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Quotational Indefinites: Bulgarian and Beyond

Introduction Beyond their regular meaning as existential quantifiers, indefinites can trigger a range of additional implications, e.g. they can invite specific vs. nonspecific interpretations (see [4], [8], a.m.o.) or convey ignorance towards the identity the referent (see [5], [1], a.o.). In this paper, I discuss one less known variety of indefinites, which I call **quotational indefinites** (QIs). While I focus on QIs in Bulgarian (e.g. *edi-koj si* 'one-who.MASC REFL'), such indefinites are also found in German (see [2]) and Japanese (see [9]), and are akin to English placeholders like *whatshisface* or *so-and-so*. I claim that (i) QIs range over *expressions* (i.e. linguistic objects) that (ii) are *referring* and that (iii) were *uttered* in a previous conversation. Taken together, these claims imply that indefinites can range over quotations (i.e. pieces of language that can be attributed to another speaker) and thus can serve reportative functions. More generally, this work uncovers important interactions between phenomena such as indefiniteness, quotation, and reportativity and forwards our understanding of the typology of indefinites.

Core empirical properties QIs can be regarded as fillers for referring expressions: they can fill in for proper names or definite descriptions but not for quantified DPs or indefinites (whether specific or nonspecific), see (1)-(2). In addition, the use of QIs triggers the implication that an antecedent expression was uttered in a previous conversation. Importantly, this implication projects, i.e. it survives embedding under entailment-canceling operators like negation or modals (3). Thirdly, QIs can also occur in direct quotations, as in (4). This sentence is ambiguous between (4a), a verbatim reading in which the QI is part of the previous utterance, and (4b), a non-verbatim reading in which the QI fills in for some referring expression in the original utterance.

(1) Maria: Ima-m srešta s Ivan / šef-a mi / edna prijatel-ka / mnogo xora.
have-1SG meeting with Ivan / boss-DEF POSS / a friend-FEM / many people
Maria: 'I have a meeting with Ivan / my boss / a friend of mine / many people.'

(2) Maria ima srešta s **edi-koj si / edi-koj si / #edi-koja si / #edi-koi si**.
Maria have.3SG meeting with QI / QI / QI / QI
'Maria has a meeting with someone.'

(3) Maria ima / n-jama / može da ima srešta s **edi-koj si**.
Maria have.3SG / NEG-have.3SG / might.3SG SUBJ have.3SG meeting with QI
a. *Assertion*: 'Maria has / doesn't have / might have a date with someone.'
b. *Reportative implication*: 'Maria's date was mentioned in a previous conversation.'

(4) Ivan kaz-a: "Maria celun-a **edi-koj si**". (ambiguous)
Ivan say-3SG Maria kiss-3SG QI
a. *Verbatim reading*: 'Ivan uttered "Maria celuna edi-koj si".'
b. *Non-verbatim reading*: 'Ivan uttered "Maria celuna z", where z is an r-expression.'

Previous work on QIs Since Japanese QIs like *dare-dare* 'who-who' are claimed to only occur in quotations, [9] analyzes these as existential quantifiers over expressions that denote individuals (or objects of type e). This account then requires some adjustments for Bulgarian QIs, which routinely appear outside quotation. According to [2], German QIs of the form *der und der* 'the and the' existentially quantify over individuals (not expressions) that were uniquely identified in a previous

conversation. On this view, it is less clear why Bulgarian (as well as German) QIs can occur in direct quotations and obtain non-verbatim readings, which refer to expressions. Neither of these two accounts readily explains why specific indefinites are not good antecedents for QIs, given that specific indefinites have previously been analyzed as type e expressions (see e.g. [4]) and that such indefinites uniquely identify the referent. I build on this previous work and propose a single meaning for QIs in Bulgarian that derives all the empirical properties mentioned above.

Formal proposal I assume a new logical type u for linguistic expressions and a corresponding domain D_u, which contains all possible concatenations of symbols (see [7]). I also introduce an expression interpretation function $E : D_u \rightarrow D$ such that $E(\alpha) = [\![\alpha]\!]$ if α is a term of the language and otherwise E is the identity function. That is, E maps expressions that are part of the language back into more familiar domains, e.g. $E(\text{Ivan}) = \mathbf{ivan} \in D_e$ because $\text{Ivan} \in D_u$ is also a term of the language. To accommodate arguments of type u (e.g. quotational arguments or traces of raised QIs), I extend the inventory of lexical meanings such that if $[\![\alpha]\!]^E = ...\lambda x_e... .\phi$ is part of the lexicon then so is $[\![\alpha]\!]^E = ...\lambda z_u... .\phi[x/E(z)]$, where $\phi[x/y]$ is just like ϕ but with all free occurrences of x substituted by y. For example, we now have as lexical meanings both $[\![\text{sleep}]\!]^E = \lambda x_e.\mathbf{sleep}(x)$ and $[\![\text{sleep}]\!]^E = \lambda z_u.\mathbf{sleep}(E(z))$. Finally, I adopt a partial semantics along the lines of [3] and borrow from these authors the (static) presupposition operator ∂, where $\partial\phi$ is true if ϕ is true and undefined otherwise.

I propose that QIs are interpreted as existential generalized quantifiers over expressions (5). For example, a sentence of the form as in (6) receives the interpretation as shown. I assume that (6) has the LF of [QI$_z$ [Maria date z]], where the QI raises from its object position and leaves a trace of type u. The semantic derivation uses the enriched lexical meaning $[\![\text{date}]\!]^E = \lambda z_u \lambda x_e.\mathbf{date}(x, E(z))$ to get to the (lambda abstracted) meaning $[\![\text{Maria date } z]\!]^E = \lambda z_u.\mathbf{date}(\mathbf{maria}, E(z))$, which then directly combines with the QI meaning in (5) and derives (6).

(5) $[\![\text{QI}]\!]^E = \lambda P_{ut}.\exists z_u(\mathbf{r\text{-}expression}(z) \wedge P(z) \wedge \partial\, \exists y_e \mathbf{utter}(y, z))$

(6) $[\![\text{Maria is dating QI}]\!]^E = \exists z_u(\mathbf{r\text{-}expression}(z) \wedge \mathbf{date}(\mathbf{maria}, E(z)) \wedge \partial\, \exists y_e \mathbf{utter}(y, z))$

The meaning in (6) correctly predicts that the antecedent expression is a referring term, assuming that the predicate $\mathbf{r\text{-}expression}$ singles out proper names and definite descriptions. The conjunct $\partial\, \exists y_e \mathbf{utter}(y, z)$ describes the reportative implication. This implication projects because if ϕ and ψ are defined, the following logical equivalences hold: $\neg(\partial\phi \wedge \psi) \equiv \partial\phi \wedge \neg\psi$, $\exists x(\partial\phi \wedge \psi) \equiv \exists x \partial\phi \wedge \exists x(\phi \wedge \psi)$, $\exists x \partial\phi \equiv \partial \exists x \phi$ (see [3]). These equivalences ensure that presuppositional terms can always be pulled out of operator embedding. Finally, the puzzling non-verbatim readings of QIs in direct quotations follow if we allow raising out of quotation, as proposed in [9] and [6]. If (7) below has the LF of [QI$_z$ [Ivan said: "Maria is dating z"]], then the lambda abstracted meaning of [Ivan said: "Maria is dating z"] is $\lambda z_u.\mathbf{say}(\mathbf{ivan}, \text{Maria is dating } z)$, which can be directly fed into the meaning of the QI in (5) to produce (7).

(7) $[\![\text{Ivan said : "Maria kissed QI"}]\!]^E$
$= \exists z_u(\mathbf{r\text{-}expression}(z) \wedge \mathbf{say}(\mathbf{ivan}, \text{Maria kissed } z) \wedge \partial\, \exists y_e \mathbf{utter}(y, z))$

References [1] Alonso-Ovalle & Menendez-Benito 2010 Modal indefinites *NLS* 18 [2] Cieschinger & Ebert 2011 Doubling definite determiners in German *LB* 226 [3] Coppock & Beaver ms Definiteness and determinacy [4] Fodor & Sag 1982 Referential and quantificational indefinites *L&P* 5 [5] Kratzer & Shimoyama 2002 Indeterminate pronouns: the view from Japanese *TCP* 3 [6] Maier 2014 Mixed quotation: the grammar of apparently transparent opacity *S&P* 7 [7] Potts 2007 The dimensions of quotation In *Direct Compositionality* [8] Schwarzschild 2002 Singleton indefinites *JoS* 19 [9] Sudo 2008 Quantification into quotations: evidence from Japanese wh-doublets *SuB* 12