animate antecedent requires a higher level of involve-

ment in the event, normally direct experience of the event, as in examples of a sort first pointed out by Fodor (1975:133ff.) and recently discussed insightfully by Higginbotham (2003).

(21) Jones remembered (his) giving the speech.

If Jones has amnesia and knows he gave the speech only because he saw a subsequent video of it, he can remember that he gave the speech, but not the process of delivering it. The 'posterior memory' reading, the one based on the video, is very difficult to assign to (21) if the pronoun is not overt. The important point for the present discussion is that when the pronoun is overt, it is still the case that the reading can be *de se* insofar as *de se* corresponds to CSI-value (what logophoric pronouns are sensitive to). In the posterior memory scenario described, for example, Jones knows he is referring to himself when he speaks of acts he knows he has taken part in.[10]

I suspect that the relevant difference between the control relation and the binding of an overt pronoun is related to the indistinctness relation discussed in Safir (2004a and references cited there) with respect to certain contrasts between anaphoric pronominals or nulls, on the one hand, and relational anaphors, on the other, where both are available. As discussed in the reference cited (based on references cited there), there is a contrast in English between *Castro dressed* as opposed to *Castro dressed himself,* for proxy readings. If Castro is at the wax museum carefully dressing a statue of himself, only the second sentence can be used to describe the situation, because the first requires that Castro be in no way distinct from himself (a similar case in Dutch would contrast a weak anaphoric pronoun, *zich*, with a relational anaphor based on a body part, *zichzelf*). If control favors an indistinctness relation between the controller, subject of the attitude, and the event described by the attitude, then the direct experience relation that Higginbotham (2003) explores is just a special case of the indistinctness of *John dressed* as opposed to *John dressed himself*. This contrast can be explored with examples like (22), supposing now that (22a,b) describe the upcoming grand unveiling event for Castro's newly renovated wax effigy.

(22) a. Castro expected himself to be wearing a uniform.
b. Castro expected to be wearing a uniform.

While (22a) allows for a situation where either (a) Castro expects his wax effigy to be wearing a uniform or (b) Castro expects to attend the

event wearing a uniform (depending on whether or not he receives permission to attend wearing military dress). However (22b) requires the second interpretation.

When the problem of control is looked at this way, the purported *de se* reading is just one where the antecedent of PRO happens to be the agent of an attitude, etc. Moreover, it is straightforwardly false that controlled PRO is always *de se*. For example, in *John failed to instruct Bill to leave*, it is clear that *Bill* is the controller of *to leave*, but he is unaware of ever getting the instruction that could result in the event that he is supposed to be the main player in – a hypothetical event he knows nothing about. On the other hand, had Bill received and understood the instruction, it could be said that he had a conscious relation to his role in the leaving event, and that he could not be distinct from the individual following the instruction. The indistinctness relation would appear to cover both cases without involving the question of what Bill was conscious of. Also, obligatory control can arise where the antecedent is not animate and hence cannot possibly be *de se*, as in *This key will serve to open the door*. The latter sort of example cannot be subject-to-subject raising by the usual tests, since *serve* selects for properties of its subject, e.g., **All hell served to break loose* vs. *All hell seemed to break loose.* Since *serve* is not a PA verb, no *de se* is expected, but control seems to operate just the same.[11] I leave for further study the suggestion that indistinctness is what underlies the relevant set of controlled PRO readings.[12]

On the other hand, I do not assume the same indistinctness relation underlies *de se*, since there are *de se* proxy readings, and the existence of a proxy reading belies an indistinctness claim. For example, (23a) allows a reading where Groucho is talking about the statue he knows was that of his brother (hence the pronoun has a CSI value), but it also allows a reading whereby only the speaker knows he is referring to a statue that used to be of Groucho's brother (hence the pronoun does not have a CSI value). I have engineered the non-CSI valued proxy reading to be prominent in (23b), where Groucho misidentifies a damaged effigy.

(23) a. When we brought Groucho to the wax museum after the fire, he thought his brother was beyond repair.
b. When we brought Groucho to the wax museum after the fire, he thought his brother was Castro.

What this establishes is that control does not obligatorily impose *de*

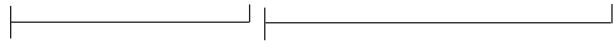
se readings, contrary to what Chierchia and Schlenker contend, although *de se* readings often arise contingently where indistinctness with a PA agent is required by control. Thus whatever mechanisms are claimed to account for control, the empirical distinctions of interpretation that result from these mechanisms are not those that the choice of logophoric pronoun is sensitive to, which I have characterized as having a CSI value. Moreover, it is not the case that *de se* readings are to be characterized as shifted first person readings, I-sentences, even by analogy. In other words, there is no reason, based on control relations, to strive to make the agent of a context (the speaker) parallel to the agent of an attitude (a perspective-holder) as a matter of logical form.

Returning now to the central issues, there is no support from the constructions just examined for the contention that the restriction on first person pronouns ever picks out anyone but the utterer in context – unless the whole context is shifted by direct quotation, in which case the utterer who is quoting cannot be evoked by a first person use. Reported perspectives, either in indirect speech or FID, do not represent such a shift, since the utterer who reports the perspective of someone else is not displaced by the introduction of another agent – the agent of utterance is still picked out by every first person mention. Thus there is no reason to suppose, indeed there is reason to doubt, that the first person restriction can be treated as a variable that is bound by a perspectival operator.[13]

3.2. Operators and CSI values

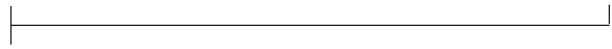
One way of accounting for the CSI-valued reading is to assume that it arises when a pronoun is bound by a class of operators introduced by PA verbs. Just such a mechanism has been proposed by Chierchia (1989) and Schlenker (2003), although I shall restrict myself to Schlenker's proposal here. Simplifying dramatically (see Schlenker 2003, this volume), Schlenker suggests that the coordinates of the attitudinal operator (**AO**) are agent, time and world (<a, t, w>). The agent coordinate of the AO, the first one, is always the one who has the attitude. As the dependency arrows (drawn from Higginbotham 1983) illustrate in (24a) (where "ㅂ" is dependent on "ㅓ"), the CSI-valued reading is a case where the agent coordinate of the AO is the antecedent *his* depends on.

(24) a. Oedipus thought [AO<*x*, y, z> [Laius didn't know *his* mother]]



'*Oedipus* thought Laius didn't know *his* mother.'

b. Oedipus thought [AO<*x*, y, z> [Laius didn't know *his* mother]]



'*Oedipus* thought Laius didn't know *his* mother.'

The non-CSI-valued reading is illustrated in (24b), where the pronoun is directly dependent on arguments of the matrix verb without the mediation of the operator. If we make this assumption, however, we face an apparent dilemma. Where the arrow indicates that the AO is bypassed in (24b), it would appear that the AO is now a vacuous operator (the agent coordinate binds nothing). If, on the other hand, we allow that the AO is not present when it has no LP to bind, we would appear to be enforcing radically different semantics for PA verb complementation for propositions containing a CSI-valued pronoun and those that do not.

There are two ways to sidestep this problem. If we maintain Schlenker's view that all three coordinates are associated with a single operator, then we might suppose that the operator counts as non-vacuous if any of the three coordinates binds a variable. It is possible and likely that one of the other coordinates binds its corresponding tense or modal variable, and so the AO is not vacuous even when it fails to bind an LP. Alternatively, we can assume that the agent coordinate is not part of the same operator as the other two coordinates, and may be present or absent independent of them, a view that would require a subtle semantic defense. I will opt for the former view and in what follows, I assume the key features of Schlenker's proposal (relevant to our discussion) as outlined in (25).

(25) a. An AO is introduced by PA verb
b. An AO has three or four coordinates (one for addressee, perhaps)
c. If one coordinate of an AO binds a variable, the AO is not vacuous
d. A pronoun bound by the agent coordinate of an AO has a CSI value.[14]

4.0. The syntax of logophoricity

The evidence presented so far for the attitudinal operator has been semantic, developing earlier proposals of Chierchia as developed

with coordinates by Schlenker. Chierchia suggested that the AO is what the choice of LP is sensitive to, thereby uniting the CSI-valued reading with LP sensitivity. The confluence of these properties has already been illustrated with examples from Icelandic and Yoruba, but both Chierchia and Schlenker are fairly neutral about how the AO is instantiated in syntax. In this section I provide evidence to support Baker's (1998) development of Koopman and Sportiche's (1989) view that the operator responsible for inducing logophoricity, an operator I will treat as an AO, is (a) to be syntactically represented and (b) to be so represented either in Spec CP or as a complementizer, not internal to the PA predicate (e.g. morphologically internal to a PA verb.

Perhaps it is now time to remedy the fact that up to now I have provided little in the way of background for those unfamiliar with languages that employ logophoric pronouns (LPs). In many languages of the world, pronouns in the complement of a PA verb must be construed with an argument of the PA verb if the pronoun in question has distinctive morphology. Since the phenomenon was first described for PA verbs that mean 'say', the pronouns in question were dubbed 'logophoric' by Hagège (1974), for the African languages he reported.

For example, Ewe has been shown by Clements (1975) to have a special form of pronoun, *yè*, that is only used when the antecedent is a 'logophoric antecedent', that is, a speaker, believer or experiencer (and in some cases, in Ewe at least, also a hearer). The use of this pronoun insures reference to the matrix logophoric antecedent, as in (26) from Clements (1975: 156).

(26) Ama gblɔ be yè-do nku nyɔnuvi hi dze yè gbɔ dyi
Ama say that *yè* set eye girl wh stay *yè* side on
'*Ama* said that *she* remembered the girl who stayed with *her*.'

By contrast, nothing in the English translation of (26) ensures that the pronouns *she* and *her* must refer to *Ama*, although either one of them, or both, or neither might be interpreted to refer to *Ama*. Not every verb permits the introduction of such pronouns, but those that do are a subset of the PA verbs.

In order to limit the length of this essay, I will not enter into many of the details of logophoric phenomena or the range of crosslinguistic variation, actually quite vast for some parameters; Instead I will limit myself to a few core facts that I take to be true of all logophoric phenomena or else I fashion my argumentation to take

advantage of existence evidence (e.g., the hypothesis is confirmed on this argument if predicted property x exists in at least one logophoric construction). Although most of the discussion of logophoricity has focused on African examples (a number of studies are available, more than I can survey here, see Huang (2000) and Schlenker for recent compilations of references), the same sort of phenomena have been attested for some European languages (particularly Icelandic, as discussed by Thráinsson 1976, Maling 1984, Anderson 1986 and Sigurdsson 1990, but see also Chierchia 1989, on Italian). The properties of the logophoric construction I take to be basic are listed in (27), with some aspects of crosslinguistic variation noted, and most of them will be illustrated with examples in the course of my presentation.

(27) a. There is a morphologically specific pronoun (or in some languages, an agreement marker) that is coconstrued with an argument of a PA verb.
b. The morphologically specific pronoun may or may not have other uses, but in the contexts where it acts as a 'logophoric pronoun', it contrasts with 'normal' pronouns that effect coconstruals for antecedents that are not arguments of PA verbs (or an argument that is not an agent of the PA verb).
c. LPs are found in propositional complements to PA verbs (i.e., they are not coarguments of the logophoric antecedent) though languages that have LP phenomena differ as to which PA verbs license logophoric pronouns.
d. The agent of the PA verb is always a possible logophoric antecedent in languages that have LP phenomena, but some languages permit other PA arguments (e.g., addressees) to be logophoric antecedents.
e. Insofar as researchers have tested for it, when the logophoric antecedent is the agent of the PA verb, the pronoun has a CSI value (or is called *de se*).
f. The distance between the logophoric antecedent and the LP is unbounded and intervening syntactic islands do not block the relationship.
g. The licensing of LPs is sensitive to the morphology of the complementizer permitted by the PA verb in some languages.
h. LPs are often licensed in connected discourse that reports the perspective of a logophoric antecedent.

Although Ewe appears to have a dedicated logophoric form, it is more typical for the logophoric form to have more than one use (in Yoruba and Edo, for example, it participates in certain focus construc-

tions) which is distinguishable by other criteria and has a different distribution when satisfying just those other criteria, a matter I will abstract away from here. It is most typically said that when the LP is available for coconstrual with the logophoric antecedent, a 'normal' pronoun cannot then be used to refer to the logophoric antecedent, that is to say, normal pronouns are antilogophoric in languages with LPs. Though the empirical patterns are more subtle than this, as the discussion of non-*de se* readings in Icelandic and Yoruba has already shown, let us assume that the 'antilogophoric generalization' is right for now.

The theses in (28) provide one way to model the syntax of this construction, not incidentally, the one I propose (with the antecedents mentioned, particularly Koopman & Sportiche 1989, and Baker 1998).

(28) a. The PA verb licenses (or constitutes or contains) an attitudinal operator that has scope over the propositional complement of the verb.
b. The attitudinal operator (or a coordinate of it) is bound by an argument of the PA verb.
c. Logophoric pronouns are morphologically scope sensitive to binding by an attitudinal operator.
d. The operator is instantiated in syntax by an A'-antecedent directly generated in C position or in Spec-CP.

This proposal amounts to the schematic analysis in (29b), where an attitudinal operator (AO) binds the subject of *is smart* and the value for the operator is provided by the agent of the PA verb, and binding by the AO constitutes self-ascription for the antecedent of the coordinate of the AO (who in this case is John).

(29) a. John thinks he is smart.
b. $[_{IP}$ John $[_{VP}$ thinks $[_{CP}$ AOx $[_{IP}$ x is smart]]]]

A number of questions arise here as to the relation between the AO, which is presumably available for any PA verb, and the subset of logophoric operators (**LOs**) that actually license LPs, which in most languages are not possible with just any choice of PA verb or complementizer form. What determines these lexical distinctions between PA verbs and the complements and complementizers they select is not a matter I will resolve, but I do not think the nature of these distinctions, as long as there is a way to make them, will be crucial to

the syntactic analysis outlined in (28).

Most of the properties discussed in (27) now fall into line given the theory in (28). By base generating the AO in Spec-CP position (or C), we permit it to have scope over everything in the CP complement of the PA verb, with the result that the relation is unbounded and penetrates islands (just as pronouns can be bound outside of islands by quantified antecedents). Clements (1975: 156) reports that a relative clause complement to the verb meaning 'remember' in Ewe cannot embed the logophoric form referring to the one who remembers (*yè* is ill-formed in place of *e* in (30a)), although, as expected where there are no island restrictions, such that *yè* becomes possible if the whole structure including the relative clause is embedded in the CP complement to a verb of saying as in (30b) (see also Kinyalolo (1993) for similar examples in Fon and Hyman and Comrie (1981:30) for a Gokana example, for which the embedded pronoun is obviative in the absence of the logophoric marker in its clause).

(30) a. Ama do nku nyɔnuvi hi dze e gbɔ dyi
Ama set eye girl wh stay 3ps side on
b. Ama gblɔ be yè-do nku nyɔnuvi hi dze yè gbɔ dyi
Ama say that *yè* set eye girl wh stay *yè* side on
'*Ama* said that *she* remembered the girl who stayed with *her*.'

Notice that in this case, it is not clear whether the crucial difference between (30a) and (30b) is embedding under a PA verb or the presence of the logophoric complementizer *ye* licensed by that verb. However, it is enough for now to point out that the unbounded relation that results rules out a conventional movement or anaphor analysis, since no locality restrictions are respected.

The fact that the logophoric antecedent does not always have to be the agent of the PA verb, as illustrated for Ewe in (31), is neatly and easily accommodated by the assumption the AO mediates the relation between the LP and its antecedent, the only question being which coordinate of the AO contributes the LP antecedent.

(31) me-se tso Kofi gbɔ be yè-xɔ nunana (Ewe, Clements 1975)
I-heard from Kofi side *be ye*-receive gift
'I heard from *Kofi* that *he* had received a gift.'

It is possible to show that the scope of the operator is not over the complements of the PA verb, but rather over the clause it selects. In Icelandic, the logophoric form is *sig* in subjunctive clauses and its

case variants (*sig* also acts as an anaphor, but the behavior of *sig* when it is an anaphor is distinguishable from *sig* when it is an LP, as Reuland and Sigurjónsdóttir,1997 have shown). As (32b) shows, the logophoric relationship may hold between the agent of a noun of belief and may be maintained across connectivity boundaries where selection of a clause plays a role as illustrated in (32a-b).

(32) a. Trú *Ólafs*, aD allar syndir *sínar* verDi *sér* fyrirgefnar, er bjargföst.
belief Olaf's that all sins SIG's will-be SIG forgiven is rockfirm
'*Olaf's* belief that *his* sins will be forgiven *him* is rockfirm.'
b. SkoDun *Siggu* er aD *sig* vantaDi hæfileika.
opinion Sigga's is that SIG lacks ability
'*Sigga's* opinion is that *she* lacks ability.'
c. *Trú *Ólafs* á guD bjargaDi *sér*
belief Olaf's in God saved SIG
'*Olaf's* belief in god saved *him*.'

Even though *Sigga* does not c-command the LP, as in (32b), the belief noun still licenses an AO across the copula, and this is enough to support the LP. However, as (32c) shows, logophoric *sig* is not licensed if it is not encased in a clausal complement (and in this case it also fails as an anaphor directly dependent on *Olaf*, since *Olaf* does not c-command *ser*). The fact that the LP acts as though sensitive to a logophoric antecedent across a copula, even though the copula does not support anaphora when the antecedent is similarly embedded, suggests that something else c-commands the LP. This follows if selection of a PA noun can license an operator in its CP complement just as a PA verb does.

The view that the operator should be found in the CP complement, rather than on the verb gains further support from the fact that logophoric pronouns can be licensed in connected discourses where the perspective of the reported speaker or experiencer is continued across sentences.[15] Clements (1975: 170-171) presents (33) for Ewe and Adésolá (2001) presents the Yoruba example in (34).

(33) Wo ame etOa wodui veviO be yèwoade dyinua
The three of them they planned firmly that they(s) would take out the moon
tOa me. Ne yèwodii tOa me ko a, yèwoakOe...
from the water. When they(s) had taken it out of the water, they(s) would lift it...

(34) Olú so pé ó ki bàba òun nítorí pé bàbá òun fún un
Olu say that he(w) greet father his(s) because that father he(s) gave him(w)

ní owó. Ó tún yin bàba òun fún isé tí bàba òun fún un
money he(w) also praise father his(s) for work that father his(s) do for him
'*Olu* said that he greeted *his* father because *his* father gave him some money.
He also praised *his* father for a job well done'

In Yoruba (34), all the italicized third person references in the translation correspond to strong pronouns (the ones Yoruba uses as LPs) in the reported discourse and all of them are Olu. The second sentence continues the report of what Olu said. The weak pronouns (not italicized in the translation) are third persons who are not Olu, and need not be coconstrued with each other. These cases suggest that the logophoric operator introduced by 'say' in the first sentence has scope over the second sentence. One way to instantiate this proposal, yet to still limit bound-variable syntax to sentential grammar, is to assume that a matrix AO resides in the matrix Spec-CP (or C) of the second sentence, and that the value of the viewpoint can be determined across discourse pragmatically. Sentence internally, however, the relation is syntactic because the LP is bound by a c-commanding operator.

Now let us turn our attention somewhat to the specialized complementizers that are frequently required in languages with morphologically marked logophoricity (though not every language with morphologically marked logophoricity has this requirement, nor is it the case that languages that have such complementizers always require them in logophoric contexts). The initial point to be made is simple: If there is a direct relationship between the logophoric antecedent (or an operator on the PA-verb) and the LP, why mark the intervening C (or T or V)? If instead the relationship between the LP and its antecedent is mediated by an operator, then it is plausible that the operator in question is somehow related to C. Indeed if the operator is in Spec-CP, it is plausible to propose that the PA verb selects for a CP that has a head that hosts the operator in its Spec, i.e., a selected logophoric C hosts a logophoric operator in its Spec-CP (with which it may agree).[16] Alternatively, the logophoric C is the operator itself. Only the CP-operator theory predicts, then, that we might expect the C of the complement of an LP licensing verb to show special, potentially crucial, morphology.

Our arguments for the existence of the AO operator in C or Spec CP are thus as follows:

(35) a. Non-commanding antecedents are possible for LPs, but not for anaphors, if the clause containing the LP expresses the perspective of the antecedent, either across a copula, as in (32a-b), or across discourse, as in (34).
b. Coarguments of a PA predicate cannot be represented with LPs (unless both LPs are embedded in an attitude complement)
c. The distribution of LPs is often dependent on, or sensitive to, the form of an intervening complementizer.

We would not expect (35a) or (35b) to hold if AOs are instantiated on verbs, with scope over the PA predicate complement, but we do expect (35a) to hold if the operator is limited to the complement clause. Then it is not surprising for (35c) to be the morphological expression of the presence of such an operator.

5.0. The syntax of logophoricity vs. asyntactic first Person

In section 3 I argued that contexts and perspectives are different and should not be conflated, but Schlenker (2003) suggests that the agent of a context and the agent of a perspective are bound by operators of the same type, namely, operators with coordinates corresponding to agent, time and world (and possibly addressee). Now that we have more perspective on what the syntax of AO is, we can examine the scopal questions that arise if contextual and perspectival agents are conflated (contrary to what I propose).

The variable-binding approach to person would require, for a language like English, that a sentence like (36a) is quantified over by a contextual operator (**CO**) binding actual world, present tense and first person variables to yield a first person interpretation at the moment of utterance in the actual world of the moment of the utterance. Thus the contextual operator is modeled on the analysis of logophoric contexts, such as (36b).

(36) a. CO<x, y, z> [Mary likes x] 'Mary likes me.'
b. John believes [AO<*x*, *y*, *z*> [Mary likes x]] 'John believes Mary likes him.'

For languages like English, it must be stipulated (as in (37)) that the CO or at least its agent coordinate, always has highest scope and that the first person pronoun is never bound by anything else, since it never refers to anyone but the speaker in context, unless we engage in direct quotation.

(37) The Highest Operator Stipulation (**HOS**)

First person pronouns must be bound by the highest operator with an agent coordinate.

This claim (which Schlenker calls the 'Fixity Thesis') would be quite uninteresting if HOS is never violated, as it would be tantamount to saying that the variable binding mechanism is arbitrarily restricted for first person so as to always pick out the agent of a context, never a perspective (unless the agent of the perspective happens to be the agent in the context of speech).

Schlenker argues that the HOS is not universal, and he claims that there is evidence against such a universal in that there are languages for which the first person pronoun is also the one used in logophoric contexts. Schlenker (2000:124) cites the following example from Amharic (though other languages also employ first person forms as LPs, see Speas (2000) and references in Schlenker (2003)).

(38) % ohn % @gna n@ ññ yi-all
John hero I-am says 3sg.m
'*John* says *he* is a hero.' or 'John says I am a hero.'

Schlenker takes this as evidence that first person pronouns are always bound as variables by a CO and can be shifted in some languages when the CO is embedded in the complement of a PA verb, that is, when a CO becomes an AO.

It is far from obvious, however, that Amharic-like languages make a case for collapsing perspective agency and context agency into a shiftable coordinate, however, because most languages with morphologically marked logophoricity do not use the first person pronoun for this purpose. Many languages have a dual use pronoun, either the one associated with focus, as in Edo and Yoruba, the *n*-pronoun of Abe, or one otherwise employed as an anaphor, as in Icelandic. Others, as in Ewe, appear to have a dedicated pronoun for the purpose. If LPs are shifted first person pronouns, then all of these cases are exceptional uses of third person for a shifted first person reading. Rather it would appear that a variety of pronominal types can be exploited for LP usage, particularly those that already force coconstruals, and first person is just one of these types. On my account, then, first person used as a logophor is a case of synonymy. I do not predict that first person will or will not be used as a logophoric pronoun in any given language, but rather that it is one of a class of pronouns that insure a coconstrual and that might be coopted for logophoric use in one language or another.

The latter observation gives us further reason to doubt that the logophoric binding relation is a good model for the person relation. Yoruba is a language that contrasts weak pronouns (*ó*) with strong (*òun*) pronouns, and the strong ones are employed as LPs when not focused, but (morphologically marked) first person pronouns in Yoruba act just as they do in English. If we are to adopt the operator-variable model of person, then Yoruba first person pronouns require the HOS.

(39) Olú so pé òun rí ìyá mi
Olu say that he see mother me
'Olu said that he saw my mother.'

In other words, (39) must have an attitudinal operator intervening between the complement clause sentence and the PA verb because *òun* is logophorically bound by hypothesis, but first person pronouns must not be sensitive to the intervening operator.

By contrast, Yoruba LPs are not only sensitive to the intervening operator, but can be sensitive to any intervening operator, not even the highest one. Thus in Yoruba it is possibly for more than one instance of the same morphologically pronoun (*òun*) to refer to two completely different individuals, which is never possible for first person. It is possible to illustrate this with an argument based on interleaving variable-binding. Suppose A and B are logophoric antecedents for α and β, respectively, but A is not B and thus α is not β. In accordance with my assumptions and Schlenker's, AOs corresponding to antecedents A and B are found in their CP complements such that O^A mediates binding between A and α and O^B mediates binding between B and β.

(40) $[_{XP}$ ...A...$[_{CP1}$ O^A [...B...$[_{CP2}$ O^B [...α...β...]]]]]

The speaker coordinate of O^A has scope over CP^1 and the speaker coordinate of O^B has scope over CP^2. Thus both α and β are in the scope of O^A. If, by virtue of their morphology, α and β are logophoric, they must, as in the case of first person, be bound by an LO. One possibility is that both should be bound by O^A, because it has the widest scope. This would at least bear some similarity to first person in the operator theory, where first person is a pronoun bound by the highest operator (the one that has the speaker in context as its agent in Schlenker's theory). If the first person HOS also holds of logophoric pronouns, then the introduction of another logophoric antecedent B

should not matter; α and β should be bound by the highest AO. It is not expected that α and β could be bound, one by A and one by B,. However, exactly this possibility is found in Yoruba, as illustrated in (41).

(41) Olú rò pé Ade so pé òun rí ìyá òun
Olu think that Ade say that he see mother his
'Olu thinks that Ade said that he saw his mother'

The strong pronouns must refer to either Olu or Ade - both can refer to Olu or both to Ade, or either one can refer to Olu while the other refers to Ade. This *interleaving* effect is exactly what we expect if logophoric coconstrual is achieved by variable binding, since one operator can be within the scope of another. Thus operator-variable binding seems like just the right model for logophoricity, as all theories discussed here agree, insofar as the introduction of a second scopal marker within the scope of the first does not close off the scopal domain of the first marker. But by the same token, variable binding seems completely ad hoc as a model for first person coconstruals, since the purported A'-binding of first person shows none of the scopal effects observed for true LPs.

However, the fact that HOS must be stipulated for the supposed variable-binding of first person, while it crucially must not be so stipulated for logophoricity, is a contrast that follows directly from the constant function approach to first person. Constant functions pick the same referent freshly every time, not reaching or referring back to previous mention – hence the scope of intervening operators is expected to be irrelevant to the success of their referential function. This point can be made more forcefully for some of the connected discourse examples introduced earlier (see (33) and (34)). In (42), a connected discourse reports the perspective of the reported speaker *Olú* throughout and we confirm this by the interpretation of the strong pronouns, which are logophoric in this context, but first person pronouns appearing in the second sentence still pick out the actual speaker, not the reported speaker.

(42) Olú so pé mo kí bàbá òun nítorí pé bàbá òun fún mi ní owó.
Olu say that I greet father his because that father his give me ? money
Mo sì yin bàbá òun fún isé tí bàbá òun se fún mi
I also praise father his for work that father his do for me.
'OLU said that *I* greeted HIS father because HIS father gave *me* some money.
I also praised HIS father for a job well done (for *me*).'

For examples such as these, the notion 'highest operator' cannot make sense without appealing to a theory of discourse scope hierarchies for person, hierarchies required only by examples like these. A syntactic theory relying on a first person operator coordinate would have to say that the first person operator is always stipulated to be the widest in a sentence even if there is a matrix LO.[17] By contrast, the constant function theory, which treats indexicality as a restriction on the pronoun, need say nothing new about such cases, since the success of reference for first person forms does not depend on the nature of any operator - it is a direct function from morphology to referent, without the necessary mediation of an operator or any syntactic structure.

It appears, at this point that the only reason to persist in assuming a bound-variable analysis for first person coconstruals is to assert that there is a parallel with LPs, not to reveal the properties of first person coconstruals. Of course it is always possible to construct a bound variable analysis for first person that does not respect sentence grammar and that presides over the same context in which the constant function produces a constant result (i.e., as long as the same individual is speaking). Then on the assumption that first person is morphologically sensitive to this operator in spite of any intervening syntax, almost all the same results can be achieved. However, one key point is then already conceded: Unlike LOs, person operators are asyntactic. What is not achieved without further stipulation is that the shift to a new speaker has to close the domain of the previous first person operator just as the new one is introduced if interleaving is to be avoided. The closure required by the operator theory is unnecessary in the constant function theory, which simply applies to any relevant change in context (i.e., whoever the agent of speaking is is identified by the function).

6.0. Other constant function phenomena

Up to this point, all of my discussion of constant functions has made use of first person singular morphology as the paradigm case, but there are fairly straightforward extensions possible to first person plural and second person (singular and plural). As Benveniste (1966) has observed, first person plural is not a plurality of speakers. Though one can imagine a self-referential chorus mentioning themselves with first person plural as they speak in unison, a more general characterization is one where *we* denotes a plurality that crucially includes the utterer in context.

The second person refers to the addressee(s) in the context. Plurality of addressees may also involve a group of which the addressee is a member. Second person singular always picks out the unique addressee in context, such that if one is speaking to a group one must narrow the conversation to address any single member of the group. For example, if the squad leader is assigning tasks to his or her assembled group, s/he might point to each member saying *you do this, you do that*, or else such instructions may be preceded by a vocative, such that the conversation for the moment is between the speaker and a unique addressee. In other words, the function picking out the speaker (as a member of the group) or the addressee is constant depending on who the speaker is and who the addressee is. The personal pronoun always picks the same person in that context.

In this way of thinking, third person pronouns are not in the conversation at all, and thus lack an indexical restriction, whether one thinks of them as the absence of features (as in Benveniste 1966) or as having a positive feature value in contrast to first and second person. In other words, third person pronouns lack any restriction that makes a constant selection from the domain of possible entities in the context, unless they happen to be syntactically bound (e.g., as is an anaphor or an LP). This is functionally imperative for human communication, since not everyone is in the conversation. How the third person form (not syntactically dependent) is connected to entities in the domain of discourse remains a matter for pragmatics on this account, though one expects that formal properties of the theory of pragmatics will limit the possibilities in a systematic way - a matter beyond our purview here.

Consider now how the conversational participant pie is sliced by first and second person. There are pronouns that must include the speaker, pronouns that must include the addressee, but no pronouns that must include both the speaker and the addressee (although *we* is permitted to refer to the conversational participants, it does not have to include the addressee). The next subsection considers this third possibility.

6.1. English generic one

One property of the indexical pronouns discussed so far is that they always pick out individuals who are participants in the context of utterance. As Nunberg (1993:18) has noted, the inference in (43g) may be drawn for each of (43a-c) if they are true in C (the context of utterance). By contrast, the inference in (43g) does not necessarily

hold even if (43d) is true in C. In this respect English generic (**EG**) *one* in (43e) patterns with the other indexicals, in that it safely permits the inference in (43g). By contrast, generic statements like (43f) lack the indexical quality that permits the inference in (43g).

(43) a. I adore cashew nuts.
b. We adore cashew nuts
c. You adore cashew nuts
d. He/John/the old man adores cashew nuts.
e. One adores cashew nuts.
f. People/they adore cashew nuts.
g. Someone in context C adores cashew nuts.

Thus it would appear then that EG *one* is an indexical pronoun, but is it a constant function pronoun? Evidence from contexts like (44) indicates that EG *one* participates in the same constancy of reference phenomenon as first and second person pronouns, that is, EG *one* always picks out the same referent as long as the context is constant.

(44) Speaker A: Mary should always pay attention to Janet's parents but Alice's parents shouldn't pay attention to Maxine's teachers.
a. Speaker B: One should always pay attention to one's parents.
Speaker C: One's parents shouldn't pay attention to one's teachers.
b. Speaker B: She should always pay attention to her parents.
Speaker C: Her parents shouldn't pay attention to her teachers.

While the third person pronouns in (44b) need not both refer to the same female, the generic pronouns must covary in (44a), but the covariation holds not only for what B says, but extends to the utterance of speaker C. Unlike speaker or addressee indexicals, both conversational participants are implicated. Thus Speaker B contradicts Speaker A in (45), but not in (46).

(45) Speaker A: One should be kind.
Speaker B: One should not be kind.

(46) Speaker A: I should be kind.
Speaker B: I should not be kind.

It is possible to show that EG *one* must include both addressees and the speaker in context if we control for contexts where one of the two is excluded under the most natural interpretation of a given use

of *one*. First consider how addressees must be included. For example, imagine a Martian at a conference of extra-terrestrials who proclaims (47).

(47) Fortunately, one is not susceptible to human disease.

The participants at the conference might breath a sigh of relief (supposing that they do that sort of thing). In this context, humans are excluded by (47). But (47) cannot be denied felicitously by a human respondent as in (48), since the speaker includes himself with EG *one*, but must also include the Martian, who is clearly not susceptible.

(48) On the contrary, one is indeed susceptible to human disease.

A Martian determined to be courteous can be inclusive if he engages in a hypothetical.

(49) If one is a Martian, one is not susceptible to human disease.

Cases like (49) permit the mixed race audience to all be included, such that any sentient being x in C would not be susceptible to human disease if x is a Martian. That neither speaker nor addressee can be excluded when EG *one* is employed is also illustrated by the infelicities in (50).

(50) a. #I believe one should be careful, but I don't believe I should be careful.
b. #I believe one should be careful, but I don't believe you should be careful.

Examples like (50a,b) are mildly contradictory, insofar as the speaker excepts herself from a general rule she believes should apply to her. Cases like (51a,b) are straightforwardly contradictory because there is no way to establish any contrast at all.

(51) a. One believes one should be careful, but one doesn't believe one should be careful.
b. I believe I should be careful, but I don't believe I should be careful.

Thus it appears that the EG *one* picks out individuals in C, that it picks out the same individuals in C every time, that both the speaker

and the addressee must be included in the reference of EG *one*, and moreover the C in question is the conversation engaged in by speaker and addressee, not just the span during which only one individual speaks. In this last respect, EG *one* does not correspond to any other pronoun in English. To see this, compare EG *one* with the usage of first person plural in English, as in (52):

(52) Speaker A: We should be kind. (e.g., earnest Christians)
Speaker B: We should not be kind. (e.g., certain social Darwinists)

For (52), each speaker refers to the ethos of within the group he represents, perhaps in answer to the query: Should the members of a group be kind? Compare (52) with (46), where the latter cannot be used to represent the exclusive meaning possible in (52), since *one* must include all conversational participants. The varying inclusions of *we* are highlighted by Nunberg's (1993:11) example from a biology text.

(53) We do not know much about this part of the brain, which plays such an important part in our lives, but we will see in the next chapter...

He remarks, "Here the first token of the first-person plural refers to the scientific community; the second to humanity in general: the third, according to the 'tour guide' convention of academic writing, to the writer and the reader... The speaker doesn't change; rather, the range of relevant groups that include the speaker is construed differently for each occurrence of the pronoun." No such varying inclusions are permitted for *one*, so (54) is odd.

(54) One does not know much about this part of the brain, which plays such an important part in one's life, but one will see in the next chapter...

There is a usage of the second person as an impersonal that is much like EG *one* (see Recanati 1993: 311). However, impersonal *you* lacks constancy of reference of *one* because it has another usage (addressee), as in the teenage daughter's remark, which does not include herself.

(55) Parent's lament: You raise them, you nurture them, you pay for their schooling, you set them up in life and then they never call you.
Parent of four daughters: And if you have a girl, you have to pay for the wedding and then she moves where you can't see the grandchildren.
Teenage daughter: But at least then you can't bother them.

Up to this point I have only stressed the indexical property of EG *one*, but there appears to be an additional restriction that requires it to participate in a generic statement of some sort. Consider the restrictions as distinguished in (56).

(56) English Generic *one*
Generic restriction: The typical sentient individual representative of a class K.
Indexical restriction: K includes the conversational participants in context C, the context of utterance.

While the right statement of the generic restriction seems elusive, the key point for our discussion is that the indexical restriction can be stated separately as long as K includes the conversational participants in C. For example, it could even be assumed that the generic restriction is properly expressed as a form of quantifier-variable binding, just as in the guise cases (e.g., *if I were any one of you...*), where a quantifier can bind an otherwise indexical pronoun (but for evidence against variable binding for EG *one*, see (60a-b)). Nonetheless, however we characterize what is generic about these pronouns, the generic restriction must be compatible with the indexical restriction. Consider (57a-d).

(57) a. The average person has 1.3 children.
b. ?The typical person has 1.3 children.
c. *One has 1.3 children.
d. ??If one is the average person, one has 1.3 children.

It appears that abstract generalizations across people are restricted because the set must include actual persons, thanks to the indexical restriction. Thus (57c) and (57d) fail because the set must include those in conversation, and no actual people have fractions of children. As I am primarily interested in the constant function restriction on EG *one*, I will leave further exploration of the generic restriction aside.[18]

Apart from the generic restriction, there are some other interesting properties of EG *one* that deserve closer scrutiny, including the fact that it behaves as a singular third person (non-person) pronoun.[19] That EG *one* is singular is obvious from its participation in subject-verb agreement paradigms, as illustrated in (58).

(58) One is/*am/*are treated well in these parts.

EG *one* os also incompatible with predicates, like *disperse* or *scatter*, which require plural subjects. Imagine that (59a,b)) are spoken by a Martian regarding the deployment of Martians on Earth.

(59) a. We are dispersed throughout Peoria, Illinois.
b. #One is dispersed throughout Peoria, Illinois.

These properties can be contrasted with the behavior of apparently similar generic pronouns in other languages, such French and German, but I will save this discussion for Safir (in preparation).

It is also possible, though perhaps a little awkward, for EG *one* to antecede third person pronouns in contexts where the third person would have a bound reading, but first or second person pronouns will not do in this context.

(60) a. *One* should do *?his / ?her/??their/*your/*my/*our* best.
b. *One* should talk to *?*his/*?her/*their/*your/*my* lawyer.

If, however, the pronoun in question is not forced to be bound, as it is for the idiom in (60a), the use of even the third person degrades notably.

In light of (60a-b), it is striking that the only truly felicitous antecedent for EG *one* is EG *one* itself. This is clear where there must be a bound reading, as in (61a-b), or where a bound reading is what is intended in (62a-b), but only succeeds for (62a).

(61) a. *One* protects *oneself*.
b. *One* must hold *one's* breath.

(62) a. *One* will do what *one* wants.
b. ??*Everyone* will do what *one* wants.
c. *?*Anyone* would do what *one* might want.
d. **Not one* person will do what *one* wants.
d. *?A person will do what *one* wants.

What is striking about (62a) is that it appears to be bound, yet the ellipsis in (63a) allows a strict reading.

(63) a. One will do what one wants, even though others won't.
b. *Every childless woman* does what *she* wants, though not *every mother* can.

The strict reading for (63a) is one where others won't do what one

wants them to do, while the sloppy reading, which is also possible (if vehicle change applies), is one where others do what those others want. By contrast, the quantifier-bound pronoun in (63b) does not allow a strict reading such that every mother does what every childless woman wants her to do. The second conjunct does not support the strict reading because the universal of the first disjunct cannot scope a (silent) pronoun outside of the clause in which it appears. The strict reading for (63a), moreover, picks out the same set it does in the first disjunct, which suggests that the generic restriction is not scopally limited by syntax (if indeed scope is the way to express it).[20]

On the other hand, the latter conclusion does leave us with some mysteries. It is not obvious how the generic restriction insures that the set it picks out is constant, including not only the conversational participants (which is enforced by the indexical restriction), but also including the exact same set of individuals who are not in the conversation. The observations proffered here only touch the surface of the rich range of issues that an examination of generic pronouns could involve us in, including crosslinguistic comparisons and relations with arbitrary PRO. In the interest of brevity, I reserve discussion of these issues for future work (specifically, Safir in preparation).

What can be concluded from this cursory examination of EG *one* is that whatever its generic restriction, EG *one* also picks out the current speaker and addressees, no matter who is speaking, across a discourse where the members of the conversation are constant. This effect is asyntactic, just as first person is, in that no embedding affects the inclusion of the speaker/addressee in the set picked out by EG *one*, hence there is no interleaving of the sort we have seen for the LPs discussed in section 5. Thus there is no reason to assume that the indexical restriction on EG *one* is ever introduced by an operator. Even if we were to establish an operator to bind EG *one* it would have to apply across the discourse as described and the binding of the persons implicated by the pronoun would still have to be separate from the binding introduced to capture whatever the generic restriction turns out to be, given the strict reading of (63b). Finally, I have shown that constant function restrictions are not limited to forms that are morphologically marked for person, as evidenced by the ability of EG *one* to enter into agreement relations as a third (non-)person pronoun.[21]

6.2. Proximate/Obviative in Fox

There is reason to believe that the system of proximate and obviative marking attested in some Algonquian languages may be

another instance of a constant function phenomenon applying to forms not marked for person. From this perspective, proximate marking is a form of non-shifting indexical morphology that picks out the central character under discussion within a given discourse span. The morphology in question is not necessarily pronominal, though it marks full nominals in such a way that every mention of a nominal within the span that has proximate marking must refer to whomever is the central character under discussion. This holds for both conversational participants. When conversational participants decide to talk about someone else, one participant introduces that person by name or description with the proximate marking, and that person is 'it', the referent for each subsequent proximate marked pronoun until one of the speakers introduces a new proximate-marked name or description. Crucially, any nominal marked with proximate refers to the same individual within the span, and any nominal marked with obviative morphology cannot be coconstrued with any proximate within the span.

I illustrate the phenomenon by use of an excerpt of a Fox narrative from Goddard's (1990: 324-5) insightful description.[22] The hero, Black Rainbow (BR), bears an affix indicating whether he is proximate or obviative, respectively (in the translations, obviatives are underlined, proximates are in italics). BR is bringing a prisoner back to camp. The prisoner and the deer are obviative in (64a,b), while proximate includes BR and the prisoner in (64c).

(64) a. i·tepi=meko e·h=i iwena·ci e·h=owi·kiwa·ci
He took HIM TO where *they* lived.
b. e·h=awato·tama·koci ope ekesi·mani
with HIM carrying *his* DEER for *him* on his back
c. i·ya·hi pye·ya·wa·ci
When *they* arrived there,
d. e·h=natoma·ci e· a·ha·towa·nicini mahkate·w-anakwe·wa
Black Rainbow-P called for SOMEONE WHO SPOKE SIOUX.
e. o·ni=pi e·h=we·pi-a·cimoci a a·ha
And then it is said that *the Sioux* began to give his report.
f. e·to·ta·kowa·ci i·nini mahkate·wi-anakwe·wani
of what had been done to *them* by THAT BLACK-O RAINBOW-O

In (64d), BR still has the topic-theme role and the translator is obviative, but (64e) the proximate role shifts to the prisoner, and remains on the prisoner, who is included in the plural pronoun referring to the Sioux people, in which case BR must be obviative.

This system bears one of the hallmarks of constant function

phenomena: During the relevant discourse span, there is no interleaving of previous proximates into the domain of present proximates such that there is ever ambiguity as to which individual is signaled by the choice of proximate morphology (as there is for Yoruba, for example, with respect to interleaving logophoricity). The fact that the shift of proximate marking from forms describing one entity to forms describing another requires obviative marking for every entity that is not the proximate one is strongly reminiscent of direct quotation in English. Once first person shifts to the quoted speaker, the quoted speaker cannot employ a first person pronoun to refer to the actual utterer of the direct quotation (recall the Cassandra example, (7a)). Once again, this is unlike the pattern we see for logophoric phenomena.

7.0. Conclusion

The main goal of this essay has been to defend the existence of constant function restrictions that pick out an individual or individuals in the context of utterance without establishing a scopal domain. For example, first person pronouns induce constancy of reference across a discourse by means of syntactically unrestricted function that yields a constant value, the utterer in the context of speech. Pronouns restricted by constant functions, though they do not necessarily involve dependent reference, can, like other pronouns, be dependent under the proper conditions. EG *one* seems to inherently involve such binding by an operator, if that is how the generic restriction is realized. However, dependency of a pronoun does not affect its constant function. If there is evidence that shows that the constant function is itself dependent, rather than the pronoun it is attached to, then the claims I have made for constant function phenomena are disconfirmed. LPs show sensitivity to the scope of binding operators and they permit interleaving, hence they are not pronouns restricted by constant functions. The fact that some LPs share the form of first person pronouns in some languages proves to have little significance, in light of the variety of dual use pronouns that can be LPs, or single use dedicated LPs. Finally, I have argued that the constant function mechanism is extended in some languages to endow certain morphologically marked third person nominals with a constant value function for some other role in the discourse, such as topic in languages with morphological proximate marking.

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NOTES

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[1] Although it plays no important role in this essay, I also assume that coconstrual of *his* with *John* also involves dependence of the former on the latter in sentences like *John loves his mother*. See Safir (2004b).

[2] There is some evidence that proxy readings are always dependent readings, see Safir (2004a, to appear b).

[3] It is proposed by Déchaine and Wiltschko (2002) that first and second person pronouns belong to a different syntactic category projection from third person pronouns, based partially on the basis of the claim that first and second person pronouns cannot be bound variables - an empirically false claim, as Rullman (2004) points out. Moreover, Rullman effectively refutes their additional arguments for this categorial difference (see especially his fn. 2) and so I will henceforth assume that there is no categorial difference between pronouns based on person for any of the cases I discuss here.

[4] It has suggested to me by Edwin Williams (personal communication) that the descriptive content of the epithet when epithets are bound have the status of appositions, which add descriptive content to an already established referent, as in *John, the nasty little adolescent twerp, has just arrived*. This sort of interpretation would presumably mean that the position of the epithet is interpreted outside the binding of the variable, such that λx(...x...) picks out the relevant set and by the way, every member of that set is a nasty little adolescent twerp. One could think of first person pronouns as appositions in this sense, but it still must be explained for epithets why *the nasty little adolescent twerp* behaves as a constituent in syntax in the position of the variable, i.e., the relevant account of apposition must somehow lift the description outside the operator binding the variable in the position of the description. I leave this proposal unexplored.

[5] It could be that the phonological features of pronouns include a first/second/third set of distinctions, even though interpretively, first and second person features are necessarily accompanied by a constant function restriction and third person pronouns need not be. This will be an issue in 6.1, where English generic *one* is treated as a third person pronoun with a constant function restriction.

[6] My use of 'identity value' here may be puzzling, but if so, it is only that I am trying to allow for the indirect relationship between the utterer and his/her identity. Like any other pronoun, first person pronouns can be used as proxies (e.g., the author Charles Dickens might have said "I think I would read better in Russian", by which it could be meant that his books would read better in Russian). Such proxy statements do not require a linguistic antecedent, though they do need some context (e.g., I see someone trying to read my untranslated book in a Moscow bookstore and I want to start a conversation and introduce myself. "I read better in Russian," I say, handing her the Russian translation.) Thus the identity of the agent of utterance restricts any first person pronoun, but the pronoun only has a value coextensive with the utterer if no proxy is assigned to the pronoun. Occasionally I will slip into using the phrase "refers to *x*", but I only intend by it that it picks out an identity value corresponding to *x*.

[7] For example, it is possible for distributive readings to be completely consistent with the presuppositions introduced by the bound pronoun, as in the case Schlenker (2003: 53) notes, *You (all) respect your wives*, which is most plausibly interpreted as distributive. In this case, every individual is also an addressee. If we understand *we* in the proper way, as a set including the speaker, every variable bound in the same way for *We (all) respect our wives* should work the same way (every individual is in the set that includes the speaker), as long as whatever device that converts plurals to singular bound variable readings in distributive contexts is in force.

[8] Adésolá (personal communication) reports that the weak pronoun can be interpreted *de se* as well in (15a), though not so easily, but (15b) would avoid any ambiguity. See note 9.

[9] I would like to thank my informants, Halldór SigurDsson and Höskuldur Thráinsson, for their help. One of them states that it is also possible, but marginal, for *hans* to get a *de se* reading in certain cases where logophoric *sín* would also be possible. This recalls the Yoruba fact mentioned in note 8.

[10] Higginbotham (2003) examines the distinction between the posterior memory and direct participation readings at length, but relates them to first person readings (a claim that is not crucial to his account, it would seem, and should be dispensed with). To account for the direct participation effect of control, Higginbotham suggests a semantics that may be roughly described as follows: the agent of the attitude is the agent of the matrix event *e*, but *e* is also introduced into the PA complement such that it has a relationship with the embedded event *e"*. If the matrix agent binds a variable in the event described by its complement (the variable of which is *e'*), then the matrix agent is directly involved in both events. The distinct reading that the overt pronoun permits is one where the matrix event variable *e* is not in the same relation with the embedded *e'*. Nothing in this account crucially involves the first person, although it does rely on the notion of 'immunity to error through misidentification', as introduced Shoemaker (1968). Indistinctness would certainly constitute immunity to error through misidentification.

This would appear to extend to the case Schlenker (2003:61) reports: If John tells a guest that Mary should leave, not knowing that the guest in question is Mary, the event cannot be described as *John told Mary to leave*. If Mary cannot be misidentified as distinct from the person John told to leave because control requires indistinctness, this is not an unexpected result, but neither is it crucially about *de se*.

[11] Bianchi (2003) argues that even cases like *serve* involve an implicit control by a benefactive dative, a position she takes to support the principled position that

control involves one event controlling another, such that logophoric players in the matrix event, the 'logophoric centre,' are the only possible antecedents for PRO in the controlled event (and she presents some interesting evidence on the basis of contrasts between *expect* and *require* verbs in Italian). Although I am sympathetic to the view that control is an event-to-event relationship, I doubt that logophoric roles, as opposed to event roles (theta-roles), are crucial across the full range of cases.

i. (For me) This evidence suffices to show that the earth is flat.
ii. (For me) These devices manage to account for the discrepancies.
iii. These circumstances coincided to force a withdrawal.
iv. Unfortunate events conspired to keep us apart..

For example, in (i), the addition of *for me* does not require *me* to be the controller (although Bianchi shows a contrast for similar Italian examples) under the reading that the speaker is satisfied that the evidence establishes the truth of the complement of *suffice*, and the same point can be made for ii. No ethical or benefactive dative can be inserted for iii. and iv. For cases like these (*manage*, explicitly), Bianchi argues that control is not necessarily mediated by events that have logophoric centres and then explores the systematic difference. I will not explore these interesting matters here, other than to note her agreement that control is not always *de se*.

[12] The indistinctness relation would also derive as a consequence the effect that PRO could not be different in gender from its antecedent, as in the cases Schlenker (2003:95-96) discusses, such as *John hopes (to be a woman) and to be worthy of himself/*herself.* Schlenker proposes splitting the features of PRO, such that the dependency of PRO on its antecedent is distinct from the requirement that gender features of PRO are interpreted outside the scope of the PA verb. The indistinctness relation, however it is formalized, would not permit the features or entities involved in these events to be different in any way, so no such split is necessary. This approach to control does not generalize to the tensed sentences where gender matters, but on these questions, see also Sharvit (2004). My account of indistinctness does have to be mitigated in some way to allow for what Landau (2000) calls partial obligatory control in cases like *Wally wants to meet at three o'clock* (e.g., one of the participants in the subordinate event must be indistinct from the controller), but I will not explore the matter here.

[13] I am not interested in the claim, made by Schlenker (2003), that shifted indexicals are "monsters" in Kaplan's (1989) sense. Von Stechow (2002) differs with Schlenker on whether or not his (Schlenker's) semantics has the consequence for the existence of monsters that Schlenker thinks it does and he develops an amendment of Schlenker's semantics (in part) to show this. If I am right, the debate is unnecessary, at least with respect to person.

[14] In languages that have a logophoric pronoun corresponding to the addressee of the PA verb, we might expect for there to be a contrast between what the addressee knows about a description and what the agent of the utterance knows about that description. Thus there should be cases where *his* pronouns of sentences like *The seer told Oedipus that his mother knew his father* could be interpreted as step-step, bio-bio, step-bio, or bio-step. I do not have the resources to test this with an appropriate language at this time.

[15] Two brief observations: First, Clements draws on observations about English developed by Ann Banfield in an article later subsumed in her book, Banfield (1982). Second, one could imagine that the AO I introduce sentence internally could be bound by a posited discourse operator with scope over spans of discourse. For reason to doubt that this would be the correct approach, however, see 5.0.

[16] Within minimalist thinking, there are other ways to model this relation in

terms of Chomsky's (2001) AGREE and its application to certain resumptive structures (see for example, McCloskey 2002). I will not enter into these possibilities here.

[17] Schlenker's (2003:83) theory introduces stipulations of this type. He introduces 'definite closure' to insure that agents of PA verbs are distinguished from agents of the utterance, or else all logophoric pronouns (which, like first person pronouns, bear a +author feature) would also have a first person usage. The purported advantage of this account is that languages with logophoric pronouns are predicted not to have a logophoric form for first person, but this would appear to introduce as a property of logical form a result that may have a functional explanation. When is it ever necessary to distinguish the agent of the utterance from the agent of the PA verb who is not other than the agent of the utterance (e.g., *I think that LP is smart* where LP=I)? Why would a special or logophoric form ever be useful for this reading, when the first person pronoun itself could serve the purpose? Moreover, the admittedly rare Gokana case reported by Hyman and Comrie (1981), if the fact as described holds up, would be damning for the 'nonexisting logical form' view, since in that language, using the logophoric form for first person is only reported as 'dispreferred,' as one would expect of something grammatically possible but functionally useless. In short, Gokana does not appear to confirm Schlenker's theory, but rather provides evidence against it.

[18] Moltmann (2003) develops an interesting account of EG *one* based on simulation theory. Her approach relies on the notion that *one* introduces a variable bound by a generic operator that "is associated with a particular 'mode of presentation', namely, the property of being identical to the relevant agent (e.g., the speaker)." The contradiction of (45a) by (45b) does not seem to be captured by this if the addressee and utterer each assumes he/she is different from the other. In other words, (45b) should not necessarily sound contradictory, contrary to fact. In my account it sounds contradictory because both conversational participants must be part of the set which the generic restriction picks out. Moltmann's account has more to offer than I can address here, however, and the interested reader is referred to it.

[19] It is not possible to argue that EG *one* is other than a pronoun because it behaves as a pronoun, rather than as a name or a description, with respect to Principle C effects.

i. *He* might suppose that better living through chemistry could improve *his*/**Bob Dole's* chance at happiness.
ii. *One* might suppose that better living through chemistry could improve *one's* chance at happiness.

[20] Consistent with Safir (2004b), I assume that EG *one* in the second disjunct of (63a) is anaphoric to the parallel *one* in the first disjunct, since dependency for x is possible in that theory wherever x does not c-command what it depends on. As noted in the text, the reason (63b) cannot have a strict reading concerns restrictions on scope, not the restrictions on dependency.

[21] If this account of the context sensitivity of EG *one* is correct, then it cannot be the case, as Schlenker (2003:85) contends, that third person simply corresponds to the lack of a presupposition that picks out the speaker or the addressee of the utterance. EG *one* agrees like a third person pronoun, but it has just the sort of indexical presupposition that Schlenker's theory requires a third person pronoun to lack.

[22] It is beyond the scope of this article to enter into the very interesting literature on proximate/obviative marking, which has a variety of fascinating effects on syntax and discourse. For a recent account with a partial survey, see especially Aissen (1997).

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