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A DIACHRONIC TYPOLOGY OF THE UNIVERSAL SUPERPARTICLE: AN INTER-GENETIC VIEW

BACKGROUND We investigate the synchronic and diachronic status of the conjunctive quantifier particle (μ) in three genetically independent language families: Japonic (Old Japanese), Indo-European (Anatolian, Celtic, etc.), and Sino-Tibetan (Mandarin).

All three language families possessed (some still possess) a multifunctional conjunction particle which can express not only conjunction (as English *and*) but also universal quantification, existentially polar quantification, free-choice inferences, and focal additivity.

JAPONIC In Old Japanese (OJ; c. 8th CE), the [WH+μ] quantificational expressions were confined to inherently scalar (σ) complements, i.e. either numeral nominals or inherently scalar WH-terms (e.g. how-many/when), as Whitman (2009) first noticed. The only two kinds of WH-terms which can serve as μ-hosts we find in OJ are interval- and quantity-denoting WH-terms, i.e. those WH-abstracts with only a σ-domain of alternatives. Non-scalar domain (δ) complements to OJ μ cannot be found – we claim this was disallowed. In Classical and Early Modern Japanese (Cl/MdJ), existential constructions arise ($\forall_\sigma \rightarrow \exists_{\sigma,\delta}$). This semantic shift is given by the pair below.

(1) 相見而者 [幾 日 毛] 不経乎
apimi-te-pa [iku ka **mo**] pe-**nu**-wo
meet-CONJ-TOP [how.many day μ] pass-NEG-CONJ
'Though **few** (=**not all/many**) days have passed since we met, . . .' (OJ; MYS 4.751, ll. 1–2)

(2) いまは なにの 心 も なし
ima fa **nani**-no kokoro **mo** **na**-si
now TOP **what**-GEN idea μ NEG-FIN
'I do **not** have **any thoughts** [but of meeting you] now'
(Cl/MdJ; IM XCVI: 168.9; Vovin 2003: 424)

INDO-EUROPEAN It has been well-investigated (Mitrović, 2014) that all old IE languages had a multi-functional μ. In non-coordinate contexts, we discuss the diachronic nature of the semantic split between those old IE language where μ+WH express a universal quantifier and those languages where μ+WH denotes a polar existential. Under the assumption that the lives of μ operators are diachronically constrained by universal factors, OJ facts shed light onto Indo-European (IE) development of polarity and quantification [WH+μ]. While all old IE languages show generalised WH-quantification (cf. **??**b), the vast majority of IE languages exhibit gramamticised polarity in [WH+μ] forms (cf. Skt. *kaš***ca**, Goth. *hwaz***uh**, etc. 'any(one)'). The more archaic Anatolian and Celtic branches, however, show plain universals (Hit. *kuišš***a**, OIr. *ca***ch** 'each(one)'), which is consistent with the diachronic trends in Japonic.

(3) UNIVERSAL μ:
jah [hvaz **uh**] saei hauseiþ waurda meina
and who.M.SG and *pro*.M.SG hear.3.SG.IND words.ACC.PL mine

'And *every* one that heareth these sayings of mine' (Gothic; *CA*, Mat. 7:26)

(4) POLAR-EXISTENTIAL μ:

na yasya [kaś- **ca**] tititarti māyā?
NEG whom.GEN [who.M.SG μ] able to overcome illusions.PL

'No one [=not *anyone*] can overcome that (=the Supreme Personality of Godhead's) illusory energy.' (Classical Sanskrit; *BP*, 8.5.30)

ARCHAIC CHINESE Archaic Chinese (AC) particle *jiē* (皆) is obligatorily distributive and functions not only as a universal quantifier but also as a polar-existential quantifier and conjunction marker. (Mitrović and Hu, 2016) While we omit data here, we conjecture a diachronic development of μ from AC to modern Chinese which has not underwent as many semantic changes as μ in Japonic and IE did.

Interestingly, the μ particle in all three families eventually ended up with a quantificational type of its hosts, i.e. $\langle\langle e,t\rangle,t\rangle$.

A DIACHRONIC-TYPOLOGICAL OUTLOOK The analysis will provide uniform treatment of μ particles in all three languages, including an explanation for the rise of polarity sensitivity in EMJ that obtained by virtue of loss of restriction to scalar complementation. The locus of historical change in the inferential procedure from a SI ('not every') to a polar-sensitive expression (NPI/'(not) any') can thus be found in the featural makeup of the μ particle and its featural change (grammaticalisation). In this regard, the analysis we provide is based on Chierchia (2013). The properties we look into are given in the table below

	Indo-European		Japonic		Chinese	
	Hittite	Sanskrit	OJ	Cl/MdJ	AC	MdM
inherent distributivity μ hosts	+	+	+	+	+	+
NPI μ-formation	−	+	−	+	(−)	(−)
scalar additivity (EVEN)	+	+	+	+	−	+
non-scalar additivity (ALSO)	+	+	−	+	−	−
conjunction	+	+	−	+	−	−
obligatory type-lift of μ hosts for QUANT. terms	+	+	−	+	−	+

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