

Effects of creator role on binding into Picture Noun Phrases

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Background and Goal – It has long been observed that reflexives in Picture Noun Phrases (PNPs) seem to exhibit exceptional behavior in their ability to escape the locality conditions imposed by Condition A (Warshawsky 1965, Ross 1967, Postal 1971, Jackendoff 1972, Drummond et al. 2011, i.a.). The standard solution offered within the GB framework is that PNPs may contain an agentive PRO subject identified with the creator of the representation, by which reflexive complements are locally bound (Abney 1986, Chomsky 1986, Davies & Dubinsky 2003, Stowell 1989, i.a.). On the other hand, predicate-based theories (Pollard & Sag 1992, Reinhart & Reuland 1993, Safir 2004, Reuland 2011, i.a.), which define Condition A as obligatory coargument binding, propose that PNP complements lack coarguments and are thus exempt from Condition A: their distribution is instead determined by discourse conditions related to perspective (logophoricity). Refining the exemption story to account for the distribution of inanimate reflexives, Charnavel & Sportiche (2016) argue that anaphors, including PNP reflexives, in fact exhibit a dual behavior (cf. Lebeaux 1984): either they are plain, in which case they must be locally and exhaustively bound as per the Chomskyan Condition A and need not be logophoric (1); or they are exempt, in which case they do not require a local or exhaustive binder, nor even any binder, but must be interpreted logophorically (2a vs. 2b).

- 1) a. [The automatic camera]_i took a picture of itself_i. *Minkoff 2004*
b. [The witty play]_i contains a parody of itself_i.
- 2) a. *That ugly picture of itself_i hurt [the car]_i. (when it fell on it). *Minkoff 1994*
b. That ugly picture of himself_i hurt John_i. (emotionally) *Minkoff 1994*

The goal of the present study is to mediate between subject projection and exemption accounts for exceptional PNP reflexives. Specifically, we propose that both subject binding and exemption are correct, but that they apply in complementary contexts. Crucial to this claim is Ahn's (2015) distinction between Local Subject-Oriented Reflexives, which are extrametrical in broad focus contexts (3), and reflexives bound by a derived subject, by an object or out of an island, which can bear nuclear stress (4). Charnavel & Sportiche (2016) suggest that logophoric exemption is precluded in positions that can host Local Subject-Oriented Reflexives (5a vs. 5b).

- 3) a. *What happened in the kitchen?* Remy_i accidentally burned {**Maríe**/**#himsélf**_i}. *Ahn 2015*
b. *What happened in the kitchen?* Remy_i accidentally **búrned** {**#Marie**/**himsélf**_i}.
- 4) a. *What is the setup for the show?* Louis_i plays a character like {his **bróther**/**himsélf**_i}. *Ahn 2015*
b. *What is the setup for the show?* Louis_i plays a character **like** {**#his brother**/**#himsélf**_i}.
- 5) a. It angered him_i that she tried to attract a man like himself_i. *Reinhart & Reuland 1993*
b. *It angered him_i that she tried to attract himself_i.

We argue that the competition between local subject binding and exemption extends to PNPs, such that binding by a DP-external antecedent is permitted only in the absence of a DP-internal subject. Based on novel findings from a grammaticality judgement task, we aim to clarify the conditions under which PNPs project an internal subject and how this affects the grammaticality of PNP reflexive complements.

Experiment – Adopting the assumption that PNP subjects denote creators, we hypothesize that the acceptability of PNP reflexives is constrained by syntactic representation of the creator within the PNP. Specifically, because DP-internal subject projection would render reflexive complements eligible for local subject binding, we predict that a PNP reflexive must refer to the creator whenever the creator is syntactically represented; otherwise, binding by an antecedent complying with either Condition A (cf. 1b) or logophoricity requirements (cf. 2b) is acceptable, regardless of the antecedent's semantic role. In order to test this prediction, we designed a grammaticality judgement survey that presented respondents with PNP reflexives in both definite and possessive PNPs across the following binding conditions: local vs. non-local, [+creation] verb vs. [-creation] verb, creator antecedent vs. non-creator antecedent. DP referent type (result vs. concrete) was also considered, following Davies & Dubinsky's (2003) proposal that argument projection is limited to PNPs that refer to the content of the representation rather than the physical object.

Results – We collected the judgements of 108 native English speakers using Amazon Mechanical Turk. Participants were presented with 30 context-sentence pairs (where contexts, excluded here for space, specified the creator in [-creation] conditions) and were asked to rate each sentence using a sliding scale from 1 through 7. The grammaticality contrasts reported below (OK/*) reflect statistically significant differences in mean rating ($p < 0.05$). Three main findings emerge from our study. First, and most strikingly, the results show that reflexive goal arguments (e.g. *letter to himself*) are acceptable only when anteceded by the creator: they cannot be bound by a non-creator verbal subject (6b) or possessor (7b), even when Condition A is satisfied by the surface syntax. We conclude that PNPs with goal arguments obligatorily project a creator subject, by which the reflexive goal must be bound. Crucially, this effect holds even when the DP refers to a physical object (8b), revealing that argument projection is not limited to result PNPs.

- 6) Ellis_i enjoyed the letter to himself_i. [letter written by {a. Ellis; *b. his sister}]
- 7) Kyle_i was touched by Sasha_k's letter to herself_k. [letter written by {a. Sasha; *b. her brother}]
- 8) Wyatt_i tore up Vanessa_k's letter to herself_k. [letter written by {a. Vanessa; *b. her boyfriend}]

Second, our findings likewise show that PNP complements of [+creation] verbs obligatorily project a creator subject: the reflexive can neither take a non-creator logophoric antecedent (9), nor a non-creator possessor antecedent (10).

- 9) *[Jackie_i's brother]_k painted the picture of herself_i.
- 10) *Gordon_i wrote Faye_k's book about herself_k.

Third, we however found that PNPs which neither contain goal arguments nor are complements of creation verbs permit non-creator binding even when the creator is contextually salient: reflexives in such PNPs can be bound by a non-creator plain antecedent (11 vs. 6b, 12 vs. 7b,10) or a non-creator logophoric antecedent (13,14 vs. 9). Hence, for these examples, we observe no evidence of subject projection.

- 11) Ellis_i didn't like the portrait of himself_i. [portrait painted by his sister]
- 12) Kyle_i liked Sasha_k's picture of herself_k. [picture painted by Sasha's brother]
- 13) The fire Hannah_i started destroyed the photo of herself_i. [photo taken by Hannah's husband]
- 14) Ben_i didn't like Amanda_k's portrait of himself_i. [portrait painted by Amanda]

In sum, our results confirm the predicted effect of binding competition on the acceptability of PNP reflexives and specify that PNP subject projection is obligatory only if the PNP is introduced by a creation verb or contains a goal argument. In addition to this main finding, we also found that non-creator possessors are excluded from PNPs with goal arguments (15) and PNP complements of [+creation] verbs (16), though not from other PNPs (17), suggesting an additional constraint against the projection of non-identical PNP subjects and possessors. We leave this for future investigation.

- 15) *Oscar_i is fond of Paula's letter to himself_i. [letter written by Oscar]
- 16) *David_i wrote Erica_k's book about himself_i.
- 17) Roger_i threw away Cora_i's book about himself_i. [book written by Roger]

Conclusion – Our study sheds new light on both the structure of PNPs and on the distribution of English reflexives. First, our survey results clarify the conditions under which DP-subject projection is obligatory. Second, they support our hypothesis that both local subject binding and exemption play a role in PNP reflexives binding: when PNPs project covert creator subjects, these subjects are the only potential binders of reflexive complements; when PNPs do not project covert creator subjects, PNP-external DPs can serve as antecedents. This finding supports extending to PNPs the generalization that reflexives can only be exempt if there is no available potential local subject binder.

Selected References – Ahn 2015: *Giving reflexivity a voice: Twin reflexives in English* (UCLA dissertation); Charnavel & Sportiche 2016: Anaphor binding: What French inanimate anaphors show. *Linguistic Inquiry*, 47(1), 35-87; Chomsky 1986: *Knowledge of language: Its nature, origin, and use*; Davies & Dubinsky 2003: On extraction from NPs. *Natural language & linguistic theory*, 21(1), 1-37; Drummond et al. 2011: Minimalist construal: Two approaches to A and B. *The Oxford handbook of linguistic minimalism*, 396-426; Jackendoff 1972: *Semantic interpretation in generative grammar*; Pollard & Sag 1992: Anaphors in English and the scope of binding theory. *Linguistic inquiry*, 23(2), 261-303; Reuland 2011: *Anaphora and language design*; Safir 2004: *The syntax of anaphora*; Stowell 1989: Subjects, specifiers, and X-bar theory. *Alternative conceptions of phrase structure*, 232-262.