

# THE SCALAR QUANTIFICATION OF *ONEK* ‘MANY’ IN BANGLA

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The interpretation of so-called vague quantifiers such as *many* is, at the conceptual-intentional interface, a straightforward one, on par with standard quantifiers such as the universal *every* and (in frameworks that recognize existential quantifiers) the existential *a/an* or *some*. However, while vague quantifiers display the same scopal behavior as standard ones do (at least at a “thick” level) at this interface, their quantificational status remains quite distinct from that of the standard quantifiers: they do not straightforwardly relate to the domains or sets defined by the nominal component that they are merged with (Barwise & Cooper 1981, Szabolcsi 2010). The behavior of an analogue in Bangla, viz., the quantifier *onek* ‘many’, is the central focus of this paper, given that it can be used in both count and noncount senses, unlike in Hindi, in which *anek*, like *many*, is exclusively [+count]. Vandiver (2011a) argues that *many* in English can be placed on a stationary scale of quantifiers, from *a/an* through *all*. This paper, on the other hand, argues that such an explanation fails to account for the distinctive behavior of *onek* with respect to (i) scope interaction with negation (where *onek* is always wider in scope than any negation that it might co-occur with), (ii) semantic interaction with the Bangla classifier *-ta/-khani* (versus no classifier), (iii) its use as a comparative quantifier on occasion with emphatic focus. Furthermore, the lower threshold for [+count] *onek* might be determined by the maximum “paucal” number, possibly varying across speakers. The lower threshold for [-count] *onek* (without *-ta/-khani*), however, seems to be less well-defined: it is interpreted in a relativized manner to quantifiers denoting ‘some’ in [-count] uses. The behavior of *onek* in Bangla is thus found to be scalar in the quantificational domain in certain respects but non-scalar in others.

**1. BACKGROUND: NON-STANDARD QUANTIFIERS.**<sup>1</sup> The interpretation of so-called vague quantifiers such as *many* is, at the conceptual-intentional interface, a straightforward one, on par with standard quantifiers such as the universal *every* and (in frameworks that recognize existential quantifiers) the existential *a/an* or *some*. However, while vague quantifiers display the same scopal behavior as standard ones do (at least at a “thick” level) at this interface, their quantificational status remains quite distinct from that of the standard quantifiers: they do not straightforwardly relate to the domains or sets defined by the nominal component that they are merged with (Barwise & Cooper 1981, Szabolcsi 2010). Instead, *many* and compound quantifiers such as *a few* and *a lot* are “relativized” to an implicit scale, and have recently been

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<sup>1</sup> This paper was originally presented at the Thirtieth South Asian Languages Analysis Roundtable Conference (SALA 30) held during February 6-7, 2014, at the University of Hyderabad, India, and has been revised following feedback from members of the audience and readers subsequent to my presenting it at the Conference. Some of the preliminary ideas for this paper were developed while I was visiting faculty during May and June of 2012 at the School of Cognitive Science, Jadavpur University, and other ideas emerged in my Advanced Semantics class at the University of Delhi. Other aspects of this work were discussed at a talk-cum-discussion organized by Gautam Sengupta and Gracious M. Tansen at the Centre for Applied Linguistics and Translation Studies, University of Hyderabad, in August 2013. I am grateful to the audiences at those sessions and to my students, and in particular to Nandini Bhattacharya, Mihir Chakravarti, Amita Chatterjee, Lopamudra Choudhury, Anumitra Ghosh-Dastidar, and Hans Henrich Hock for their inputs.

labelled “relative quantifiers” for purposes of formal representation in computational semantics (Vandiver 2011a, 2011b).

**2. THE MANY AVATARS OF *ONEK* ‘MANY’ IN BANGLA.** It turns out that *onek* ‘many, much / a lot (of)’ occurs in multiple uses in the Indic language Bangla (now spoken diasporically in different countries besides India and Bangladesh). It can occur with both [+count] and [–count] nominals, unlike Hindi *anek*, which is reported to occur only with [+count] nominals.

**2.1. AS A [+HUMAN, +COUNT] NOMINAL, WITH AN ARCHAIC ERGATIVE ENDING:**

- (1) a. *onek-e bhut-e biššaš kore*  
 many-erg ghost-loc belief do-pres-3  
 ‘Many people believe in ghosts.’

**2.2. AS A QUANTIFIER ADJECTIVE, WITH [+COUNT] NOMINALS:**

- (2) a. *gache onek am jhulche*  
 tree-loc many mango hang-pres.prog.-3  
 ‘There are many mangoes hanging on the tree(s).’  
 b. *onek diner amar je gan*  
 many day-gen 1sg-gen rel.pron song  
*amar kache phire aše* (R. Tagore)  
 1sg-gen CHEZ return-conjpppl come-pres-3  
 ‘The song that is mine since a long time (lit. of many days) comes back to me’
- (3) a. *e+nodite onek mach*  
 this+river-loc a-lot-of fish  
 ‘There are a lot of fish in this river.’ / ‘A lot of fish in this river ...’  
 b. *e+nodite onek-rōkomer mach*  
 this+river-loc many-type-gen fish  
 ‘There are many kinds of fish in this river.’ / ‘Many kinds of fish in this river ...’

**2.3. AS A QUANTIFIER ADJECTIVE, WITH [–COUNT] NOMINALS:**

- (4) *e-dighite onek jol*  
 this-lake-loc a-lot-of water  
 ‘There is a lot of water in this lake.’
- (5) *bacca onek dudh kheYe tarpər*  
 baby a-lot-of milk ingest-conjpppl thereafter

ekhon ghumocche  
 now sleep-pres.perf-3  
 ‘The baby is now sleeping, after having drunk a lot of milk.’

**2.4.** WITH A “PARTITIVIZING” SINGULAR CLASSIFIER FOLLOWED BY A [–COUNT] NOMINAL, AND WITH A PLURAL-MARKING CLASSIFIER FOLLOWED BY A [+COUNT] NOMINAL:

- (6) a. onek+ṭa | dudh pore gelo  
 a-lot+partitive | milk fall-conjpppl go-past-3  
 b. onek+khani |  
 a-lot+portion |  
 ‘A lot of the milk spilled.’

**2.5.** AS A [+COUNT] QUANTIFIER ADJECTIVE WHEN FOLLOWED BY THE [–HUMAN] / DEROGATORY INDIVIDUATED PLURAL-MARKING CLASSIFIER *-gulo*:<sup>2</sup>

- (7) a. ei kōtha+ṭa-r onek-gulo mane ache  
 this word-def.sg-gen many-indiv.pl meaning be-pres-3  
 ‘There are several meanings to this word.’ / ‘This word has several meanings.’  
 b. rastar more onek-gulo guṇḍa dāriye  
 street-gen turning-loc many-indiv.pl ruffian stand-conjpppl  
 ache  
 be-pres-3  
 ‘There are several ruffians standing at the street corner.’

**2.6.** AS A COMPARATIVE DEGREE MODIFIER, IN THE SENSE OF ‘MUCH X-ER’:

- (8) poṅgu hoYe bēce thakar ceYe  
 invalid be-conjpppl live-conjpppl stay-vbl.n-gen than  
 more jaWa onek bhalo  
 die-conjpppl go-vbl.n much-more good  
 ‘It is much better to die off than to live on as an invalid.’

<sup>2</sup> I am grateful to Jasodhara Bagchi for drawing special attention to this use of the quantifier under investigation, a use that, so far as one can make out, seems to be specific to Bangla (among Indic languages). It turns out that even a Dravidian language such as Telugu occasionally uses the cognate form *aneka* in similar uses to those of the Bangla and Hindi quantifiers, as a Telugu-speaking member of the audience at the conference helpfully pointed out to me.

I am also grateful to Amiya Kumar Bagchi for reminding me of the additional Sanskrit-origin adjectival quantifier *onekanek* ‘various, many kinds of’ that is morphologically related to *onek* and is used in relatively formal styles in Bangla.

2.7. AS AN ADVERB OF QUANTIFICATION, IN THE SENSE OF ‘A LOT’:

- (9) a. bacca-ṭi      ɔnek    kēdeche  
 child-def.sg    a-lot    cry-pres.perf-3  
 ‘The child (has) cried a lot.’
- b. chele-ṭi      ɔnek-ṭa                      šere                      uṭheche  
 boy-def.sg    a-lot+classifier            recuperate-conjppl    rise-pres.perf-3  
 ‘The boy has recovered to a considerable degree [health-wise].’

Despite these apparently disparate categorizations of *ɔnek* in terms of both syntactic classes – such as quantity modifier versus adverbial of quantification – and semantic feature-classes – such as [+count] and [–count] – all of these different uses of this form are more polysemous than distinctly homonymous. The reason is that *all* of these senses semantically share a clear notion of quantitative vagueness on a “scale” of relativization, from zero to the totality of the domain set (i.e., semantically from *none* to *all*). This fact also puts some strain on Barwise & Cooper’s (1981: 163) “fixed-context assumption” according to which only the so-called logical quantifiers, symbolized as  $\forall$  and  $\exists$  respectively, can be meaningfully mapped onto the set-of-set notion at the heart of generalized quantifier theory. This is because, according to the “scale” mapping of quantifiers, both logical and non-logical quantifiers are parameterized onto such a “scale”, whose specific frame of application can and does vary according to the context, and also (albeit to a lesser extent) according to the speaker’s appraisal of what would count as ‘little’ and what as ‘much’.

There is another respect in which this kind of “scale” of relativization for the placement of non-logical quantifiers such as *many* and *a few* has received scarce attention. Given the overwhelming focus on the representation of quantifier scope interactions at the Conceptual-Intentional (“LF”) interface of language under a Parametric-Minimalist theoretical framework (as exemplified by Huang 1982, 1995; May 1985; Aoun & Li 1993; Szabolcsi 2001), what has suffered relative neglect (since the early promise proffered by Barwise & Cooper 1981, especially in Appendix B to their article, which discusses the non-logical quantifiers *few*, *most*, and *many* in English) has been the formal characterization of non-logical quantifiers as expressions that structure how the human mind cognizes absolute and relative quantities of kind or domain expressions. This has assumed particularly grave proportion in the context of work on the formal semantics of quantificational expressions that occur saliently in South Asian languages, where such expressions often have subtly distinctive properties that need to be teased out with sensitivity rather than accounted for in terms of quantifiers in more intensively analysed languages in a “one-size-fits-all” spirit.

**3.** *onek* ‘MANY, A LOT (OF)’ AS A RELATIVE QUANTIFIER AND SCALARITY. The notion of semantic scalarity is by no means new: it has been used since a few decades, in the analysis of *let alone* by Fillmore, Kay & O’Connor (1988) and in the treatment of the semantics of *even* as proposed by Kay (1990). Accordingly, it is not a surprise that *onek* should relate to scalarity as well, especially given that it occurs in many of its salient uses as a degree modifier as seen above. Nonetheless, it also departs from being a purely scalar expression in its syntactic and lexical behavior, as one sees below.

**3.1.** THE SCALARITY OF *onek* ‘MANY, A LOT (OF)’. As a “vague” quantifier, this form casts its semantic footprint across an approximate scalar range (Vandiver 2011b) in between *kichu*, an equivalent of ‘some/a few’ in Bangla, and expressive multal forms such as *procur* ‘abundantly many/much’ and *porbot-proman* ‘a mountainous amount’, though it falls clearly short of *šob* ‘all’.

**3.2.** THE NON-SCALARITY OF *onek* ‘MANY, A LOT (OF)’. Vandiver (2011a) argues that *many* in English can be placed on a stationary scale of quantifiers, from *a/an* through *all*. In this paper, on the other hand, I argue that such an explanation fails to account for the distinctive behavior of the Bangla relative quantifier *onek* on a number of counts. These are as follows:

**3.2.1.** LEXICAL SELECTION FOR WIDE SCOPE WITH RESPECT TO NEGATION. The quantifier *onek*, interestingly, can only occur outside the scope of negation in a Bangla sentence, the form *beši* as a negative-polarity quantifier being selected in its stead when the negation takes wide scope. This use of *onek* has been noted by Dasgupta (1988) in the context of constraints on Quantifier/(NP)-Extraction. Thus, the lexical and the syntactic-scopal stages are required to be in consonance in the derivation of sentences with this use of *onek*, a problem that might be of some significance in the context of the Parametric-Minimalist theoretical perspective on derivation and Full Interpretation.

**3.2.2.** PARTITIVE INTERPRETATION WITH THE (SINGULAR) CLASSIFIER *-ta* WITH [–COUNT] NOUNS. As was seen in example (6a), Section 2.4, this otherwise non-partitive quantifier semantically interacts with the singular non-human/derogatory classifier *-ta* in a peculiar way, to yield a “partitivized” interpretation. The same observation is made with reference to the portion-denoting classifier expression *-khani* (diminutive counterpart to the classifier *-khana*) ‘small chunk/piece of’) in example (6b). The partitive is not morphologically an overt case in most Indic languages, but there is some evidence in Hindi (Jain 2015) that it is expressed nonetheless by a combination of syntactic and semantic means – i.e., that otherwise nominative- or accusative-marked DPs do display partitive readings in certain syntactic configurations. This behavior of *onek* cannot be explained in purely scalar terms, since in this instance the interpretation of *onek* gets relativized to a “total quantity/mass” as denoted by the quantified nominal, understood in a particularized and not in a generalized sense (i.e., as a context-specific, particular quantity or mass in its specific totality) and only the [–count] reading is possible for the DP as a whole.

**3.2.3.** THE USE OF *onek* AS A COMPARATIVE “VAGUE” QUANTIFIER. This was seen in Section 2.6, above: In the particular syntactic configuration of a comparative sentence, this

otherwise non-comparative form takes on a clear comparative interpretation, with optional focal stress or intonation (though the latter is largely at the speaker's discretion; for pragmatic functions of such intonation, see also Bagchi 2011).

**3.3. THE COGNITIVE “PAUCAL” THRESHOLD.** For non-autistic human beings, in general, there is a visual/auditory/tactile threshold for the number of items that can be cognized without conscious counting or processing. For want of a better term, one can use the grammatical term “paucal”, meaning ‘numerically less than many but greater than or equal to two’ to describe this cognitive-perceptual threshold. Visually, this threshold is the maximum number that a cognitive agent can “subitize”, i.e., ‘instantly see how many (there are)’ (Mandler & Shebo 1982; Gallistel & Gelman 1991), and, while this number may and does vary across individuals, there seems to be some kind of consensus that the number ranges between three and five or six – which would coincide to a great extent with the semantic domain of a countable quantifier such as *a few*. There thus seems to be a *prima facie* correlation, at least partially, between the cognitive “paucal” threshold and the upper semantic threshold of *a few*, beyond which a quantifier such as *several* (and, beyond that, *many*) would be more appropriate to utter. Thus, *onek* is distinctly “non-paucal”, regardless of which particular number might constitute the “paucal” threshold: it denotes perceptual (and, for abstract qualities such as ‘goodness’, cognitive) abundance in all its non-comparative uses, and even in its comparative use it signals that the margin of difference with the standard of comparison is significantly large.

**4. CONCLUSION.** This paper has presented facts relating to the relative quantifier *onek* ‘many, a lot (of)’ (and in some contexts ‘much X-er’) in Bangla with a view to highlighting its scalar nature as well as its non-scalar behavior in certain key respects relating especially to lexical choice in relation to its relative scope vis-à-vis negation, interaction with partitive-marking classifiers, and use as a comparative degree modifier with occasional focusing governed by the speaker's choice and the pragmatics of the context.

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