

Scope Freezing in PP Dative Constructions?
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The English Double Object Construction (1b) and the *with*-variant of the *Spray-Load* construction (2b) show surface scope freezing (Larson 1990, attributed to David Lebeaux):

- (1) a. The teacher gave a book to every student. ($\exists > \forall, \forall > \exists$)
 b. The teacher gave **a student every book**. ($\exists > \forall, * \forall > \exists$)
- (2) a. Maud draped a cover over every armchair. ($\exists > \forall, \forall > \exists$)
 b. Maud draped an armchair **with every cover**. ($\exists > \forall, * \forall > \exists$)

Russian exhibits ditransitives wherein one order of arguments is scopally ambiguous and the other is frozen, similar to PP-DOC alternations (Antonyuk 2015). Some Russian predicates are ambiguous in ACC-OBL order, but frozen in the reverse order (3a,b). Some are ambiguous in OBL-ACC order, and frozen in the reverse (4a,b). And some predicates are ambiguous in both (5a,b)¹.

- (3) a. Maša potrebovala [_{DP} **kakije-to dokumenty**] [_{PP} **s každygo posetitelja**]
 Masha demanded some documents.ACC from every visitor *ACC-OBLIQUE*
 ‘Masha demanded some documents from every visitor’ ($\exists > \forall, \forall > \exists$)
- b. Maša potrebovala [_{PP} **s kakogo-to posetitelja**] [_{DP} **každyi dokument**]
 Masha demanded from some visitor every document.ACC *OBLIQUE-ACC*
 ‘Masha demanded every document from some visitor’ ($\exists > \forall, * \forall > \exists$)
- (4) a. Maša obozvala [_{DP} **kakim-to prozviščem**] [_{DP} **každygo mal’čika**]
 Masha called some nickname.INSTR every boy.ACC *OBLIQUE-ACC*
 ‘Masha called every boy by some nickname’ ($\exists > \forall, \forall > \exists$)
- b. Maša obozvala [_{DP} **kakogo-to mal’čika**] [_{DP} **každym prozviščem**]
 Masha called some boy.ACC every nickname.INSTR *ACC-OBLIQUE*
 ‘Masha called some boy by every nickname’ ($\exists > \forall, * \forall > \exists$)
- (5) a. Maša napisala [_{DP} **kakoj-to slogan**] [_{PP} **na každoj stene**]
 Masha wrote some slogan.ACC on every wall.GEN *ACC-OBLIQUE*
 ‘Masha wrote some slogan on every wall’ ($\exists > \forall, \forall > \exists$)
- b. Maša napisala [_{PP} **na kakoj-to stene**] [_{DP} **každyj slogan**]
 Masha wrote on some wall.GEN every slogan.ACC *OBLIQUE-ACC*
 ‘Masha wrote every slogan on some wall’ ($\exists > \forall, \forall > \exists$)

¹ Note that the relative nature of scope freezing (i)-(ii) holds with Russian ditransitives as well (see (8a)-(9a)):

- (i) a. I promised to rent someone every apartment in the building. (Larson 1990)
 b. ‘I promised that I would rent someone every apartment in the building.’
 c. ‘I promised to someone that I would him/her every apartment in the building.’
 d. ‘There is someone such that for each every apartment in the building, I promised to rent him/her it’
 promise > $\exists > \forall$ = (ib)
 $\exists >$ promise > \forall = (ic)
 $\exists > \forall >$ promise = (id)
- (ii) a. A (different) teacher gave me every book. ($\forall > \exists$) (Bruening 2001)
 b. A (different) teacher gave someone every book.
 (**someone** > **every** > **a**): there is someone x, such that for every book y, a different teacher z, z gave y to x.

Introduction of focus (marked by accent) alters this picture in certain cases. Focusing the outer object determiner in an ambiguous order induces wide scope on the focused QP (6a-d):

- (6) a. Maša potrebovala [_{DP} **kakije-to dokumenty**] [_{PP} s **KAždogo posetitelja**]
 Masha demanded some documents.ACC from EVERY VISITOR.FOC *ACC-OBLIQUE*
 ‘Masha demanded some documents from every visitor’ ($\forall > \exists$, $*\exists > \forall$) (cf. 3a)
- b. Maša obozvala [_{DP} **kakim-to prozviščem**] [_{DP} **KAždogo mal’čika**]
 Masha called some nickname.INSTR EVERY BOY.ACC.FOC *OBLIQUE-ACC*
 ‘Masha called every boy by some nickname’ ($\forall > \exists$, $*\exists > \forall$) (cf. 4a)
- c. Maša napisala [_{DP} **kakoj-to slogan**] [_{PP} na **KAždoj stene**]
 Masha wrote some slogan.ACC on EVERY WALL.GEN *ACC-OBLIQUE*
 ‘Masha wrote some slogan on every wall’ ($\forall > \exists$, $*\exists > \forall$) (cf. 5a)
- d. Maša napisala [_{PP} na **kakoi-to stene**] [_{DP} **KAždyj slogan**]
 Masha wrote on some wall.GEN EVERY SLOGAN.ACC *OBLIQUE-ACC*
 ‘Masha wrote every slogan on some wall’ ($\forall > \exists$, $*\exists > \forall$) (cf. 5b)

By contrast, focusing the outer object in a frozen order yields no change in interpretation:

- (7) a. Maša potrebovala [_{PP} s **kakogo-to posetitelja**] [_{DP} **KAždyi document**]
 Masha demanded from some visitor EVERY DOCUMENT.ACC *OBLIQUE-ACC*
 ‘Masha demanded every document from some visitor’ ($\exists > \forall$, $*\forall > \exists$) (cf. 3b)
- b. Maša obozvala [_{DP} **kakogo-to mal’čika**] [_{DP} **KAždym prozviščem**]
 Masha called some boy.ACC EVERY NICKNAME.INSTR *ACC-OBLIQUE*
 ‘Masha called some boy by every nickname’ ($\exists > \forall$, $*\forall > \exists$) (cf. 4b)
- c. Maša nakryla [**kakoe-to kreslo**] [**KAždoj prostynej**]
 Masha covered some chair.ACC every sheet.INSTR.FOC *ACC-OBLIQUE*
 ‘Masha covered some chair with every sheet’ ($\exists > \forall$), $*(\forall > \exists)$
- d. Maša zarazila [**kakogo-to pacienta**] [**KAždoj bolezn’ju**]
 Masha infected some patient.ACC every illness.INSTR.FOC *ACC-OBLIQUE*
 ‘Masha infected some patient with every illness’ ($\exists > \forall$), $*(\forall > \exists)$

Thus whereas focus can disambiguate a scopally ambiguous structure (6a-d), focus apparently cannot “ambiguate” a frozen scope structure (7a-d). These facts strongly suggest that argument permutation and focus represent two independent sources of scope determination².

These data raise two interesting questions:

Q1: how does focus disambiguate a scopally ambiguous structure?

Q2: why doesn’t focus affect scope at all in a scopally frozen structure?

The answer to Q1 appears to be straightforward: we argue that a focused QP undergoes covert focus raising to a high functional projection, FP, to check a strong focus feature³. The high position of FP in the tree results in the wide scope for the focused phrase wrt other QPs in a sentence.

² Antonyuk (2015) argues for a derivational analysis of Russian ditransitives, with scope freezing resulting from an overt instance of a lower QP crossing over a higher one as a result of a single instance of movement; this instance of overt QP crossing is argued to establish a Relation R – a syntactic binding relation, with the overtly moved QP binding a variable in the nominal restriction of the lower QP, which straightforwardly accounts for the relative nature of scope freezing as well as for scope freezing found in other syntactic contexts in Russian, such as with reflexive monotransitives and with cases of overt QP scrambling across a structurally higher QP.

³ Evidence for LF focus movement is familiar since Chomsky (1976), who analyzed (i) as involving covert (quantificational) focus movement leading to a WCO violation:

(i) *His_i mother loves JOHN_i.

Preliminary supporting evidence:

- (8) a. [**Kakoj-to rebjonok**] narisoval kartinki [**na každoj stene**] ($\exists > \forall, \forall > \exists$)
 Some child.NOM drew pictures on every wall.GEN
 ‘Some child drew pictures on every wall’
 b. [**Kakoj-to rebjonok**] narisoval kartinki [**na KAždoj stene**] ($??/*\exists > \forall, \forall > \exists$)
 Some child.NOM drew pictures on every wall.GEN
 ‘Every wall is such that some child or other drew pictures on it’
- (9) a. [**Neskol’ko tamožennikov**] potrebovali s menja [_{DP} **každyi document**] ($\exists > \forall, \forall > \exists$)
 Several customs workers demanded from me every document.ACC
 ‘Several customs officers demanded every document from me’
 b. [**Neskol’ko tamožennikov**] potrebovali s menja [_{DP} **KAždyi document**] ($??/*\exists > \forall, \forall > \exists$)
 Several customs workers demanded from me every document.ACC
 ‘Every document is such that several (possibly different) customs officers demanded it from me’”

The answer to Q2 depends on one’s theory of scope freezing and will be left without a definitive answer for now⁴.

However, one theory that is immediately falsified by the data in (7) is the Superiority account of scope freezing (Bruening 2001) since a feature-driven account of scope freezing predicts that the focus feature on a higher probe would not be in competition with a P feature on little *v* that is responsible for QR. Thus on Superiority account we predict that focus would disrupt surface scope rigidity and would result in wide scope for the focused QP (similarly to (6)).

Russian scope and focus facts in (6) and (7) also undercut Bruening’s central argument for the *R-dative shift* account of *to*-datives in (13)-(14a) below (Bruening 2010, 2014).

Non-derivational accounts of the DOC and the PP Dative construction point to the contrast in pairs such as (10)-(11) as evidence that the two constructions should not be analyzed as derivationally related (Green 1974, Oehrle 1976, Gropen et al.1989):

- (10) a. The lightning here gives me a headache.
 b. *The lightning here gives a headache to me.

- (11) a. The count gives me the creeps.
 b. *The count gives the creeps to me.

Additionally, there are non-alternating pairs, like (12):

- (12) a. The boss denied George his pay. (Bruening 2010)
 b. *The boss denied his pay to George.

Bresnan et al. (2007), Bresnan and Nikitina (2007) argue that such contrasts are spurious, and are obliterated under certain conditions (when the goal NP is “heavy”):

⁴ See Antonyuk (2015) for a discussion of the Superiority account (Bruening 2001), Scope Economy account (Antonyuk-Yudina 2009), the Cyclic Linearization account of scope freezing (Larson and Harada 2011) and the new Relation R account proposed there.

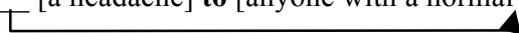
(13) a. ... a stench or smell is diffused over the ship that would give a headache to the most athletic constitution. (Bresnan and Nikitina 2007:4, (15))

b. This story is designed to give the creeps to people who hate spiders. (Bresnan et al. 2007:72, (6b))

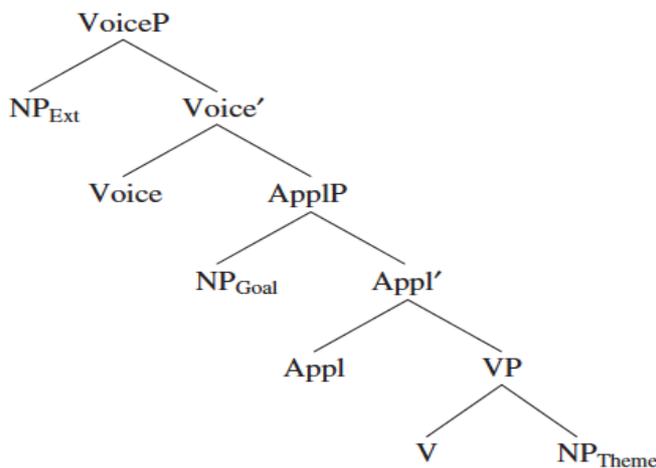
c. Who could deny something to someone so dedicated to the causes of international friendship and collaboration? (Bresnan and Nikitina 2007:6, (22)).

Bruening (2010) suggests that constructions like (14a), involving “DOC idioms”, are not “true PP datives” but rather underlyingly DOCs (14b), disguised by an “anti-dative shift” operation, the so-called *R-dative shift* (14c).

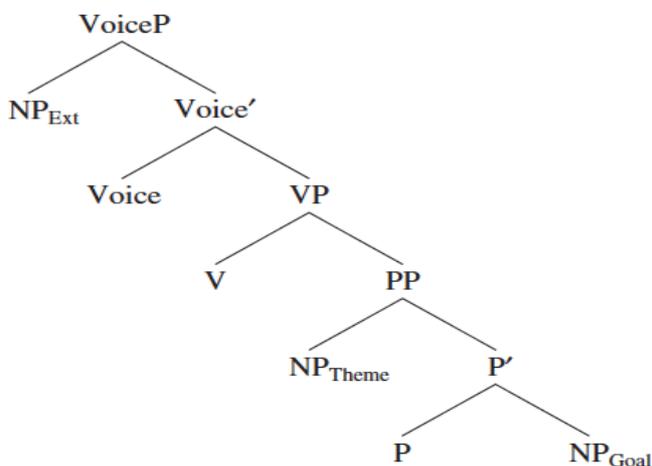
- (14)a. This lighting would give a headache to anyone with a normal constitution.
- b. This lighting would give [anyone with a normal constitution] [a headache].
- c. This lighting gives [a headache] to [anyone with a normal constitution].



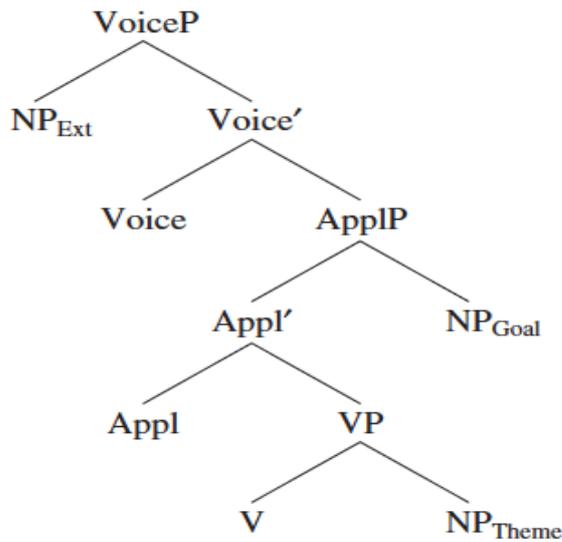
(15) Double Object Construction:



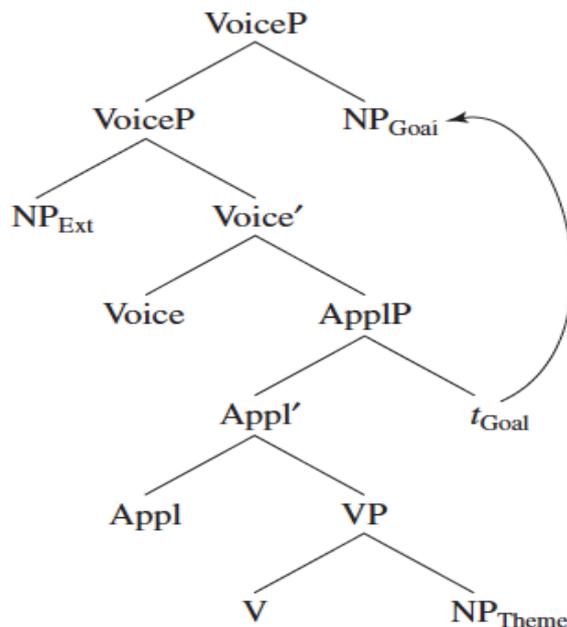
(16) The PP Dative Construction:



(17) The R-shifted DOC:



(18)

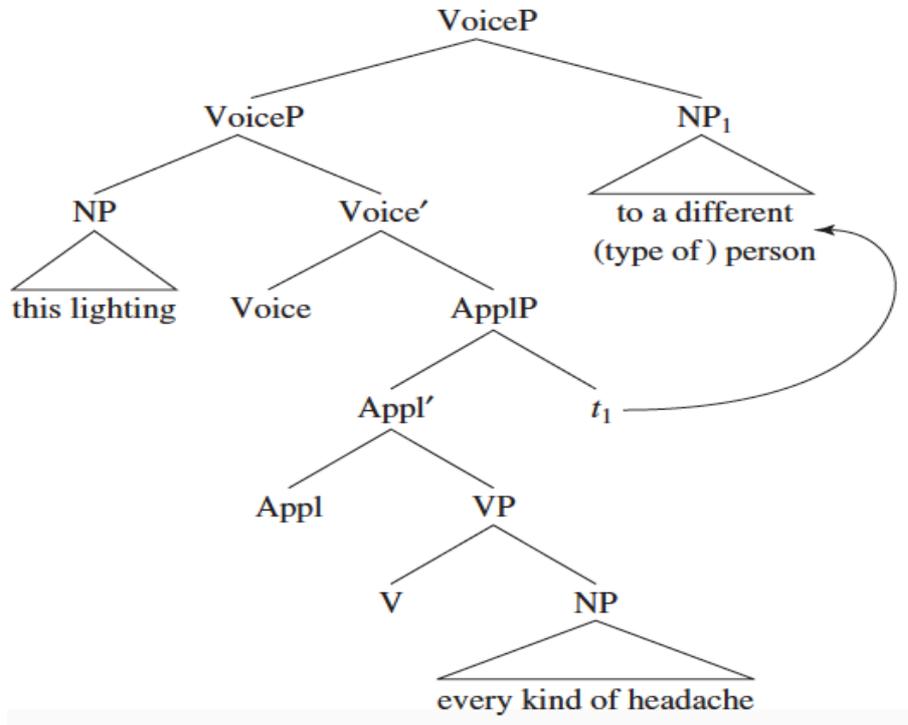


- (19) **The Extraction Constraint on Rightward Specifiers** (Bruening 2010)
 The specifier of ApplP may be ordered to the right of its sister only if the NP that occupies it undergoes A-Bar Extraction.

In support, Bruening claims that “scope freezing” in DOCs also holds in “disguised PP datives”. The DOC (20a) is scope frozen in the surface IO>DO word order; but the “PP dative” (20b) prefers scope in the (non-typical) contra-surface IO>DO order (cf. 20c). Bruening proposes that the IO in (20b) has moved to a high right Spec, preserving the c-command relations in DOCs that create scope freezing (20a) under his Superiority-based account:

- (20) a. This lighting gives [a different person] [every kind of headache]. ($\exists > \forall, * \forall > \exists$)
 b. This lighting gives [every kind of headache] to [a different (type of) person]. ($\exists > \forall, * \forall > \exists$)
 c. The instructor gave [every headache pill] to [a different person]. ($\forall > \exists, \exists > \forall$)

(21) The proposed structure for (20b):



Bruening (2014): “The significance of the R-Dative Shift analysis being the only successful one proposed so far should be clear: If it is correct, it indicates that double object constructions and prepositional dative constructions are derivationally and semantically distinct. The failure of O&R’s alternative is indicative of a broader failure: the view that the two are not distinct, and should be derivationally related, cannot account for the empirical facts” (p.2)

We argue that (13) and (14a) are true PP datives, the apparent scope preference in (20b) representing the intrusion of focus: => scope preferences in (20a)(=a true DOC) and (20b) (=a PP Dative) thus have different sources.

- (14) a. This lighting would give a headache **to anyone with a normal constitution.**
 (20) a. This lighting gives [a different person] [every kind of headache] ($\exists > \forall, * \forall > \exists$)
 b. This lighting gives [every kind of headache] [**to a different (type of) person**] ($\exists > \forall, * \forall > \exists$)

Suppose, following Bresnan (2007), Bresnan & Nikitina (2009), Larson (2014) i.a. PP datives and DOCs are neither thematically nor truth conditionally distinct and that speaker choice among them is determined by pragmatic factors. Specifically, suppose contrasts like (21a,b), cited by Bruening (2010), reflect the fact that IO position in DOCs and applicative structures favor old information/topics (e.g., pronouns), whereas final position favors new information and foci (Gerds and Kiyosawa 2005a,b). Evidence for this view (familiar since Green 1974), is that definiteness on the DO (21c) and/or heaviness/contrastive stress on the *to*-object significantly improve such PP structures (21d,e):

- (21) a. The lighting here gives me a headache.
 b. #The lighting here gives a headache to me.

- c. The lighting here would give a headache to anyone who stayed in it longer than an hour.
- d. The headache that that lighting gave to John was like none he had ever experienced.
- e. A: The lighting gave Jim a headache?
B: No, the lighting gave a headache to ME, you idiot!

Assume now that the *to*-object quantifier in final position is focused in constructions like (20b).

- (20) a. This lighting gives [a different person] [every kind of headache] ($\exists > \forall, * \forall > \exists$)
- b. This lighting gives [every kind of headache] [**to a different (type of) person**] ($\exists > \forall, * \forall > \exists$)

The scope facts in (20b) then fall under the Russian pattern observed above. In the ambiguous PP dative structure, focus on a final quantifier is expected to induce wide scope (cf. 6a-d). However, as the Russian facts show, wide scope for the *to*-object quantifier is independent of the scope freezing induced by the DOC argument permutation. Hence there is no reason to assume the scope limitations in (20a,b) reflect a common derivation, contra Bruening and thus no reason to believe sentences such as (13) and (14a)/(20b) are disguised DOCs rather than true PP Datives⁵.

Q: Is there any evidence that the Russian data above is related to the Bruening paradigm in (14)? That is, is there any reason to believe that the *to*-PP is obligatorily focused in (14a)?

- (14) a. This lighting would give a headache to anyone with a normal constitution.

This conclusion is supported by the following paradigm:

- (22) A: Who does this lighting give a headache to?
B: \surd This lighting gives a headache to [anyone with a normal constitution]
B: ##This lighting gives a headache to anyone with a normal [constitution]

When the question requires narrow contrastive focus, this sentences with the above bracketing becomes acceptable:

- (23) A: Does this lighting give a headache to anyone with normal eyesight?
B: No, you idiot! This lighting gives a headache to anyone with a normal [constitution]!

(14a) cannot serve as an answer to a neutral, out-of-the-blue question:

- (24) A: What happened?
B: ##This lighting gives a headache to anyone with a normal constitution.

Finally, the Russian focus paradigm is directly replicable in English:

- (25) a. The teacher assigned some problem to every student. ($\exists > \forall, \forall > \exists$)
- b. The teacher assigned some problem to EVERY student. ($* \exists > \forall, \forall > \exists$)

THANK YOU!

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⁵ Notice that our account, if correct, also provides evidence against Ormazabal and Romero's (2012) treatment of Bruening's R-dative shifted cases as true PP Datives, which derive the obligatory inverse scope via vacuous extraposition of the PP to the right.

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