

Numeral quantifiers and syntactic structure

This handout:

- introduces the interesting and complex numerical quantifier (NQ) system of Japanese
- provides evidence, using sentences with NQs, about the syntactic structure of “particles”, contrasting case markers like *-ga* NOM and *-o* ACC with postpositions like *de* ‘with, on/at, by means of’ and *e* ‘to, toward’
- provides evidence for how we should analyze *(-)*ni (DAT case suffix? postposition?)

I. Introduction to numeral quantifiers (NQs)

- (1) “A numeral quantifier consists of a numeral and a classifier that agrees with the type of entity being counted.” (Miyagawa 1989: 19)
- (2) Japanese has two sets of numerals
 - *hito-*, *huta-*, *mi-*,... are native (“Yamato”)
 - *iti*, *ni*, *san*,... are Sino-Japanese

Classifiers tend to combine with numerals of the same lexical stratum

- (3) A few examples (there are many more NQs)

(i)	hito-ri , huta-ri	1, 2 people
	san-nin , yo-nin	3 or more people
(ii)	iti-dai , ni-dai , san-dai	furniture, machines, vehicles (land/air)
(iii)	ip-pon , ni-hon , san-bon	long, thin, cylindrical objects (incl. bottles)
(iv)	is-satu , ni-satu , san-satu	books, magazines, pads of paper
(v)	hito-tu , huta-tu , mit-tu	generic counter for inanimate objects

II. NQs and syntactic structure

- (4) Consider the following examples with NQs. (Additional constructions are also grammatical; see Watanabe (2006) for discussion, proposals, and a review of the literature.)
- (5) Examples where NQs are **grammatical**

(a)	Gakusei-ga	san-nin	hon-o	katta.	(Miyagawa 1989: 27)
	<i>student-NOM</i>	<i>3-CL</i>	<i>book-ACC</i>	<i>bought</i>	
	‘Three students bought books.’				
(b)	Tomodati-ga	san-nin	Tanaka-sensei-ni	atta.	(Miyagawa 1989: 29)
	<i>friend-NOM</i>	<i>3-CL</i>	<i>Tanaka-teacher-DAT</i>	<i>met</i>	
	‘Three friends met (encountered, ran into) Prof. Tanaka.’				
(c)	Hanako-ga	pen-o	san-bon	katta.	(Miyagawa 1989: 28)
	<i>Hanako-NOM</i>	<i>pen-ACC</i>	<i>3-CL</i>	<i>bought</i>	
	‘Hanako bought three pens.’				

(10) Now consider these examples (data adapted from Miyagawa 1989: 35, 36)

(a) Ken-ga sizin NI huta-riatta.
Ken-NOM poet ?? 2-CL met
'Ken met two poets.'

(b) * Aya-ga kooen NI huta-tu itta.
Aya-NOM park ?? 2-CL went
(intended meaning: 'Aya went to two parks.')

- These examples show that there are **two kinds of /ni/**: one is a case suffix (dative), and one is a P. (Do you see why this is? Can you draw the structures?)

(11) Thus far, all grammatical examples have had the NP immediately adjacent to the NQ. Here is an example where that is not the case. (Data from Tsujimura 2007: 239.)

Hon-o gakusei-ga san-satu katta.
book-ACC students-NOM 3-CL bought
'Students bought three books.'

- What are the implications of this example for the syntactic analysis of word-order variation (scrambling) in Japanese?

For further reading

Miyagawa, Shigeru. 1989. *Structure and Case Marking in Japanese*. [See especially chapters 1 and 2.] San Diego: Academic Press.

Tsujimura, Natsuko. 2007. Ch 5, "Syntax." *An Introduction to Japanese Linguistics*. [See especially §3.3.1, "Numeral quantifiers".] Oxford: Blackwell. (This book is on reserve for the course.)

Watanabe, Akira. 2006. "Functional projections of nominals in Japanese: Syntax of classifiers." *Natural Language & Linguistic Theory* 24(1): 241-306. (This article is downloadable through a UNC connection.)