Negative Polarity Indefinite Pronouns in Slovenian

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Kristina Gregorčič, PhD student of descriptive linguistics, Faculty of Arts, University of Ljubljana, kristina.gregorcic@ff.uni-lj.si

Research Problem

Slovenian polarity sensitive indefinite pronouns have so far not been identified and have not been a subject of linguistic study. In addition to having received relatively little attention, they have sometimes even been misinterpreted. In fact, in the most influential grammar of Slovenian (Toporišič 2000), indefinite pronouns with negative polarity features, the *bare* and the *koli*-series, have not been recognized as negative polarity items (NPIs) at all, nor have they been presented as two semantically distinct categories of pronouns.

Introduction: Negative Polarity Items

- **Negative polarity items** (NPIs) are expressions whose grammaticality depends on occurrence in the scope of nonveridical operators. An operator α is **nonveridical** iff $α (p) \nrightarrow p$ in some epistemic model M(x) ∈ c (where c stands for context) (Giannakidou 1998).

- Among the most frequently discussed NPIs are English *any*-pronouns, which are **weak NPIs** (see Giannakidou 1998 for typology of NPIs): they are ungrammatical in veridical contexts (1a) unless the latter generate negative implicatures (1b) (see Giannakidou 1998), and grammatical in nonveridical contexts (1c–d).

    (1) a) *I did **anything**.
        b) I'm sorry I did **anything**. (Implicature: 'I wish that I had **not** done anything.')
        c) I didn't do **anything**.
        d) If you do **anything**, let me know.

- In modal contexts, *any*-pronouns may trigger the **free choice** (FC) **inference** (2a). The inference disappears in downward entailing[1] (DE) contexts (2b) (see Chierchia 2013 for a discussion on how the inference is generated).

    (2) a) I can do **anything**. (FC inference: 'I can do *a* and I can do *b* and I can do *c*…')
        b) I didn't do **anything**. (no FC inference: 'I did not do *a* or *b* or *c*…')

[1] An operator α is **downward entailing (DE)** iff $α (A ∨ B) → α (A) ∧ α (B)$ (Ladusaw 1980).

Distribution of Slovenian NPI pronouns

- Slovenian is a strict negative concord language: it has a special *ni*-series, which can only occur with the clausemate negation.

    (3) *(Ne) bom naredil **ničesar**.
        not be.AUX.FUT.1SG do.PCP ni-thing.GEN
        Intended: 'I will not do anything.'

- In addition, Slovenian has two series of NPI pronouns – the *bare* and the *koli*-series. Both are grammatical in nonveridical contexts (4) – the scope of the clausemate negation included (4c) – and ungrammatical in veridical contexts (5). They are acceptable only in veridical contexts that trigger negative implicatures (6).

- Both series of pronouns are anti-specific (4a) (see Aloni & Port 2006).

    (4) a) Hočem **kaj** / **karkoli** narediti. #Tam je.
           want.PRS.1SG ∅-thing.ACC koli-thing.ACC do.INF there be.PRS.3SG
           Intended: 'I want to create something. There it is (what I want to create).'

        b) Če hočeš **kaj** / **karkoli** narediti, povej.
           if want.PRS.2SG ∅-thing.ACC koli-thing.ACC do.INF tell.IMP.SG
           'If you want to do anything, let me know.'

        c) Nočem narediti **česa** / **česarkoli** nespametnega.
           not-want.PRS.1SG do.INF ∅-thing.GEN koli-thing.GEN reckless
           'I don't want to do anything reckless.'

    (5) * Včeraj sem **kaj** / **karkoli** naredil.
         yesterday be.AUX.PRS.1SG ∅-thing.ACC koli-thing.ACC do.PCP
         Intended: 'Yesterday, I did something.'

    (6) Žal mi je, da sem **kaj** / **karkoli** naredil.
        sorry I-DAT be.PRS.3SG that be.AUX.PRS.1SG ∅-thing.ACC koli-thing.ACC do.PCP
        'I'm sorry that I did anything.'

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Existential or universal quantifiers?

- Slovenian *bare* and *koli*-pronouns behave like existential quantifiers: they cannot form fragment answers (7a); they are also incompatible with *skoraj* 'almost' and can be bound in donkey sentences (7b).

    (7) a) Si Kaj naredil? –*Kaj. / *Karkoli.
           be.AUX.PRS.2SG ∅-thing.ACC do.PCP ∅-thing.ACC koli-thing.ACC
           Intended: 'Have you done anything? –Something.'

        b) Če hočeš (*skoraj) **kaj**ᵢ / **karkoli**ᵢ narediti, to ᵢ/ⱼ naredi.
           if want.PRS.2SG almost ∅-thing.ACC koli-thing.ACC do.INF this do.IMP.SG
           Intended: 'If you want to do almost anythingᵢ, do itᵢ.'

- If a modal operator takes narrow scope with respect to *koli*-pronouns, the latter obtain characteristics of universal quantifiers: they trigger the FC inference (see Chierchia 2013) and typically acquire emphatic stress (indicated by block capitals). In contexts of this kind, *koli*-pronouns form fragment answers (8a), combine with *skoraj* 'almost' and reject binding in donkey sentences (8b).

    (8) a) Lahko kaj narediš? –**KARKOLI**.
           easily ∅-thing.ACC do.PRS.2SG koli-thing.ACC
           'Can you do anything? –(I can do) ANYTHING.'

        b) Če lahko narediš skoraj **KARKOLI**ᵢ, to–ᵢ naredi.
           if easily do.PRS.2SG almost koli-thing.ACC this do.IMP.SG
           Intended: 'If you can do almost ANYTHINGᵢ, do itᵢ.'

- Emphatically stressed *koli*-pronouns (indicated by block capitals) can also acquire some characteristics of universal quantifiers in non-modal environments, where they do not trigger the FC inference. They can be modified by *skoraj* 'almost' (9a), and can form fragment answers (9b). They, however, still allow binding in donkey sentences (see the co-indexing in 9a).

    (9) a) Če narediš skoraj **KARKOLI**ᵢ, bodi na toᵢ ponosen.
           if do.PRS.2SG almost koli-thing.ACC be.IMP.SG on this proud
           'If you do almost ANYTHINGᵢ, be proud of itᵢ.'

        b) A: Ne delaš prav. B: Česa? A: **ČESARKOLI**.
           not do.PRS.2SG right what.GEN koli-thing.GEN
           A: 'You're not doing it right.'
           B: 'What (am I not doing right)?'
           A: 'Nothing at all.' (Not *a* or *b* or *c*…)

Total or partial variation?

- **Total variation (exhaustivity)**: $∀d∈ D_{NPI}. ∃w. P(d)(w)$ and P is only true for d in w, and for no other d' in w (after Giannakidou & Quer 2013: 129)

- **Partial variation (referential vagueness)**:
  $∃w_1, w_2 ∈ W: [\![α]\!]^{w_1} ≠ [\![α]\!]^{w_2}$; where α is the referentially vague variable (ibid.: 142)

- Only *koli*-pronouns are sensitive to modification by relative clauses (subtrigging) (10). They are not compatible with contexts where some of the alternatives are unequivocally ruled out (11). They thus require total variation, while *bare* pronouns require partial variation.

    (10) Naredil je *kaj / **karkoli**, kar si mu naročil.
         do.PCP be.AUX.PRS.3SG ∅-thing.ACC koli-thing.ACC what si be.AUX.PRS.2SG him tell.PCP
         'He did anything that you told him to do.' (after Giannakidou & Yoon 2016: 541)

    (11) Peter is hiding. Marija and Janez know that Peter is in the house,
         but neither in the bathroom nor in the kitchen. Therefore, Marija can say:
         Peter je v **kateri** / #**katerikoli** sobi.
         Peter be.PRS.3SG in ∅-DET koli-DET room
         'Peter is probably in some room.' (after Alonso-Ovalle & Menéndez-Benito 2010: 6)

- In *koli*-pronouns, total variation is *not* a conversational implicature (cf. Giannakidou & Yoon's (2016) claim about *any*), as it cannot be cancelled: *koli*-pronouns take into account the total set of alternatives even in extensional DE contexts (see A's answer in (9b) above). The FC inference, on the other hand, *is* a conversational implicature, generated only when the *koli*-pronoun takes wide scope with respect to a modal operator (12).

    (12) Vsak, ki #(lahko) naredi **karkoli**, je vsemogočen.
         everyone that easily do.PRS.3SG koli-thing.ACC be.PRS.3SG omnipotent
         'Everyone who can do anything is omnipotent.' (karkoli > lahko 'can')
         (FC inference: 'Everyone for whom it is true that they can do *a* and they can do *b* and they can do *c*…')

Scalarity

- **Ordering of the alternative values** along a chosen dimension on a pragmatic scale (see Fauconnier 1975, Israel 2011). In *any*-pronouns, it is a **by-product of total variation** (Duffley & Larrivée 2010).

- Only *koli*-pronouns are scalar, as they can create negative bias in questions (see Heim 1984). This only happens when emphatic stress is placed on the pronoun (indicated by block capitals) (13). As is the case with *any*-pronouns, scalarity is not an inherent feature of *koli*-pronouns; it is an inference which comes about when the total variation is emphasized (see Duffley & Larrivée 2010).

    (13) Si **kaj** / **karkoli** / #**KARKOLI** naredil? –Ja.
         be.AUX.PRS.2SG ∅-thing.ACC koli-thing.ACC koli-thing.ACC do.PCP yes
         Intended: 'Have you done anything? –Yes.'

- When emphasis is placed on the total variation, *koli*-pronouns display some, but not necessarily all, characteristics of universal pronouns. In some cases, as in (9a) above, they simultaneously display features of universal and existential quantifiers. Thus we believe that they are not universal quantifiers. Taking into account Horn's (2000) observation that the identification tests proposed for universal quantifiers may be applicable not only to universal quantifiers proper, but also to expressions highlighting a plurality and/or an upper bound, we believe that *koli*-pronouns are existential quantifiers producing a "mirage" effect of universality. This effect is generated when emphasis is put on the total variation (i.e. plurality), which results in foregrounding an upper bound (i.e. the speaker focuses on the less prototypical/likely alternative values).

The Bagel Problem

- The phenomenon is first observed in Russian (Pereltsvaig 2006): the *libo*-pronouns (NPIs) can be licensed in all DE environments, except for the clausemate negation, which only licenses the negative concord *ni*-pronouns.

- Slovenian does not *seem* to display the Bagel Problem. However, the *bare* series requires the presence of a modal operator in the scope of the clausemate negator (14i.a–b). The *bare* pronoun (but not the *koli*-pronoun) can even outscope the clausemate negator (14i.b). The *koli*-series can be licensed by the clausemate negator, but it sounds emphatic, signalling that all imaginable alternatives are taken into consideration (14ii) (see Blaszczak 2008 for a similar observation about the Polish *kolwiek*-pronouns).

    (14) i) Denarnica Je prazna. #V njej nimam **kakšnega** denarja.
            wallet be.PRS.3SG empty in her not-have.PRS.1SG ∅-DET money
            a) 'The wallet is empty. #It is not possible that I have any money in it.'
               ¬◊∃x [money (x) ∧ have in the wallet (I, x)]
            b) 'The wallet is empty. #It is possible there is some money that I do not have in it.'
               ◊∃x [money (x) ∧ ¬ have in the wallet (I, x)]

        ii) Denarnica je prazna. V njej nimam **kakršnegakoli** denarja.
            Wallet be.PRS.3SG empty in her not-have.PRS.1SG koli-DET money
            'The wallet is empty. I don't have any money in it at all.'

Conclusion

Slovenian *bare* and *koli*-pronouns belong to the group of weak NPIs: they are licensed by nonveridical operators and rescued by negative implicatures. *Bare* pronouns are referentially vague. They have existential quantifying force and are never scalar. *Koli*-pronouns require total variation, which is their non-cancellable feature. The free-choice inference triggered by *koli*-pronouns, however, is cancellable: it disappears in downward entailing contexts, unless the *koli*-pronoun takes wide scope with respect to a modal operator. *Koli*-pronouns are scalar iff stressed, which makes them similar to English *any*. Both series exhibit the Bagel Problem: *bare* pronouns are not licensed by the clausemate negation at all, while *koli*-pronouns sound emphatic in its scope.

References

Aloni, Maria & Angelika Port. 2006. Epistemic indefinites crosslinguistically. In E. Elfner & M. Walkow (eds.), *Proceedings of the 36th Annual Meeting of NELS*, 1–14. Amherst: UMass.
Alonso-Ovalle, Luis & Paula Menéndez-Benito. 2010. Modal Indefinites. *Natural Language Semantics* 18. 1–31.
Blaszczak, Joanna. 2008. The puzzle of kolwiek-pronouns in Polish. In J. Jayez & L. M. Tovena (eds.), *Free Choice: Facts, Models and Problems. Workshop Proceedings, 20th ESSLLI*, 3–12. Hamburg: ESSLLI.
Chierchia, Gennaro. 2013. *Logic in Grammar: Polarity, Free Choice, and Intervention*. Oxford: Oxford University Press.
Duffley, Patrick J., & Pierre Larrivée. 2010. Anyone for non-scarality? *English Language and Linguistics* 14(1). 1–17.
Fauconnier, Gilles. 1975. Polarity and the Scale Principle. In *Proceedings of Chicago Linguistic Society* 11, 188–99. Chicago: Chicago Linguistic Society.
Giannakidou, Anastasia & Josep Quer. 2013. Exhaustive and non-exhaustive variation with free choice and referential vagueness: Evidence from Greek, Catalan, and Spanish. *Lingua* 126. 120–149.
Giannakidou, Anastasia & Suwon Yoon. 2016. Scalar marking without scalar meaning: Nonscalar, nonexhaustive even-marked NPIs in Greek and Korean. *Language* 92(3). 522–556.
Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (Non)Veridical Dependency*. Amsterdam: John Benjamins.
Horn, Laurence R. 2000. Any and (-)ever: Free choice and free relatives. In Adam Z. Wyner (ed.), *The Proceeding of the Fifteenth Annual Conference*, 71–111. Haifa: The Israel Association for Theoretical Linguistics.
Heim, Irene. 1984. A Note on Negative Polarity and Downward Entailingness, *North East Linguistics Society* 14(1). 98–107.
Israel, Michael. 2011. *The Grammar of Polarity: Pragmatics, Sensitivity, and the Logic of Scales*. Cambridge: Cambridge University Press.
Ladusaw, William. 1980. *Polarity Sensitivity as Inherent Scope Relations. Outstanding Dissertations in Linguistics*. New York: Garland Publications.
Pereltsvaig, Asya. 2006. Negative Polarity Items in Russian and the Bagel Problem. In A. Przepiorkowski & S. Brown (eds.), *Negation in Slavic*, 153–178. Bloomington: Slavica Publishers.
Toporišič, Jože. 2000. *Slovenska Slovnica*. [Slovenian grammar]. Maribor: Obzorja.