Lecture 10. Pronouns and Reflexives II: Varieties of reflexives, varieties of binding theories

Readings: Full references and links are in References at the end. These are all on the CD except for Kiparsky 2002, which is on the web.
(1) Büring (2004), Chapter 1.4 (Reflexive verbs and reflexive phraseologisms), Chapter 3 (Domains and orientation), Chapter 6 (The Coreference Rule), Chapter 11 (Exempt anaphora and reflexivity).
(2) (Testelets 2005), St.Petersburg Lectures on Binding Theory, Lecture 2: Domains, orientation, and a typology of pronouns and Lecture 3: Long-distance binding and Revisions of the Binding Theory
(3) (Reinhart and Reuland 1993) Reflexivity.
Optional readings:
(4) (Pollard and Sag 1992) Anaphors in English and the scope of binding theory.
(5) (Heim 1998) Anaphora and semantic interpretation: A reinterpretation of Reinhart's approach
(6) (Fischer 2004) Optimal binding – For next week
(7) (Kiparsky 2002) Disjoint reference and the typology of pronouns (not on your CD, but available on the web) – For next week

1. Is the distribution of "pronouns" and "anaphors" complementary?

1.1. Background (from the last two lectures)

(1) **Syntactic binding:** NP_1 syntactically binds NP_2 iff NP_1 and NP_2 are coindexed and NP_1 c-commands NP_2.

(2) *Binding conditions*

Condition A: An anaphor must be bound in its local domain.
Condition B: A pronoun must be free in its local domain.
Condition C: An R-expression must be free.

These conditions rule out the impossible choices of co-indexing in examples like *Lucie thought that Lili hurt her/ herself*, and also account for the contrasts in the following.

(3) a. $Felix_i$ invited $himself_i$.
b. *$Felix_i$ invited him_i. (This is a "condition B violation")

(4) a. $Lucie_i$ believes that we should elect her_i.
b. *$Lucie_i$ believes that we should elect $herself_i$. . (A "condition A violation")

Our main issues:

- How do the syntactic binding conditions relate to the semantics of anaphora? What happens when we distinguish "bound variable anaphora" from "coreference" and/or "pragmatic anaphora"?

- More distinctions: different kinds of reflexives, various properties of anaphoric expressions in various languages. What's the full range of syntactic anaphoric expressions, what's the full range of semantic (or semantic and pragmatic) varieties of anaphora, and how do syntax and semantics correlate cross-linguistically?

Conclusion argued for by Reinhart (Reinhart 1983a, Reinhart 1983b), Grodzinsky and Reinhart (1993), Bach and Partee (1980), Pollard and Sag (1992), and discussed a bit last week:

> **Semantic binding requires syntactic binding, but coreference does not.**

- Let's take some time to review what that means and what kinds of arguments help to establish it. Main tests for semantic binding: (i) Can have quantified antecedent like 'No student', 'Every student'; (ii) Strict vs. Sloppy Identity tests; (iii) the interpretation of sentences with subjects like "Only John". And what would be counter-evidence. **This remains one of the strongest generalizations about anaphora!**

1.2. The "complementarity question" and "domains"

So far we have not tried to be very precise about the notion of "local domain" in the statement of the binding principles A and B. The original idea was that there would be some clear syntactic definition of the relevant local domain, some more refined and precise definition of something analogous to the "(minimal) clause" (a verb together with all its arguments, for instance), and that Principle A and Principle B would apply in the same domain. If that were so, then the pronouns and anaphors would be in complementary distribution: where an anaphor is possible, a co-indexed pronoun is not, and vice versa. In simple cases, like (3) and (4) above, this is what we see.

Why anaphora is such a rich area of linguistic research: As researchers have looked more closely at anaphoric expressions (in the broad sense) within a given language, and especially across languages, it has become clear that (i) forms like reflexives and pronouns are very often NOT in complementary distribution; (ii) in order to develop a good account of the syntax and semantics of anaphora, it's necessary to make progress on a whole range of important problems, working on syntax and semantics hand in hand, including:

- what a "clause" is (or what analogs of the "clause" are relevant for the domains of anaphoric relations – see Büring's chapter 3 on domains and Testelets' Lecture 2 on domains)
- what the arguments of a predicate are, since "co-argument" status appears to be important for semantic binding (Montague 1970, Bach and Partee 1980, Pollard and Sag 1992, Reinhart and Reuland 1993)

- what the typology of kinds of anaphoric expressions is, since the simple division into "reflexives" and "pronouns" isn't adequate for a good explanation (more on that today and more in the next two weeks)
- whether Principle B belongs "in the grammar" or not; this leads to issues on the relation between syntax, semantics, and pragmatics, with interesting ideas coming in from Optimality Theory (Bach and Partee 1980, Pollard and Sag 1992, Reinhart and Reuland 1993, Kiparsky 2002, Fischer 2004) (more next week)
- on what syntactic and semantic "levels" the conditions on anaphora apply. The notions of command, c-command, 'co-argument domain', 'governing category', 'binding category', and others have been developed in response to observations about the distribution of anaphoric expressions, going back to Langacker (1969), who discovered one of the first constraints on the distribution of anaphora: "A pronoun may not both precede and command its antecedent". And the study of anaphora has been a crucial part in the development of notions of "logical form" and the overall architecture of grammar, especially the syntax-semantics interface. And we already saw in Heim's work how anaphora was central to one of the major innovations in semantic theory, from 'static' to 'dynamic' ("context-change") theories of semantics. Bach and Partee (1980) argued that semantic "function-argument" structure was more important than syntactic constituent structure for constraints on bound-variable anaphora; more recent work on "co-argument" constraints develops and refines similar ideas.

Büring (Chapter 1, page 11) has a useful way of categorizing some of the main factors in the study of binding theory, although in this initial statement he does not include the semantic distinction of semantic binding vs. coreference. So the following should be taken to be about components of a theory of *syntactic* binding.

> The general format of a Binding Condition can be schematized as in (1.33):
>
> (1.33) An NP of **class α** must (must not) be coindexed with a **commanding** NP within its **domain δ.**
>
> What needs to be made precise in each case are three things:
>
> - The **classification** of NPs according to their coreference and binding options. The classical binding theory has three classes: reflexives and reciprocals ('anaphors'), non-reflexive pronouns ('pronominals'), and non-pronominal or full NPs ('r-expressions').
> - The identification of one of more **domains** within which binding requirements apply. In the simplest case, it's the "minimal clause".
> - The formulation of a proper notion of **command** or *accessibility* as prerequisite for, and source of, asymmetry in binding. In the "chapter 1" version, it's linear precedence and c-command.

Initial evidence of non-complementarity

One source of difficulty for Chomsky's original Binding Theory is the fact that reflexive and non-reflexive pronouns are not actually in complementary distribution, even in English.

One problematic class of examples concerns "picture nouns", and more generally the issue of binding inside an NP. First some examples that suggest that the NP itself can be a binding domain if it has a "subject" in the form of a possessor.

(5)a. John$_5$ saw [a picture of himself$_5$ / *him$_5$] (This NP has no "subject", so domain = clause)
b. John$_5$ saw [Mary's picture of ??himself$_5$ / him$_5$] (binding domain = NP in this case)

So the definition of "local domain" was amended early on to include the notion of "subject":

(6)**Definition of *governing category*** (See Testelets Lecture 2 for more details and for related Russian examples) (Büring p. 50; I don't know the original reference for this version.)

γ is the *governing category* for NP, iff γ is the smallest category **that has a Subject** and dominates
(a) NP
(b) NP's case assigner
(where a Subject is either a clausal subject or a possessive)

But here are some examples where, unexpectedly, both pronoun and reflexive are possible for many speakers, contrary to what the definition in (6) would predict.

(7)a. *Hanna* found Peter's picture of *her*(*self*). (Büring p.51, from Keller and Asudeh (2001)
b. *John* believes [that pictures of *him/ himself* are on sale] (Büring p.52)

Prepositional phrases.

Many well-known cases of non-complementarity concern prepositional phrases, and these have been a problem for theories of anaphora for decades. Since PP's pretty clearly don't have subjects, we expect in a simple sentence with a PP in it, a reflexive can be bound from outside the PP, and a non-reflexive pronoun would have to be free within the whole clause.

Sometimes this prediction is indeed borne out: it turns out that the prediction works well for PPs whose NP can be regarded as an *argument of the verb*, where the preposition itself is "empty", and is simply "selected" by the verb. (These are the prepositions you learn to ignore when doing translations: just translate the verb and then do whatever the target language requires. For instance, in some languages, including Russian, the translation of (8a) below has no PP at all, but just an NP in the dative case.)

(8)a. John$_1$ sent a letter to him$_{*1}$/ himself$_1$. (In these two, it's as if the PP were just an NP)
b. John$_1$ always relies on him$_{*1}$/ himself$_1$.

But there are many PPs which allow both pronouns and reflexives.

(9)a. John$_1$ looked around him$_1$/ himself$_1$.
b. John$_1$ pulled the blanket over him$_1$/ himself$_1$.
c. Muhammed$_1$ hid the book behind him$_1$/ himself$_1$.

Such examples led various authors to propose that the domains for Condition A and Condition B are not the same. Büring summarizes the proposal of Hestvik (1991) as follows. First we define **NP's coargument domain** as the smallest XP that contains NP, NP's case assigner C, and all other arguments of C. Then the coargument domain for any argument of a verb will be its minimal clause. But since a preposition has only a complement and no subject, the coargument domain of an NP in a PP will be just the PP.

(10) **Binding conditions, Hestvik-style**
(A) A reflexive must be bound within the smallest category containing it, its case assigner, and a Subject (its Governing Category)
(B) A non-reflexive pronoun must be free in its coargument domain.

With these conditions, one can account for the non-complementarity seen in (9), but can no longer account for the complementarity seen in (8).

What is the difference between the PPs in (8) and those in (9)? As hinted at above, the prepositions in (8) are "semantically empty", and function much like case markers; from a semantic perspective, these NPs are arguments of the *verb*, not of the preposition. Those in (9), on the other hand, have real semantic content, and could be replaced by other prepositions with contrasting meanings. So there the NP is really a semantic argument of the preposition.

Bach and Partee (1980) represented this difference as a difference in semantic function-argument structure; syntacticians describe it using the notion of assignment of thematic roles (θ-roles): in the examples in (8), the NP gets its θ-role directly from the V, whereas in (9), the NP gets its θ-role from the P. The notion of "θ-role assigner" is basically the same as the notion of "semantic predicate".

So we can improve Condition B by changing the notion of "Coargument domain": we can replace the notion of "case assigner" by the notion of "θ-role assigner". (Büring p.55) (Note that this notion is closely connected to what we have called "function-argument structure".)

(11) **Revised definition[1]:**

> **NP's coargument domain** is the smallest XP that contains NP, NP's θ-role assigner (semantic predicate) C, and all other arguments of C.

(12) **Binding conditions, Hestvik-style, just with new notion of coargument domain**

> (A) A reflexive must be bound within the smallest category containing it, its case assigner, and a Subject (its Governing Category)
> (B) A non-reflexive pronoun must be free in its coargument domain.

Note that the "coargument domain" notion was more semantic than the earlier "governing category" notion, and that the replacement of "case assigner" by "θ-role assigner" in the definition of "coargument domain" is also a move toward a more semantically based definition.

What is surprising now is that Principle A is stated in very syntactic terms, and Principle B in quite semantic terms.

But further work by Reinhart and others on long-distance reflexives, "exempt reflexives", and semantic distinctions observable in some cases of non-complementarity has suggested that attention to semantics is needed for Principle A as well.[2] And as we saw last week in the work of Grodzinsky and Reinhart, Reinhart has argued that all binding conditions should apply only to bound-variable anaphora, not to coreference.

[1] Büring ends up with a more complex definition (p.56) based on a class of English examples that I don't want to discuss; I don't think I agree with his analysis of them, and I don't want to complicate the definition for their sake.

[2] As a semanticist, it is predictable that I am most interested in the semantic aspects of anaphora. But I should make it clear that I don't think you can study anaphora with semantics alone: the syntax of the constructions which allow or prohibit various kinds of anaphora is crucial as well. The cooperation of syntacticians and semanticists is required, and ideally, we need more people like Tanya Reinhart who pay equal attention to both.

2. Kinds of reflexives.

Chomsky's binding theory says that anaphors (typically understood to mean reflexives and reciprocals) must be locally bound. But many languages have what are known as "long-distance reflexives" (LDRs) which can be bound by an antecedent in a higher clause. Some of these have properties that resemble the properties of **logophors**, and that term itself has been broadened in recent years in the course of work on kinds of anaphors, especially by Reinhart and Reuland.

2.1. Logophoricity

Logophors are oriented toward a semantically or pragmatically determined class of antecedents rather than a specifically syntactic domain. Various languages have a special set of pronouns used to refer to the "source" of an embedded statement. The following is from Ewe (from Büring, p.60, who got it from Sells (1987)and Kuno (1987), who both got it from Clements (1975).)

(13) a. kofi$_1$ be **yè**$_{1/*2/*s}$ –dzo. (The subscript *s* is for "speaker")
Kofi say LOG left
'Kofi said that he (Kofi) left' (Logophoric)
b. kofi$_1$ be **e**$_{*1/2/*s}$ –dzo.
Kofi say he left
'Kofi said that he (other) left' ("he")
c. kofi$_1$ be **me**$_{*1/*2/s}$ –dzo.
Kofi say I left
'Kofi said that I left' ("I")

The pronoun *yè* can only refer to the subject of *be* 'say', not to any other person, speaker or not. Pronouns like that are called *logophoric*. In Ewe, the subject of *be happy, know, see* can antecede logophoric pronouns; in Tuburi, the experiencer of a psychological verb (*be afraid, be glad, hope*) can bind a logophor (Büring, pp. 60-61, citing Sells (1987) and Hagège (1974)).

To show that these logophoric pronouns are not just long-distance subject-oriented anaphors, Büring gives two examples with the Japanese logophoric pronoun *zibun* (from Sells 1987: 453ff).

(14) a. Takasi$_1$ wa Taroo$_2$ ni [Yosiko ga **zibun**$_{1/*2}$ o nikundeiru koto] o hanasita.
Takasi TOP TarooDAT Yosiko NOM self ACC be-hating COMP ACC told
'Takasi told Taroo that Yosiko hated him (Takasi).
b. Taroo$_2$ wa Takasi$_1$ kara [Yosiko ga **zibun**$_{1/*2}$ o nikundeiru koto] o kiita.
Taroo TOP Takasi from Yosiko NOM self ACC be-hating COMP ACC heard
'Taroo heard from Takasi that Yosiko hated him (Takasi).

If zibun were subject-oriented, we would expect it to refer to Takasi in (14a) and to Taroo in (14b). But it can refer only to Takasi in both; Takasi is the "source" of the embedded proposition in both sentences. In both cases, Takasi may have said to Taroo, "Yosiko hates **me**."

Another property of logophoric pronouns is that they can sometimes occur with no sentence-internal antecedent at all. Example (15) is from Icelandic; *sér* is the dative of the logophoric pronoun *sig*. (Büring p.62, from Sigurðsson (1986) via Sells (1987)).

(15) a. Formaðurinn$_1$ varð óskaplega reiður. Tillagan væri avívirðileg.

the chairman became furiously angry the proposal was-SUBJ outrageous
Væri henni beint gegn **sér** persónulega?
was-SUBJ it aimed against self personally
'The chairman became furiously angry. The proposal was outrageous. Was it aimed at him personally?'

The second and third sentences are clearly reporting the chairman's thoughts[3]. The choice of subjunctive helps to mark that. This allows the logophoric *sér* to be used with no sentence-internal binder.

All the examples with logophoric pronouns have paraphrases involving an embedded sentence containing a first-person pronoun, for instance as follows (Büring pp. 62-63):

(16) a. Kofi said, "I left."
b. Takasi told Taroo, "Yosiko hates me!"
c. Taroo heard from Takasi, "Yosiko hates me!"
d. The chairman, furiously angry, thinks: "The proposal is outrageous. Is it aimed at me personally?"

Büring (p. 63) offers a "rule of thumb" (i.e. not a formal rule, but a pretty good guide) for logophoric pronouns:

(17) A logophoric pronoun can be used if it is embedded in a constituent *c* such that (i) *c* is embedded, (ii) *c* denotes a proposition *p*, which (iii) can be paraphrased as a mental state or reported utterance of the pronoun's antecedent such that the paraphrase contains a first person pronoun in place of the given pronoun.

A potential antecedent of a logophoric pronoun is sometimes called a *logophoric center.*

Updated after the lecture: Note that a logophoric pronoun can be interpreted as a bound variable *or* as "free" (including "coreferential"). The examples above don't include any that are unambiguously bound variables, but they exist in the literature. For instance, for Japanese, I'm quite sure that you can get an analog of (14a) like "Every girl$_i$ told the teacher that Taroo was teasing zibun$_i$", and the same for a bound variable analog of (14b).

2.2. Long-distance reflexives

There are many languages in which reflexives do not need to be locally bound but can find an antecedent outside their minimal clause – often the antecedent needs to be a subject or a logophoric center. The term "long-distance reflexive" (LDR) has become common for referring to such reflexives. The Latin reflexive *se* (acc.)/ *sibi* (dat.) can be bound by a non-local antecedent if it is the subject of a verb of saying (Büring p.72).

(18) Iccius$_7$ nūntium mittit, nisi subsidium **sibi**$_7$ submittātur …
Iccius message sends if-not relief REFL-DAT furnished-PASSIVE
'Iccius sends a message that unless relief be given to himself ….

There are two kinds of accounts offered in the literature, a 'movement' kind of analysis and a 'logophor' kind of analysis. The movement analyses involve covert movement of the LDR into

[3] This technique when used in literature is known as *style indirect libre*, or 'free indirect style', and its linguistic properties are very interesting, since it works differently both from direct quotation and normal embedded indirect speech reports; see Banfield (1973).

the clause of its antecedent, after which it behaves according to Condition A. (Analogies have been made to 'clitic climbing'; LDRs, like clitics, are often short, prosodically weak forms.)

As for the logophoric-style analyses, we will see an example in Section 3, since Reinhart and Reuland (and also Pollard and Sag) also divide English reflexives into two classes, treating one class as basically logophoric. Büring (pp. 73-4) shows how Maling (1984) make a convincing case that the long-distance reflexives in Icelandic are indeed logophoric. Büring himself does not feel that any of the existing accounts are fully satisfactory.

Updated after the lecture: One semantic argument in favor of the "logophor" account: Long-Distance reflexives can be bound variables *or* coreferential/free; local reflexives are always bound variables. This is discussed in Kiparsky (2002); I'll include some data next week.

3. Reflexivity: Reinhart & Reuland, Pollard & Sag

As Büring makes clear, there is a great deal of similarity between Reinhart and Reuland's (R&R) account of reflexives and Pollard and Sag's (P&S) account, although they use different terminology and different theoretical frameworks. Both start from the problem of complementary vs. non-complementary positions, that is, positions in which reflexive and non-reflexive pronouns are in complementary distribution and positions in which they are not.

Complementary positions: NOTE: These reflexives are always bound variables!

(19) a. Max criticized himself/*him.
b. Some people talk to themselves/*them.
c. Lucie's pictures of herself/*her

Non-complementary positions: NOTE: These reflexives can be bound or free/coreferential!

(20) a. Lucie saw a picture of herself/ her.
b. Mary likes jokes about herself/ her.

(21) a. Max keeps a gun near himself/ him.
b. Lucie counted five tourists in the room apart from herself/ her.

(22) Max boasted that the queen had invited Lucie and himself/him for a drink.

A standard Binding Theory response to this problem is to try to adjust the domains for Conditions A and B so that the domain in which non-reflexives must be free is smaller than the domain in which reflexives must be bound.

R&R and P&S make a radical departure from standard Binding Theory. They both assume that there is instead a major difference between the reflexives in complementary positions ("regular positions") and those in non-complementary positions ("exempt positions"), and that **only the ones in complementary positions – where they are interpreted as semantically bound (i.e. as bound variables) -- are subject to syntactic binding requirements at all.**

Here is Büring's paraphrase of Pollard and Sag's proposal (Büring, p. 223)

(23) **Pollard and Sag's Binding Theory**

Binding Condition A: A reflexive/reciprocal must be bound by a less oblique coargument, if there is one.

Exempt Anaphor Condition: A reflexive/reciprocal that doesn't have a less oblique coargument must denote a *designated participant.*

Binding Condition B is then the complement of Binding Condition A; all examples of non-complementarity are held to involve exempt anaphors occurring in exempt positions.

These conditions can account for the examples above.

They can also account for the interesting observation that in all the positions that count as exempt, one can find examples where the reflexive doesn't have a local antecedent at all – not c-commanding it, not even in the same clause. (Büring p. 224, from sources cited there.)

(24) a. It angered him that she … tried to attract a man like himself.
b. John's campaign requires that pictures of himself be placed all over town.
c. John was furious. The picture of himself in the museum had been mutilated.

What is a *designated participant*? That is not formally defined, but Büring summarizes what is said about it by P&S and by R&R as follows:

(25) a. First and second person exempt anaphors don't need linguistic antecedents at all; speaker and hearer are automatically designated participants.
b. Third person exempt anaphors need an antecedent.

First and second person examples:

(26) a. There were five tourists in the room apart from myself/ me.
b. Er waren vijf toeristen in de kamer behalve mezelf. (Dutch)
c. Physicists like yourself are a godsend.
d. 'She gave both Brenda and myself a dirty look.'

Third person examples:

(27) a. ?* Mary tried to attract a man like himself.
b. 'It angered him that she …. tried to attract a man like himself.'

Note that in complementary positions, adding such an antecedent doesn't help at all.

(28) a. *She tried to attract himself.
b. *It angered him that she tried to attract himself.

Properties of exempt positions: pronouns in those positions *do not have a higher coargument*: either the predicate isn't accompanied by a higher coargument (*pictures of, jokes about*, with no possessive), or because it doesn't have one at all (*near, apart from, in addition to, including, except, other than, like*), or because the pronoun itself isn't an argument but only part of an argument (the coordination examples).

Extending the PP data from Chapter 3, Büring concludes that one can indeed distinguish between Ps whose NP argument is in a 'regular' (complementary) position and those whose argument is in an exempt position (pp. 229-232); he concludes that reflexives within PPs are exempt anaphors in all cases except for argument PPs headed by semantically inert Ps, and that the needed notion of "higher coargument" for the binding conditions must be defined as including all arguments to heads that assign either case or a θ-role to the reflexive.

Reinhart & Reuland's theory of Reflexivity.

Reinhart and Reuland observe that long-distance reflexives (Dutch *zich*, Norwegian *seg*, Italian *sè*) are always morphologically simplex (one morpheme; Faltz (1977)), whereas reflexives that are limited to local domains may be simplex or complex (English *himself*, Dutch *zichzelf*,

Norwegian *seg selv*). R&R abbreviate these two types as "SE anaphors" ("Simplex Expressions") and "SELF anaphors".

They thus draw a major three-way distinction among SELF-anaphors, SE-anaphors, and pronouns. They hypothesize that SELF anaphors function to reflexivize predicates, whereas plain pronouns have a 'referential' function, and SE anaphors do neither.

SE anaphors need not be locally bound, but are always subject-oriented. Both SE-anaphors and SELF-anaphors can sometimes be used logophorically, and failure to distinguish between 'grammatical' and 'logophoric' functions in research on anaphora has been responsible for many misconceptions.

R&R's substitute for Condition A is the following:

(29) **Reinhart & Reuland Condition A:** A reflexive-marked syntactic predicate is reflexive.

Some definitions: a "**predicate**" is something that has an external argument (a subject) (so this means that NPs that are complements to categories without a 'subject' are automatically exempt.) A predicate is called **reflexive** if it has two coindexed arguments.

A predicate P is **reflexive-marked** if either P is lexically reflexive or one of P's arguments is a SELF anaphor.

So Condition A says that if a SELF anaphor occurs as an argument of a syntactic predicate, then that predicate must have two coindexed arguments. And as Reinhart had already emphasized, she takes coindexing to always mark bound variable anaphora, not coreference.

(30) **Reinhart & Reuland Condition B:** A reflexive predicate is reflexive marked.

I.e., if it has two coindexed arguments, one of them must be a SELF anaphor. So the arguments can't consist of a name and a pronoun, or two pronouns. And with respect to condition B, SE anaphors are like pronouns. So SE anaphors can only be long-distance, not local.

(31) Jan haat zichzelf/ *hem / *zich. (Dutch; R&R p. 661)
Jan hates himself / *him / *SE
(32) Jan zag [jou achter zich/ hem staan].
Jan saw [you behind SE/ him stand]
'Jan saw you stand behind SE/him.'

As allowed for in their conditions, intrinsically (lexically) reflexive predicates allow local SE, because they are reflexive-marked by virtue of being lexically reflexive.

(33) a. Max wast zich.
Max washes SE.
b. Max schaamt zich.
Max shames SE
'Max is ashamed.'

A SELF anaphor can be used logophorically just in case it does not occupy an argument place of a predicate (in their sense of 'predicate'); they use the term *logophoric* to include both the traditional logophors discussed above and also *emphatic* uses of reflexives:

(34) a. This letter was addressed only to myself.
b. Why should the state always take precedence over myself?
c. "Bismarck's impulsiveness has, as so often, rebounded against himself."
(R&R, p. 672)

Logophors, on their view, do not have to be bound variables, though they may be. But reflexive-marking a predicate is an operation on its argument structure, so it always results in variable-binding.

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