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10   **Areal perspectives on total reduplication of verbs in Sinitic**[*]

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16

17   Abstract

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19   The topic of reduplication in Sinitic languages has attracted much

20   attention in the literature, but studies adopting a comparative and

21   areal perspective are still lacking. This paper aims at analysing the

22   correlations between form and function in reduplicating

23   constructions in a sample of twenty Sinitic languages, representing

24   eight branches of the family, comparing them to a set of fourteen

25   non-Sinitic languages of the East- and Southeast Asian area. We

26   will show that the various semantic nuances conveyed by

27   reduplicated verbs could be argued to derive from the core

28   meaning of verbal reduplication as iteration of an event, either over

29   a bounded or an unbounded time-span. On the structural level, a

30   pervasive feature of reduplication lies in its compliance to strict

31   requirements on the morphological makeup of the base. This holds

32   especially in the case of reduplication of disyllabic and

33   bimorphemic verbs with increasing semantics, a consistent pattern

34   across our sample.

35

36   1. Introduction

37

38   Total reduplication (TR) is a cross-linguistically widespread

39   morphological technique (see Stolz, Stroh & Urdze 2011).

40   Although it is not universal, its cross-linguistic attestation has been

41   captured in terms of an implicational universal. It has been claimed

42   indeed that partial reduplication (PR) implies TR, i.e. any language

43   making use of PR also has TR (Moravcsik 1978, Rubino 2013),

44   although counterclaims have also been put forward (as several

45   contributions to this special issue show). Both TR and PR are a

46   common sight in East Asian languages, Chinese among them, and

47   reduplication has attracted much attention in the literature on

48   Sinitic (see e.g. Tang 1988, Zhu 2003, Tsao 2004, and the articles

49   in Wang & Xie 2009 and Xu 2012, *inter alios*). As for most other

50   topics in Chinese linguistics, Standard Mandarin (SM) has been

51   researched in greater depth, with a dearth of comparative studies

52   (see Chappell, Ming & Peyraube 2007). Moreover, to the best of

53   our knowledge, no one has ever tackled the issue of reduplication

54   in Sinitic languages (specifically, of the relation between form,

55   structure and meaning in reduplication) adopting an areal

56   perspective, i.e. taking into account also data from non-Sinitic

57   languages of East and Southeast Asia.[1]

58   In this paper, we will first propose an overview of verbal TR[2] in

59   a convenience sample of twenty Sinitic languages, in order to

60   highlight the connections between form, structure and function of

61   reduplication. To this end, we will take into consideration not only

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[1] However, as remarked by an anonymous reviewer, this has been done for other geographical areas (see e.g. Abbi 1992 on South Asia).
[2] Note that here the scope of TR is meant to include also cases in which the reduplicant undergoes tone change, i.e. 'total' holds at the segmental level only. Moreover, we will treat as TR also cases as e.g. Indonesian *apung* 'to float' > *ter-apung~apung* 'to float (continued action)', even though the addition of the 'accidental' prefix *ter-* is not repeated on each reduplicant, i.e. it is the verb root only which undergoes TR (Sneddon 1996:20; compare Rubino 2013).

62　lexical-semantics and aspectual (*Aktionsart*) features of the verbs,

63　but also their morphological structure. We will show that for the

64　reduplication of simple (monomorphemic/monosyllabic) verbs

65　there is more variation within and across languages of the Sinitic

66　group, whereas reduplicated complex (bimorphemic/disyllabic)

67　verbs have a more consistent behaviour. We will also argue that

68　the relation between form and meaning for reduplicated compound

69　verbs applies even across word classes and, moreover, the input of

70　different patterns of reduplication is conditioned by morphological

71　factors, i.e. by the relation holding between the constituents of the

72　base verb. The generalisations drawn for Sinitic will be tested

73　against a small convenience sample of fourteen non-Sinitic

74　languages of the East- and Southeast Asian area, which are known

75　to share several prominent typological features with Sinitic (see

76　Enfield 2005, Goddard 2005). Since the present research mainly

77　wishes to achieve descriptive and empirical goals, no specific

78　theoretical framework for reduplication is either discussed or

79　adopted here (for a theoretical assessment of (part of) the

80　phenomena at issue, the reader is referred to Arcodia, Basciano and

81　Melloni forthcoming).

82　This paper is organised as follows. In section 2, we will provide

83　an overview of TR in Sinitic, discussing the correspondence

84　between form and function of the attested patterns, the constraints

85   on the input and output of processes of reduplication, and we will

86   propose an analysis for these data. In section 3, we will describe

87   the salient features of verbal reduplication in the non-Sinitic

88   sample, highlighting similarities and differences among TR

89   patterns in these languages, and discussing the relevance of our

90   comparison in a broader typological perspective. In the last section

91   of this paper, we will summarise our main conclusions and provide

92   some hints for further research.

93

94   2. Verbal reduplication in Sinitic

95

96   Sinitic is the largest branch of the Sino-Tibetan family in terms of

97   number of speakers, with a number of dialect groups varying from

98   7 to 10, according to different classifications; each group is then

99   divided into a variable number of subgroups (e.g. Southern Min,

100 Central Plains Mandarin, etc.) and clusters (see Kurpaska 2010).

101 Northern and Western China are dominated by Mandarin dialects,

102 from which SM originated, whereas most of the variation within

103 Sinitic is found in Central and Southern China. Chinese 'dialects'

104 are not varieties *of* SM but, rather, varieties *related to* SM, and

105 should be seen as distinct objects for the purposes of comparison

106 (Norman 2003).

107   However, SM is by far the best studied variety, although it is

108   not always representative of the whole family from the typological

109   point of view (see Yue 1993, Ansaldo & Lim 2004). Note, for

110   instance, that in the *WALS* article on reduplication (Rubino 2013),

111   SM is the only Sinitic language included in the sample[3]. Even

112   though the past twenty years have seen an upsurge of interest in

113   dialectal grammar by Chinese linguists, the vast majority of works

114   in this field are written in Chinese, and are thus not readily

115   accessible to non-specialists, who often must resort to the limited

116   (but growing) scholarship in English and/or other European

117   languages.

118   TR is a widespread feature in Sinitic and, also, in the (broadly

119   defined) East- and Southeast Asian area; however, it is neither

120   uniform, nor consistent throughout the Sinitic group, and even less

121   in the area. In what follows, we will first provide an overview of

122   verbal reduplication in SM, for which we have the greatest

123   abundance of data and analyses, and we will then highlight the

124   most salient similarities and differences of TR in a sample of

125   nineteen more languages, representing eight branches of Sinitic.

126   This is a convenience sample which is not meant to be a balanced

127   representation of Sinitic but, rather, is aimed at providing a broad

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[3] Only ten Sinitic languages have been used in the *WALS*, five of which belong to the Min subgroup. Moreover, most importantly, only five of them, one of which is SM, are included in maps concerning grammatical topics, whereas the rest have been considered only for phonological (or lexical) features.

128 range of examples of different TR constructions within this

129 language group. Although we chose to focus on verb reduplication,

130 we will also make reference to TR involving other word classes,

131 when necessary for the purposes of our discussion.

132   In table 1, we provide a list of the varieties considered, together

133 with their affiliation and with the sources consulted.

134

135   <mark>INSERT TABLE 1 HERE</mark>

136

137   Unfortunately, since the descriptions for most dialects are less

138 detailed, we do not have data of the same quality for them as for

139 SM. Nevertheless, we will show that there are some clear

140 tendencies apparent even in our limited data.

141   Before starting our illustration, we must first briefly introduce

142 the relationship between syllables and morphemes in Sinitic

143 languages. In Chinese, the overwhelming majority of syllables

144 correspond to morphemes, and there are virtually no subsyllabic

145 morphemes (SM examples)[4]:

146

147   (1) a. 書   b. 走

148   *shū*   *zǒu*

149   'book'   'walk'

---

[4] This is not necessarily the case for all of Sinitic; in some varieties, tonal and ablaut morphology is also attested.

150

Compounding is the most common word formation process, and

compound words are mostly disyllabic (see Shi 2002):

(2) a. 書店   b. 走避

    shū-diàn   *zǒu-bì*

     book-shop   walk-avoid

     'bookshop'   'run away from'

However, a small number of polysyllabic monomorphemic

(simplex) words is also attested:

(3) a. 馬達   b. 靦腆

    mǎdá   *miǎntian*

     'motor'   'shy'

As we will see below, this is relevant because reduplication

works in a significantly different way for monosyllabic and

disyllabic words, simplex and complex words, and also for

different kinds of compound words.

Lastly, in table 2 we provide an overview of the key distinctions

and variables on which our presentation and analysis are based.

173

174

175   We will elaborate on the distinctions introduced here and on

176   their relevance in the course of the paper.

177

178   2.1 Reduplication of verbs in Standard Mandarin

179

180   Generally speaking, TR in SM has both iconic (4) and counter-

181   iconic (5) semantics:

182

183   (4) 小   →   小小

184   *xiǎo*   *xiǎo~xiāo*

185   small   small~small

186   'small'   'very/really small'

187   (5) 教   →   教教

188   *jiāo*   *jiāo~jiao*

189   teach   teach~teach

190   'teach'   'teach a little'

191

192   'Increasing' reduplication is the default function of TR of

193   adjectives, indicating a higher degree of liveliness or intensity (see

194   Tang 1988, among others). Verbal TR, on the other hand, is said to

195   express diminishing meaning, marking the so-called 'tentative' or

9

196 'delimitative' aspect (Chao 1968, Li & Thompson 1981, Tsao

197 2004): to do something "a little bit/for a while", to do something

198 quickly, lightly, casually or just for a try (adapted from Li &

199 Thompson 1981:29; characters added):

200

201   (6) 請你嚐嚐這個菜

202   *qǐng   nǐ cháng~chang zhè gè cài*

203   please 2SG taste~taste   this CLF dish

204   'please taste this dish a little'

205

206   It also has the pragmatic function of marking a relaxed tone,

207 casualness (Ding 2010), and thus reduplicated verbs are also used

208 as mild imperatives (see Xiao & McEnery 2004). When a

209 compound (disyllabic and bimorphemic) verb is reduplicated, the

210 whole verb is iterated as such:

211

212   (7) 研究   →   研究研究

213   *yán-jiū*   *yán-jiū~yán-jiū*

214   study-investigate   study-investigate~study-investigate

215   'research'   'do a bit of research'

216

217   The semantic effect is one of diminution; this is termed the

218 'ABAB' pattern. However, compare (8):

219

(8) 說笑 → 說說笑笑

shuō-xiào *shuō~shuō-xiào~xiào*

talk-laugh talk~talk-laugh~laugh

'talk and laugh' 'talk and laugh continuously'

224

If the reduplicated verb is complex and made of coordinate constituents, as in (8), TR actually has an increasing function, here describing two (related) actions being performed alternately, repeatedly. Structurally, TR follows the 'AABB' pattern in this case. Reduplicated coordinate compound verbs may thus express iteration (or pluriactionality), progressive aspect (Hu 2006, Ding 2010), and also express vividness (9), or other kinds of more abstract meanings (10), depending on the linguistic context (on the semantics of AABB verbal reduplication, see Hu 2006):

234

(9) 跑跳 → 跑跑跳跳

pǎo-tiào *pǎo~pǎo-tiào~tiào*

run-jump run~run-jump~jump

'run and jump' 'skip, run about, run and jump in

a vivacious way'

240

(10)偷摸 → 偷偷摸摸

242   *tōu-mō*   *tōu~tōu-mō~mō*

243   steal-touch   steal~steal-touch~touch

244   'pilfer'   'furtively, do a thing covertly'

245

246   Interestingly, TR of coordinate compound nouns, an

247   unproductive process restricted to a few lexicalised items, also has

248   increasing semantics, and the output is AABB (11). TR of

249   compound adjectives also follows the AABB pattern, just as

250   coordinate compound verbs and nouns, and has, again, increasing

251   meaning (12):

252

253

254   (11) 子孫   →   子子孫孫

255   *zǐ-sūn*   *zǐ~zǐ-sūn~sūn*

256   child-grandson   child~child-grandson~grandson

257   'descendants'   'heirs, generation after generation'

258

259   (12) 乾淨   →   乾乾淨淨

260   *gān-jìng*   *gān~gān-jìng~jìng*[5]

261   dry-clean   dry~dry-clean~clean

---

[5] There is no consensus in the literature on tonal patterns in AABB reduplication. According to Li & Thompson (1981:33), the second syllable is unstressed, and thus has a neutral tone, whereas Tang (1988:282) claims that the second syllable is in the neutral tone, while the third and fourth syllable, or just the fourth syllable, are in the first tone. Furthermore, Tang observes that in Taiwan most speakers use the original tones, i.e. there is no tonal modification in this reduplication pattern (see also the examples in Paul 2010).

262   'clean'   'very/totally clean'

263

264   Thus, there appears to be a fundamental difference between the

265   diminishing ABAB pattern and the increasing AABB pattern of

266   reduplication: the former is possible only for verbs, whereas the

267   latter applies to all major word classes. However, AABB TR is not

268   productive for nouns and is available only for a subset of verbs.

269   What is interesting, in our perspective, is that the two patterns

270   apply to different sets of verbs (and nouns), which are apparently

271   defined on the basis of word structure [6]. This is noteworthy

272   especially because many (if not most) languages do not exhibit

273   such a clear correspondence between patterns and functions in

274   reduplication (Mattes 2014).

275   Moreover, the semantic difference between the ABAB and the

276   AABB patterns also concerns restrictions on the input and on the

277   output of TR. Be it monosyllabic AA or disyllabic ABAB

278   reduplication, diminishing TR only allows dynamic and volitional

279   verbs (Li & Thompson 1981), with the [+controlled], [+dynamic],

280   [+durative] features, as those in the examples seen above. This

281   means that all inherently telic verbs, as 去 *qù* 'go' or 弄壞 *nòng-*

282   *huài* 'make-bad, spoil' cannot reduplicate (but cf. below, fn. 10):

---

[6] Note that for verb-object compound verbs, TR involves the repetition of the verbal head only (AAB):

唱歌　　　　　→　　　唱唱歌
chàng-gē　　　　　　　*chàng~chàng-gē*
sing-song　　　　　　　sing~sing-song
'sing'　　　　　　　　　'sing a little'

13

283

284   (13) *我想去去北京

285   * *wǒ xiǎng qù~qu Běijīng*

286   1SG want go~go Beijing

287   'I want to go a bit [≈ for a short while] to Beijing'

288

289   (14) *弄壞弄壞那樣東西

290   * *nòng-huài~nòng-huài nà yàng dōngxi*

291   make-bad~make-bad that CLF thing

292   'spoil a bit that thing'

293

294   There appears to be an incompatibility between diminishing

295   semantics and accomplishments/achievements: monosyllabic

296   simplex verbs as 進 *jìn* 'enter' or 出 *chū* 'exit' cannot undergo TR.

297   Also, stative verbs, generally speaking, do not reduplicate (see

298   Tsao 2004)[7]. Thus, we may conclude that diminishing TR is

299   aspectually constrained. Compare the AABB pattern:

300

301   (15) 進出   →   進進出出

302   *jìn-chū*   *jìn~jìn-chū~chū*

303   enter-exit   enter~enter-exit~exit

---

[7] However, some stative verbs which express states of mind allowing a dynamic interpretation too, as e.g. 了解 *liǎojiě* 'understand', may actually be reduplicated (Ding 2010:283).

304   'enter and exit'   'go in and out, shuttle in and out'

305

306   Example (15) shows that, differently from diminishing

307 reduplication, increasing reduplication does not have any particular

308 aspectual restrictions on the input. However, the base verbs must

309 have specific structural properties: as said above, its constituents

310 must be in a relation of coordination, as in (8). Increasing

311 reduplication, moreover, is not restricted to attested compound

312 verbs:

313

314   (16) *走停   →   走走停停

315   *zǒu-tíng*   *zǒu~zǒu-tíng~tíng*

316   walk-stop   walk~walk-stop~stop

317   'walk and stop'

318

319   Although both 走 *zou* 'walk' and 停 *tíng* 'stop' are attested as

320 individual verbs, there is no compound *走停 *zǒu-tíng*, but 走走停

321 停 *zǒu~zǒu-tíng~tíng* is attested anyway. The possibility that these

322 are but two individual reduplicated monosyllabic verbs should be

323 ruled out, in our opinion, since the reduplication of monosyllabic

324 verbs always has diminishing semantics, as mentioned before.

325 Moreover, reduplication of telic verbs such as 進 *jìn* 'enter' (cfr. ex.

326 15) is not allowed. The coordinands may also be synonymous;

15

327   however, many compounds of synonymous constituents, as e.g. 討

328   論 *tǎo-lùn* 'discuss-discuss = discuss', are now lexicalised and

329   opaque, and thus reduplicate as ABAB (diminishing).

330   Note that disyllabic adjectives with a hierarchic modifier-head

331   structure, as 雪白 *xuě-bái* 'snow-white', reduplicate as ABAB (雪

332   白雪白 *xuě-bái~xuě-bái*), but with an increasing meaning. This

333   constitutes the only exception to the otherwise perfect

334   correspondence between ABAB and diminishing meaning, on the

335   one hand, and between increasing meaning and the AABB pattern,

336   on the other hand (but cf. Paul 2010:137, fn. 15).

337   As to the aspectual semantics of the output of verbal TR, we

338   may remark that diminishing reduplication somehow adds a

339   boundary to the predicate, i.e. it turns an unbounded dynamic event

340   into a holistic / temporally bounded event. As a matter of fact, the

341   progressive aspect marker (正)在 (*zhèng)zài* is incompatible with

342   reduplicated (ABAB) verbs, but the perfective aspect marker −了

343   −*le*, indicating cessation or termination of an action, is perfectly

344   acceptable (Xiao & McEnery 2004, Ding 2010):

345

346   (17)*她在看看電視

347   *tā   zài   kàn~kan   dianshì*

348   3SG.F PROG watch~watch television

349   'she is watching TV a bit'

350

351   (18)她看了看電視

352   *tā*   *kàn-le-kan*   *dianshì*

353   3SG.F watch-PFV-watch television

354   'she watched TV a bit'

355

356   To sum up, in SM the 'default' function of verbal TR is

357 marking delimitative aspect, adding a boundary to the predicate.

358 However, increasing TR is also possible for a subset of verbs,

359 namely coordinate compound verbs, and the pattern of

360 reduplication for those items (AABB) is the same as that for

361 compound adjectives and some nouns. As an exception to this

362 strong association between form and meaning in the reduplication

363 of disyllabic items, compound adjectives with a modifier-head

364 structure follow the ABAB pattern, despite increasing semantics.

365 Let us now provide an overview of the most salient features of

366 verb reduplication in the other Sinitic languages of our sample.

367

368 2.2 Reduplication of verbs in Chinese dialects

369

370 All the languages of our sample make use of verbal TR, with the

371 exception of Xiangtan, in which only adjectives reduplicate. The

372 (near) absence of verbal reduplication is said to be a common

373 feature of the Xiang group (Wu 2005:11-12).

374   In many dialects of our sample, we find verbal TR constructions

375 characterised by the same form-function correspondence described

376 above for SM, as can be seen from the following examples:

377

378   (19) Tiantai (Dai 2006:145)

379   等   →   等等

380   *təŋ³²⁵*   *təŋ³²⁵~təŋ*

381   wait   wait~wait

382   'wait'   'wait a little'

383

384   (20) Shanghai (Zhu 2003:86)

385   幫助   →   幫助幫助

386   *pòng-zu*   *pòng-zu~pòng-zu*

387   help-help   help-help~help-help

388   'help'   'help out a bit'

389

390   (21) Hong Kong Cantonese (Matthews & Yip 2011:40)

391   上落   →   上上落落

392   *séuhng-lohk*   *séuhng~séuhng-lohk~lohk*

393   rise-fall   rise~rise-fall~fall

394   'rise and fall'   'go up and down'

395

396   Aspectual features of the input and output of these constructions

397   also seem to be largely the same as for SM, although we lack

398   detailed information on this for most dialects. However, many

399   other meanings and patterns of TR are attested in the dialects of

400   our sample. Moreover, within one variety there may be

401   considerable variation also among verbs with a different

402   morphological makeup. For instance, in Xinyi, TR of verbs has

403   delimiting semantics as in SM, but only simplex monosyllabic

404   verbs are allowed in this construction.

405   In what follows, we will first discuss TR of verbs with a

406   (broadly defined) progressive/iterative meaning, and then we will

407   discuss the AABB pattern across dialects. Note that above we

408   considered only bare reduplication, but there are several cases of

409   TR constructions which include other items, as e.g.:

410

411   (22) Taiwanese Southern Min (Chuang 2007:4; characters added)

412   食食咧

413   *ciah^8~ciah^8 le^0*

414   eat~eat   EMPH

415   'eat for a little while'

416

417   Here the emphatic marker 咧 *le^0* is required in the construction.

418   While these patterns fall out of the scope of TR proper, since they

419   involve the addition of other morphemes, we will nevertheless

420   mention some of them for the purposes of our discussion.

421

422   2.2.1 Reduplication with progressive semantics

423

424   In §2.1, we pointed out that TR of (non-coordinating) verbs seems

425   to add a temporal boundary to the predicate. However,

426   progressive(/iterative) semantics is also attested for reduplication

427   of monosyllabic verbs in several Chinese dialects (see Wang H.

428   2005b, Fu & Hu 2012):

429

430   (23) Wenzhou (Chi & Wang 2004:250)

431   渠束见束见，写写

432   *gi^2   ts^hʮ^5~ ts^hʮ^5* XIE~XIE

433   3SG.M read~read write~write

434   'He is reading and writing'

435

436   In Wenzhou, reduplication of monosyllabic verbs may mean

437   'repetition/continuation over a short period of time'. In (23),

438   'reading' and 'writing' are two actions performed alternately for

439   quite some time, although each instantiation of the individual

440 actions has a short duration[8]. Delimitative aspect may also be

441 marked by means of TR, just as in SM; the two functions of

442 reduplication are distinguished by suprasegmental means, and obey

443 different restrictions (see Wang F. 2011:53-62). In Suzhou, another

444 dialect of the Wu group, TR of verbs has delimiting semantics, but

445 apparently it can indicate continuation of an action in the

446 background as well (Fu & Hu 2012: 145):

447

448 　　(24)我打打球，小王來喊嘖

449 　　　　WO DA~DA　　QIU XIAO-WANG　LAI　HAN ZE

450 　　　　1SG play~play ball young-Wang come call PERF

451 　　　　'I was playing [a ball game] when Young Wang came to

452 　　　　call (me)'

453

454 As a matter of fact, Shi (2007) proposes that

455 progressive(/iterative) verbal reduplication is a feature

456 distinguishing Southern China from Northern China, and that it

457 reflects the Middle Chinese pattern of verbal reduplication,

458 whereas the diminishing pattern is an innovative feature (see also

459 Shi 2007, 2009, Fu & Hu 2012). However, progressive TR is

460 found also in Taonan, a Mandarin dialect of the Northeast (Wang

461 H. 2005b:150):

---

[8] Note that there is a pause between the two reduplicated verbs, indicated by a comma, which implies that we are not dealing with AABB reduplication here.

462

463   (25) 你看她吃吃奶睡著了

464   NI KAN TA   CHI~CHI NAI SHUI-ZHAO LE

465   2SG see 3SG.F eat~eat milk sleep-fall   PERF/PFV

466   'Look, she fell asleep while drinking milk'

467

468   This construction allows only simplex monosyllabic action

469 verbs, having the feature [+durative]. Moreover, these reduplicated

470 verbs cannot build an independent clause: they rather serve as a

471 background to the predicate of the main clause, i.e. 睡著 SHUI-

472 ZHAO 'fall asleep' in (25).

473   Note that both Shi (2007) and Fu & Hu (2012) provide only

474 examples of TR of monosyllabic verbs, and mention no cases of

475 ABAB reduplicated compound verbs with increasing semantics. In

476 our sample, if (bare) ABAB reduplication of verbs is possible, it

477 mostly has a diminishing function, as in (20). One dubious case is

478 that of Wenzhou, in which, according to Chi & Wang (2004) a

479 limited number of disyllabic verbs can undergo TR with a

480 progressive/iterative meaning. Nevertheless, Chi & Wang never

481 mention explicitly if this subset of verbs reduplicate as ABAB or

482 as AABB. Moreover, according to Wang F. (2011:83), disyllabic

483 verbs are allowed only in the SM-like delimiting pattern.

484   A more puzzling case is that of Quanzhou. In this variety,

485 ABAB reduplication of verbs reportedly has an increasing function,

486 but only in a construction involving the particle 咧 LIE, just as 咧

487 le^0 in Taiwanese (22), another Southern Min dialect (Li R. 2007:21;

488 note that the functions of these two particles are not the same).

489 Nevertheless, increasing reduplication without 咧 LIE is possible if

490 an object is present:

491

492   (26) 煮無利齊，著食食伊了

493   ZHU WU ?[9]   ZHAO SHI~SHI YI LE

494   cook not much must eat~eat 3SG PFV

495   'I didn't make a lot, you must eat it up'

496

497   Following Li R.'s analysis, here the reduplication of 食 SHI

498 indicates that the act of eating is to be iterated several times, and

499 whether this happens in a short or in a long time span is not

500 relevant. We will get back to the analysis of progressive/iterative

501 reduplication later, after having discussed a related topic, namely

502 that of TR in resultative verb constructions.

503

504 2.2.2 Reduplication in resultative constructions

505

---

[9] To the best of our knowledge, this character has no SM reading, hence the question mark.

506   In resultative verb constructions (RVCs), exemplified above (14)

507   by SM 弄壞 *nòng-huài* 'make-bad = spoil', the first verb indicates

508   an action leading to the state expressed by the second constituent.

509   Since they describe an inherently telic process, they are normally

510   excluded from delimitative reduplication in SM, as mentioned

511   before (§2.1)[10]. However, in some dialects of our sample this does

512   not seem to be the case:

513

514   (27) Wenzhou (Wang F. 2011:60)

515   a.   逮魚洗洗光生

516   DAI YU   XI~XI-GUANGSHENG

517   OBJ fish wash~wash-clean

518   'wash the fish clean'

519   Nanjing (Committee 1993:232)

520   b.   你去把地掃掃乾淨

521   NI QU BA DI   SAO~SAO-GANJING

522   2SG go OBJ floor sweep~sweep-clean

523   'sweep the floor clean'

---

[10] However, as pointed out in Li Y. (1998; qtd. in Chi & Wang 2004:151), in SM one may also find examples like 洗洗乾淨 *xǐ~xi-gānjìng* 'wash~wash-clean'; these are said to be calques of dialectal patterns. As a matter of fact, examples of reduplication in resultative constructions are found in the works of writers such as Lu Xun and others coming from the Wu dialect area (see He 2007).

524   Taiwanese Southern Min (Chuang 2007:6; characters

525   added)

526   c. 拍死   →   拍拍死

527      $phah^4\text{-}si^2$ $phah^4\text{~}phah^4\text{-}si^2$

528   hit-die   hit~hit-die

529   'beat to death, kill'   'beat savagely, to death'

530

531   In Wenzhou, TR of the first verb in a resultative construction is

532   often found in imperative sentences, making the request sound

533   softer (Wang F. 2011). According to Chi & Wang, in a sentence

534   such as (27a) the verb 洗 XI 'wash' indicates an action which has

535   not yet eventuated. Fu & Hu (2012) suggest that here the focus is

536   on the result state, whereas the reduplicated verb indicates that the

537   action leading to the result state is carried on (or repeated) for

538   some time. Wang F. (2011) adds that this pattern of TR, even when

539   it is used in declarative sentences, expresses 'dissatisfaction' or

540   'surprise' on the part of the speaker. As to Nanjing, according to

541   the description we consulted, the function and use of verbal TR in

542   RVCs is somewhat close to that of Wenzhou: the reduplication of

543   the verb emphasises the result state, and it is typically found in

544   imperative sentences. Here, however, the verb leading to the result

545   state is emphasised as well. Interestingly, in Wenzhou when a verb

546   is followed by a directional complement, as e.g. 出 CHU 'exit,

547 outwards', TR reportedly indicates that the action occurred hastily,

548 in a short time (Chi & Wang 2004:151):

549

550 (28)渠一聽到消息馬上沖沖出

551 *gi²*   YI   TING-DAO XIAOXI MASHANG CHONG~CHONG-CHU

552 3SG.M once listen-arrive news right.away dash~dash-out

553 'he dashed out as soon as he heard the news'

554

555 Opinions diverge on Taiwanese Southern Min: Tsao (2004)

556 glosses as 'rapid completion' the function of TR in RVCs, arguing

557 that this is consistent with the delimitative function (short

558 duration > rapid completion). Chuang (2007), on the other hand,

559 believes that reduplication in a construction such as (27c) adds to

560 the intensity of the predicate, indicating "intensification on the

561 action causing a change of state" (Chuang 2007:84). A 'rapid

562 completion' account could actually apply to the use of TR in the

563 Wenzhou constructions exemplified in (27a) and (28), in our

564 opinion: in imperatives, if TR indicates 'dissatisfaction', it may

565 imply that the requested action should be carried out quickly; haste

566 and speed seem to be part also of the meaning conveyed by TR

567 with directional complements. We will get back to this below.

568 In Quanzhou, a Southern Min variety closely related to

569 Taiwanese, it has been argued that TR of verbs does not indicate

570   rapid completion, but rather iteration of the action, as seen in (26).

571   TR occurs also within RVCs, indicating that the action leading to

572   the result state occurred several times. This is compatible with

573   Chuang (2007)'s account, as 'iteration' may well entail

574   'intensification'.

575   Another Southern Min dialect, namely Zhangzhou, also makes

576   use of TR in RVCs (Chen 2001:232):

577

578   (29) 紙拆拆破

579   ZHI   CHAI~CHAI-PO

580   paper tear~tear-broken

581   'the paper was completely torn (into pieces)'

582

583   Here, according to Chen, TR conveys the meaning of 'complete

584   quantity', i.e. that the object has been completely affected. Chen

585   believes that verbal TR in Zhangzhou is connected with iteration,

586   even when it has diminishing semantics. This analysis is in line

587   with Li R.'s discussion of Quanzhou reduplication just seen above,

588   although here the focus seems to be on the effects of the action,

589   rather than on the action itself. Note that in Taiwanese Southern

590   Min, in Quanzhou and in Zhangzhou this kind of RVCs with TR

591   are commonly found in declarative sentences, as well as in

592   imperatives.

593   In Taiwanese Hakka, TR of verbs in a resultative construction

594   indicates that the action leading to the result state is performed

595   quickly, in a rash, careless fashion (Ye 2011:27):

596

597   (30)咬咬棉

598   YAO~YAO-MIAN

599   chew~chew-soft

600   'chew until it is destroyed'

601

602   In Suzhou, TR of verbs in a resultative construction reportedly

603   indicates completed action (Wang P. 2011: 332):

604

605   (31)烧烧熟

606   SHAO~SHAO-SHU

607   cook~cook-cooked

608   'cooked'

609

610   Just as in Wenzhou, the reduplicated resultative construction is

611   often found in imperative sentences, judging from the examples

612   provided in Wang P. (2011). Also, note that TR is used to indicate

613   perfective aspect/completion of an action also in another Wu

614   dialect, Yongkang (not included in our sample due to lack of

615   adequate data; Huang B. 1996:175):

616

617   (32)信寄寄就来

618   XIN   JI~JI   JIU LAI

619   letter send~send then come

620   '(I, she, etc.) will come after sending the letter' / '(please)

621   come after sending the letter'

622

623   Since no context is provided, it is unclear whether (32) is to be

624   understood as a declarative or as an imperative sentence.

625   Fu & Hu (2012), on the basis of their own cross-dialectal survey,

626   propose that all monosyllabic patterns of verbal reduplication in

627   Sinitic with a progressive/iterative meaning are found in

628   background sentences. As such, they must be followed either by

629   another clause, as in (24) and (25), or by a resultative complement,

630   or by a directional or a quantifier. According to them, the function

631   of these background clauses is to specify the manner, reason or

632   circumstances of the occurrence of the predicate or result state; the

633   result state thus serves as a boundary to the continuation of the

634   action. In the light of the above, it seems that progressive/iterative

635   verb reduplication differs from diminishing reduplication not only

636   because of its meaning, but also because of its aspectual properties:

637   in the former pattern, the boundary is provided by something else,

638   be it another event, as in the case of progressive TR, or another

639 state, as in the case of reduplication in RVCs. On the other hand, in

640 a pattern as that exemplified in (31) and (32), in which the

641 reduplication of the first verb in the construction is said to indicate

642 the completion of the event described by the predicate, the use of

643 TR to indicate a completed action is akin to that of the perfective

644 aspect marker －了 −*le* in SM RVCs and imperative sentences:

645

646   (33)土豆燒熟了, 再家牛肉

647   *tǔdòu*   *shāo-shú-le*   *zài* *jiā niú-ròu*

648   earth-bean cook-cooked-PFV then add cow-meat

649   'once potatoes are cooked, add the beef'

650

651   (34)擦了它   (adapted from Li & Thompson 1981:208)

652   *cā-le*   *tā*

653   erase-PFV 3SG.N

654   'get rid of it'

655

656   As pointed out by Li & Thompson, in (34) the presence of the

657 perfective marker －了 −*le* reinforces the imperative, as it suggests

658 that the action must be completed[11]. If reduplication of the verb in

659 (31) indicates that the action has been completed, then its use in

---

[11] But cf. Sybesma (1999:71), according to whom in this case －了 –*le* would be a 'phase marker', i.e. a kind of resultative element, indicating that an action has been accomplished more or less successfully without specifying the result state (on phase markers or phase complements, see Chao 1968; Li & Thompson 1981).

660　imperatives may be explained in the same way as SM $-\overline{\jmath}$ $-le^{12}$.

661　The idea of rapid completion applied above to Wenzhou TR in

662　RVCs and VPs with directional complements may have something

663　in common with this as well, at least as far as imperative sentences

664　are concerned.

665　　　Thus, in short, it appears that whereas diminishing reduplication

666　alters the *Aktionsart* of the verb by providing a temporal boundary

667　to the event, perfective TR operates on grammatical aspect. Note

668　that in Wenzhou the reduplication of a monosyllabic verb, if

669　followed by an aspectual(/modal) particle like 爻 $\hbar u \jmath^0$, indicating

670　perfective aspect, may mean 'sudden change' (Chi & Wang 2004:

671　151):

672

673　　(35)鸡都死死爻

674　　　　JI　　　DOU　　SI~SI　　$\hbar u \jmath^0$

675　　　　chicken　already　die~die PFV

676　　　　'The chicken has died already'

677

678　　　The reader may have noticed the use of a verb like 死 SI 'die',

679　which is not allowed in SM delimitative reduplication because of

---

[12] Also, compare Russian пошли! *pošli!* 'let's go!', lit. 'we went (off)', in which the use of a perfective past tense conveys a sense of urgency.

680   its inherent telicity[13]. Wang F. suggests that 交 $\hbar u\mathfrak{I}^0$ is added only

681   to those reduplicated verbs whose base form indicates [-controlled],

682   [-durative] actions, and the construction indicates "suddenness,

683   broad scope, gravity of the consequences, etc." (2011:87; our

684   translation). Needless to say, this is to be regarded as a different

685   construction from the iterative/progressive constructions seen

686   above, because of the presence of an aspectual particle.

687

688   2.2.3 Summary

689

690   Let us now summarise the patterns of TR introduced in the two

691   preceding sections, to provide an overall picture. Whenever a

692   relevant example has been quoted in the text, we will add a

693   reference to it.

694

695   <mark>INSERT TABLE 3 HERE</mark>

696

697   Let us now turn to the topic of the AABB pattern of verbal TR.

---

[13] The cognate verb 死 si^2 in Taiwanese Southern Min may also reduplicate, and is normally followed by the "phase marker" 去 khi^3, indicating completion (Tsao 2004: 302); here, however, reduplication involves the addition of causative meaning, as in the following example (Chuang 2007: 68; characters added):

死死去
$si^2\sim si^2$ khi^3
die~die finish
'cause to become dead'

Note that only monosyllabic verbs are allowed in this construction, further attesting to the relevance of word structure for reduplication (Chuang 2007: 68).

698

699   2.2.4 AABB reduplication

700

701   In the preceding sections, we stressed the fact that there appears to

702   be much variation in TR constructions across Sinitic varieties. As

703   to the AABB pattern of verbal TR, it mostly seems to behave just

704   as in SM, as in the Hong Kong Cantonese example seen above (21);

705   not all varieties in our sample use this construction, but in those

706   dialects in which it is used, there appear to be no significant

707   differences. Two main generalisations emerge:

708

709   a. AABB reduplication seems to be largely independent of the

710   other patterns attested in a given variety;

711

712   b. AABB reduplicated verbs tend to have 'adjective-like'

713   features: they are often used to depict situations, and

714   typically behave as intransitives, regardless of the valency of

715   the base verb(s).

716

717   The first generalisation may be exemplified by Meixian Hakka.

718   In this dialect, there is neither bare reduplication of monosyllabic

719   verbs, nor ABAB reduplication of disyllabic verbs. However,

720 AABB TR is productive, and appears to have the same function

721 and restrictions on the input as in SM (Huang Y. 2006:18):

722

723   (36)上上下下

724   *soŋ⁴⁴~soŋ⁴⁴-ha⁴⁴~ha⁴⁴*

725   ascend~ascend-descend~descend

726   'go up and down'

727

728   A similar case is that of Taiwanese Southern Min. As said

729 earlier, delimitative reduplication necessarily involves either a

730 particle as the emphatic marker 咧 *le⁰* (22), or a resultative

731 complement (27c). Compound verbs reduplicate as ABB or BAA,

732 depending on their structure (Chuang 2007:33; characters added):

733

734   (37)修理   →   修理理咧

735   *siu¹-li²*   *siu¹-li²~li² le⁰*

736   fix-fix   fix-fix~fix EMPH

737   'fix'   'fix a little'

738

739   (38)定票   →   票定定咧

740   *ting³-phio⁵*   *phio⁵ ting³~ting³ le⁰*

741   book-ticket   ticket book~book EMPH

742   'book (tickets)'   'book the tickets for a little while'

743

Compound verbs reduplicating as ABB are often made of synonymous constituents, just as (37), and are arguably lexicalised (see above, §2.1). Verb-object compounds reduplicate only the verb, just as in SM (see above, fn. 6), but here the object is moved before the verb. However, AABB reduplication of coordinate verbs has increasing semantics and does not involve any other item (adapted from Chuang 2007:35):

(39) 來去　　　→　　來來去去

　　lai^5-khi^3　　　　lai^5~lai^5-khi^3~khi^3

　　come-go　　　　come~come-go~go

　　'come and go'　　'coming and going'

As to our second generalisation, namely, that AABB reduplicated verbs tend to have adjective-like features, this is explicitly stated in some of the sources we consulted. For instance, in Xunxian, AABB reduplicated verbs are used to "depict a situation, and their pragmatic features, as well as their syntactic distribution, are about the same as adjectives" (Xin 2006:99; our translation). Moreover, they cannot be followed by aspect markers or complements:

35

766   (40)那個人走路搖搖晃晃嘞，是不是喝醉了？

767   NA GE REN   ZOU-LU   YAO~YAO-HUANG~HUANG-*lɛ*

768   that CLF person walk-road shake~shake-sway~sway-DET

769   SHI BU SHI HE-ZUI   LE

770   be not be drink-drunk PRF

771   'That person is tottering as s/he walks, isn't s/he drunk?'

772

773   Here the main verb is 走路 ZOU-LU 'walk', whereas 搖搖晃晃

774   YAO~YAO-HUANG~HUANG has the function of indicating the

775   manner of the action. This is apparent also in the SM example (10)

776   seen above, in which the TR of the verb 偷摸 *tōu-mō* 'pilfer'

777   yields 偷偷摸摸 *tōu~tōu-mō~mō* 'furtively', i.e. an adverbial

778   depicting how an action is carried out. Another case in point is

779   Taiwanese Hakka, in which AABB reduplicated verbs and

780   adjectives are actually lumped together as modifiers of

781   actions/processes or (stative) situations (Chang 1998:111):

782

783   (41)求求乞乞

784   *kiu²~kiu²-k'iet⁵~k'iet⁵*

785   request~request- plead.for~plead.for

786   '(with) a begging attitude'

787

788   (42)迷迷痴痴

789   *mi²~mi²-ts'ɨ¹~ts'ɨ¹*

790   dazed~dazed-confused~confused

791   'dazed, foggy'

792

793   Chang also points out that in TR of antonymic verbs, as 出出入

794   入 *ts'ut⁵~ts'ut⁵-ŋip⁵~ŋip⁵* 'exit and enter, shuttle in and out', what

795   is being depicted is two different actions occurring repeatedly, just

796   as in SM and in the other varieties of our sample. In point of fact,

797   pairs of antonym motion verbs seem to be the most common

798   AABB reduplicated verbs in our sample, arguably because of their

799   semantics and, also, for pragmatic reasons.

800   An interesting case is that of Chengdu, a Southwestern

801   Mandarin dialect. According to Yang (2005), the AABB pattern of

802   reduplication is available only for a limited set of verbs, which

803   reduplicate as ABAB in SM, and reduplication has increasing

804   semantics (Yang 2005:85):

805

806   (43) 商量   →   商商量量

807   SHANG-LIANG   SHANG~SHANG-LIANG~LIANG

808   discuss-consider   discuss~discuss-consider~consider

809   'discuss, consult'   'discuss repeatedly/for a while'

810

811   Yang also claims that the verbs reduplicating as AABB in

812   Chengdu, nearly all made of coordinate (often synonymous)

813   constituents, correspond to ABAB reduplicates in SM, i.e. to

814   highly lexicalised compound verbs (see above, §2.1). Nevertheless,

815   with a cursory Google search, we actually found that e.g. both 商

816   量商量 *shāng-liang~shāng-liang* (delimitative) and 商商量量

817   *shāng~shāng-liang~liang* (iterative) may be found in written

818   Chinese[14], attesting not only to the differences in the perception of

819   the structure of this word by different speakers[15], but also to the

820   strong connection between the AABB pattern and increasing

821   semantics, on the one hand, and the ABAB pattern and diminishing

822   semantics, on the other hand.

823

824   2.3 Summary

825

826   In the preceding sections, we outlined the main features of TR in a

827   representative sample of languages of the Sinitic group. Although a

828   detailed description of these phenomena is lacking for most

829   varieties at issue, the picture that emerged from our description is,

830   at best, complex and heterogeneous. Nonetheless, it has been

---

[14] 882,000 hits for the ABAB version and 609,000 hits for the AABB version (11/11/2013).
[15] Compare Mandarin 來往 *lái-wǎng* 'come and go', which reduplicates as 來來往往 *lái~lái-wǎng~wǎng* 'go back and forth, come and go in great numbers', and 來往 *lái-wang* 'have contacts with', fully lexicalised (note the neutral tone of the second constituent), which reduplicates as 來往來往 *lái-wang~lái-wang* 'have some contacts with'.

831 possible to highlight some common features among the various

832 semantic and morphological patterns of TR in Sinitic. Let us try to

833 summarise the overall picture as follows, with a focus on verbal

834 reduplication.

835 Based on SM, we identified two main patterns of TR, formally

836 distinguished at the structural level for disyllabic bases, and

837 showing a tight correspondence between form and function: i.e.,

838 AABB (increasing) and ABAB (diminishing) TR.

839 These semantic functions of TR crosscut lexical classes quite

840 nicely in SM. While the diminishing pattern is found only among

841 verbs (as input and output categories), the increasing pattern

842 involves both verbs and adjectives (and nouns, though to a very

843 limited extent). However, only a small subset of verbs are allowed

844 in the increasing template: that is to say, only disyllabic

845 coordinated verbs can be reduplicated within the AABB template,

846 with the consequence that TR of a monosyllabic verb never

847 conveys increasing semantics. This shows that a rigid division of

848 labour applies to TR patterns of SM, in the very sense that there is

849 virtually no chance of having instances of structural identity

850 between the increasing and the diminishing functions.

851 As to the other Sinitic varieties under examination, a

852 preliminary observation concerns the cross-linguistic attestation of

853 verbal and adjectival TR, which seems to occur in all the dialects

854   considered. The only exception is Xiangtan, in which only

855   adjectives reduplicate (allegedly, a gap that is found in all the

856   dialects of the Xiang group according to Wu 2005).

857   A second major issue concerns the level of cross-linguistic

858   uniformity for each pattern, which distinguishes the monosyllabic

859   from the disyllabic templates in the verbal domain. In a nutshell,

860   whereas the structural and semantic features of TR for disyllabic

861   verbs are fairly consistent across dialects, monosyllabic verbs are

862   found in several kinds of constructions, apparently expressing

863   incompatible meanings. Therefore, there seems to be a general

864   tendency for variation to occur in constructions involving the

865   reduplication of monosyllabic, rather than disyllabic items.

866   Sinitic dialects also differ as to the morphological makeup of

867   TR, since some dialects avoid what we dubbed here as 'bare TR'

868   and require additional markers, as noticed for Taiwanese Southern

869   Min (22). Another aspect of variation lies in the input and output

870   constraints for TR: for instance, in Xinyi TR of verbs has

871   delimiting semantics as in SM, but only simplex monosyllabic

872   verbs are allowed in this construction.

873   The most striking deviation from SM, however, is found in the

874   aspectual constraints on TR. As to the semantics of the output,

875   reduplication can convey progressive aspect, arguably opposed to

876   the delimiting semantics of the correspondent SM pattern. As to

877   the aspectual constraints on the input verbs, the ban on telic bases

878   identified for SM clearly does not apply as such to other Sinitic

879   varieties, where inherently telic predicates can be reduplicated.

880   Specifically, RVCs are bases for TR in Wenzhou (27a.), Southern

881   Min (27b.), Nanjing (27c.), Zhangzhou (29), Taiwanese Hakka

882   (30), etc., uncontroversially pointing to the need for a different

883   aspectual characterization of the verbal pattern of TR in these

884   dialects. A detailed analysis of RVCs in the reduplication template

885   clearly exceeds the limits of the present study. We remarked,

886   however, that there is variation in the morphological makeup of

887   these patterns and in the linguistic contexts of use, although for

888   many varieties there appears to be a tendency to use them

889   predominantly in imperative sentences. As to the semantics of TR

890   in RVCs, some of its main features are 'rapid completion' or

891   'repetition over a short period of time', i.e. values tightly related to

892   the core semantics of diminishing reduplication in SM.

893   Let us now turn to the AABB template, which targets adjectives

894   and coordinated verbs in SM. Our cross-linguistic survey has

895   disclosed two main properties of this pattern: it is structurally and

896   semantically consistent across languages, independently of the

897   other reduplication patterns attested in a given dialect (exx.36-39).

898   Moreover, reduplicated verbs in the AABB template may dismiss

899   their verbal features and approach manner adverbs instead. As a

900   consequence, AABB reduplicated verbs tend to avoid aspect

901   markers and drop arguments and complements altogether,

902   independently of the valency properties of the base (ex. 40). From

903   the semantic and pragmatic points of view, AABB TR is often

904   used to depict situations and, in particular, it can express the

905   manner in which the action (described by the main verb in the

906   sentence) is carried out (exx. 41-42).

907   To recapitulate, there is a major point of divergence among

908   Sinitic varieties, which lies in the semantic characterization of verb

909   reduplication. On the one hand, verbal TR indicates background

910   open-ended events, as in Suzhou and Taonan; on the other, it may

911   involve inherently telic predicates. Chinese scholars have

912   attempted several explanations for the semantics of TR in these

913   varieties, capitalising on the notion of 'backgrounding', 'irrealis',

914   'rapid completion', 'suddenness', 'intensity'. This is partly a

915   reflection of earlier uses of reduplication in the history of Chinese;

916   more specifically, TR in SM exhibits innovations with respect to

917   the older patterns, which are instead preserved to a greater extent

918   in other Sinitic varieties. As to the semantic and structural

919   characterization of AABB reduplication, this emerges as a more

920   stable pattern across languages, being rather consistent in structural

921   and semantic terms across dialects.

922   As a (tentative) conclusion, we may propose that there are two

923   core semantic values for reduplication, both involving the notion of

924   'iteration': iteration over a long/undefined period of time and

925   iteration over a short/defined period of time. The former should

926   reflect the older use of reduplication, and the latter should reflect

927   the 'innovative' uses, as e.g. those of SM. Iteration over a

928   long/undefined period of time may easily be reanalysed as

929   expressing progressive/unbounded semantics, as in Suzhou,

930   whereas iteration over a short period of time may be reanalysed as

931   indicating perfective-like meanings, as rapid completion and

932   suddenness, and, also, tentativeness. These processes of reanalysis,

933   needless to say, are construction-specific, i.e. they depend on the

934   interaction between verb semantics and the other items, such as

935   resultatives or aspect markers, if present. Thus, reduplication may

936   add a temporal boundary, as in SM, but may also act to the

937   contrary. In Suzhou, for instance, both effects of reduplication are

938   attested (compare 24 and 31). However, more data taken from a

939   broader variety of contexts is needed to provide a proper

940   assessment of these phenomena.

941

942   3. An areal perspective

943

944   In this section, we will test the generalisations drawn for Sinitic on

945   a small convenience sample of fourteen non-Sinitic languages of

946   the East- and Southeast Asian area. The languages of our sample

947   are shown in table 4, together with their affiliation, the country

948   where they are (mainly) spoken and the sources consulted.

949

950   INSERT TABLE 4 HERE

951

952   All the languages in our sample display verbal reduplication.

953   However, the meaning conveyed by verbal reduplication is

954   generally increasing: TR is mainly used to express iterative or

955   durative aspect, repeated action, emphasis, etc. The only languages

956   that use verbal reduplication with a diminishing function, like in

957   SM, are Vietnamese and Dong, as we will see. In what follows, we

958   will first provide an overview of the patterns and functions of

959   verbal TR in the languages at issue. Then, we will focus on the

960   reduplication of disyllabic and bimorphemic verbs.

961

962   3.1 Verbal reduplication: an overview

963

964   As mentioned above, verbal TR in the non-Sinitic languages of our

965   sample mainly has an increasing function. For example, according

44

966   to Khin Khin Aye (2005:354), in Singapore Bazaar Malay[16] TR

967   conveys iterative or durative aspect, expressing either repetition or

968   continuity of the action or process expressed by the main verb:

969

970   (44) *Dia   selalu di tengah jalan tipu~tipu   sama orang.*

971   3SG   always in middle road cheat~cheat with   people

972   'He is always on the road, cheating people.'

973

974   In Khmer too verbal TR expresses repeated action (Haiman

975   2011:90):

976

977   (45) *papuh teuk   pruac~pruac*

978   bubble water bubble.up~bubble.up

979   'water keeps bubbling and bubbling'

980

981   TR expresses repetition also in M'nong (46), Burmese (47),

982   Zhuang (48) and Yongning Na (49):

983

984   (46) *par~par* 'fly~fly, fly repeatedly'   (Thu 1998:62)

985

986   (47) *lá~lá-sa* 'come~come-tease, keeps coming and teasing'

987   (Lay 1978:47)

988

---

[16] Singapore Bazaar Malay is a Malay-lexified pidgin with a Sinitic substratum.

989   (48) *bae~bae-dauq~dauq* 'go~go-come~come, go back and

990   forth'   (Wei 1985:16)

991

992   (49) *tω33~tω33* 'pull~pull, pull back and forth' (Lidz 2010:372)

993

994   Note, however, that although Lay (1978) states that

995   reduplication of monosyllabic verbs in Burmese can indicate that

996   the action is frequently repeated, he nevertheless adds that the

997   main verb in the reduplication pattern, such as *sa* 'tease' in (47),

998   does not reduplicate. Thus, it is not clear whether this pattern can

999   be considered as TR or not. Also, note that in Zhuang verbs

1000   generally do not reduplicate; the only verbs displaying

1001   reduplication are antonymous directional verbs, like (49) above.

1002   In Jahai, verbal TR is said to convey continuative aspect, i.e. it

1003   is used to signal that a situation goes on for a period of time, often

1004   implying that it is carried out until completion (Burenhult

1005   2005:101)[17]:

1006

1007   (50) *ɁoɁ   gej~gej nasiɁ ton*

1008   3SG eat~eat rice   that

1009   'He kept on eating that rice [until he was finished].'

---

[17] According to Burenhult (2005), TR of "property verbs" does not express continuity but only intensity. However, we suggest here that these verbs are actually adjectives, prone to be used as predicates in specific contexts (see "verb-like adjectives"; Dixon 2004:14), as e.g.: *lajin* 'to be different' → *lajin~lajin* 'to be very different'; *Ɂhəj* 'to be small' → *Ɂhəj~Ɂhəj* 'to be very small' (Burenhult 2005:101).

1010

1011   In Indonesian, reduplication may indicate either an action done

1012   over an undefined time span or an action performed repeatedly

1013   (Sneddon 1996:20):

1014

1015   (51) *Bu Yem meng-urut~urut   rambut anaknya*.

1016   Mrs Yem ACT-stroke~stroke hair   child

1017   'Mrs Yem stroked her child's hair (a number of times).'

1018

1019   In Lao (52) and Thai (53), verbal TR expresses intensification

1020   or emphasis:

1021

1022   (52) *man2 jaak5-paj2~jaak5-paj3*[18]   (Enfield 2007:255)

1023   3SG   want-go~want-go

1024   'He really wanted to go.'

1025

1026   (53) *cʰán cʰɔ́ɔp~chɔ̂ɔp kʰáw*[19]   (Sookgasem 1997:269)

1027   I   like~like   her

1028   'I do like her.'

1029

1030   In Indonesian too, reduplicated verbs convey a sense of

---

[18] This type of reduplication has the structure σ2⁺-σα, where σ2⁺ is a stressed and lengthened version of σα, with tone 2 overriding the original tone (Enfield 2007:255).

[19] In this kind of reduplication in Thai, the non-high tone of a monosyllabic word or the last syllable of a polysyllabic word changes to high or extra high tone (Sookgasem 1997:260).

1031 intensity, as e.g. *men-jadi~jadi* 'ACT-become~become, get worse'

1032 (Sneddon 1996:20).

1033   There are yet other functions of verbal TR in the languages of

1034 our sample. For example, in Bahnar verbal TR expresses

1035 consecutive actions (Banker 1964:124):

1036

1037   (54) *sa~sa* 'eat~eat, to eat first and then do something else

1038   immediately'

1039

1040   In Yongning Na, verbal TR may express reciprocal events (Lidz

1041 2010:372)[20].

1042

1043   (55) *tʰæ13~tʰæ13* 'bite~bite, bite each other'

1044

1045   Verbal TR expressing reciprocal meaning is found in Qiang too

1046 (La Polla & Huang 2003:123):

1047

1048   (56) *ʁu~ʁu* 'curse~curse, curse each other'

1049

1050   Interestingly, diminishing verbal TR is quite rare. It is basically

1051 found only in Vietnamese (Goddard 2005:68):

1052

---

[20] Moreover, according to Lidz, reduplication of stative verbs conveys 'added intensity'.

1053   (57) *động~động* 'move~move, move a little'

1054

1055   However, in Indonesian too some reduplicated verbs have a sort

1056   of diminishing meaning (Sneddon 1996:20), since they convey the

1057   semantic/pragmatic value of 'action done in a casual or leisurely

1058   way'.

1059

1060   (58) *duduk~duduk* 'sit~sit, sit about'

1061

1062   This pragmatic effect of TR can be considered an extension of

1063   the 'short duration' value, defined as the diminishing function of TR

1064   in SM.

1065   In Dong, verbs generally cannot reduplicate. However, arguably

1066   because of the influence of Chinese, there is a tendency for some

1067   verbs to undergo reduplication with diminishing function, i.e.

1068   implying 'short duration' or 'try out' (Long & Zheng 1998:122).

1069

1070   (59) *ja²¹² tau⁵⁵ pai⁵⁵ ṭham¹³~ṭham¹³*

1071   two 1PL go walk~walk

1072   'Let's go for a short walk.'

1073

1074   Finally, in M'nong TR of a restricted class of verbs (basically,

1075   stative verbs, judging from the examples we found) expresses

1076 lightened meaning, as e.g. *bo~bo* 'love~love, love less' (Thu

1077 1998:62).

1078

1079 3.2 AABB reduplication

1080

1081 In the non-Sinitic languages of our sample, the verbal AABB

1082 pattern of reduplication is found only in a few languages. For

1083 example, it is observed in Vietnamese, as shown in the examples

1084 below (Nguyen 1997:52). The meanings conveyed by this pattern

1085 are akin to those found in Sinitic.

1086

1087   (60) a. *nói cười*   →   *nói~nói cười~cười*

1088   speak laugh   speak~speak-laugh~laugh

1089   'speak and laugh' 'speaking and laughing at the same time'

1090   b. *đi lại*   →   *đi~đi lại~lại*

1091   go come   go~go-come~come

1092   'go and come'   'go back and forth'

1093

1094   The AABB-type TR pattern is found in M'nong too, where it

1095 indicates repetition, hence an intensifying value (Thu 1998:64):

1096

1097   (61) a. *sa nhêt*   →   *sa~sa-nhêt~nhêt*

1098   eat drink   eat~eat-drink~drink

1099   'eat and drink'   'eat and drink again'

1100   b. *gơm ngơi*   →   *gơm~gơm-ngơi~ngơi*

1101   laugh speak   laugh~laugh-speak~speak

1102   'laugh and speak'   'laugh and speak again'

1103

1104   In Dong, as said above, verbal reduplication is uncommon; here

1105 two antonymous verbs can reduplicate following the AABB

1106 pattern, conveying the meaning of repeated action (Long & Zheng

1107 1998:122):

1108

1109   (62) a. tha^{453}~tha^{453}-lui^{33}~lui^{33}

1110   go.up~go.up-go.down~go.down

1111   'go up and down, again and again'

1112   b. pai^{55}~pai^{55}-$ɕon^{33}$~$ɕon^{53}$

1113   go~go-turn~turn

1114   'keep going back and forth'

1115

1116   Note, however, that there are just a few examples of this kind of

1117 reduplication in Dong, and we may speculate that this pattern, just

1118 like diminishing reduplication (see ex. 59 above), is influenced by

1119 Sinitic.

1120   In Zhuang, as we have seen, only antonymous directional verbs

1121   can reduplicate, following the AABB pattern, indicating repetition

1122   (see ex. 48 above).

1123   Finally, in Burmese there are bimorphemic AB verbs, where

1124   neither A nor B exist independently, which nonetheless reduplicate

1125   as AABB and yield adverbs (63). The AB bases entering this

1126   pattern of reduplication seem to be stative verbs (including the so-

1127   called adjectival verbs; Lay 1978:57):

1128

1129   (63) *sîn-sâ* 'think' → *sîn~sîn-sâ~sâ* 'thoughtfully'

1130

1131   This use of AABB reduplicated verbs as adverbs is hardly

1132   surprising. As a matter of fact, we have seen above that in Sinitic

1133   AABB verbs often drop their verbal status and tend to acquire

1134   adjectival-like features, often recurring as modifiers of the main

1135   verb in a given sentence.

1136   On these empirical grounds, some interesting generalizations

1137   emerge, which specifically target the morphological makeup of the

1138   base verbs.

1139   First and foremost, in the non-Sinitic languages of our sample,

1140   just as in SM, verbs that are allowed in the AABB TR construction

1141   must be disyllabic **and** bimorphemic. As a matter of fact, in

1142   languages which have disyllabic monomorphemic reduplication,

1143   the TR pattern is ABAB, i.e. the verb reduplicates as a whole and

1144   'behaves' as monosyllabic TR.

1145   Furthermore, it is worth nothing that the AB bases entering the

1146   AABB reduplication pattern must be formed by two **lexical**

1147   morphemes. For example, in Jahai derived forms such as

1148   imperfectives, iteratives and distributives can undergo

1149   reduplication. However, even though these verbs are bimorphemic,

1150   the reduplication pattern is ABAB, since one of the morphemes is

1151   derivational/functional, rather than lexical (Burenhult 2005:65, 101;

1152   our glosses):

1153

1154   (64) /ɟʔ-ɟɨʔ/   →   /ɟʔ-ɟɨʔ~ɟʔ-ɟɨʔ/

1155   IPFV-burn   IPFV-burn~IPFV-burn

1156   'to be burning'   'to be keeping on burning'

1157

1158   As to the grammatical relation between the constituents of the

1159   base, in all the languages at issue disyllabic bimorphemic bases

1160   undergoing the AABB type of TR are formed by **coordinate**

1161   compounds (including constituents in an antonymous relation), just

1162   as in Sinitic.

1163   On a more general level, what seems to emerge from the above

1164   picture is that languages making use of the AABB pattern of TR

1165   tend to have a 1:1 correspondence between syllables and

1166   morphemes. Related to this, the AABB pattern seems to be

1167   dependent on the occurrence in a given language of a specific

1168   compounding pattern, namely, bimorphemic and coordinate verbs.

1169   Table 5 summarizes the patterns and functions of verbal TR in the

1170   languages of our non-Sinitic sample; as for table 3., we added

1171   references to the relevant examples in the text.

1172

1173   <mark>INSERT TABLE 5 HERE</mark>

1174

1175   4. Concluding remarks

1176

1177   In this article we provided an illustration of the patterns of verbal

1178   (and, to a very limited extent, adjectival) reduplication in SM and

1179   in a convenience sample of nineteen Chinese dialects and fourteen

1180   non-Sinitic languages of the East- and Southeast Asian area.

1181   Starting from a quite detailed analysis of SM, for which a

1182   considerable amount of empirical and theoretical research is

1183   available, we aimed at highlighting some interesting correlations

1184   between structure and meaning in reduplication which cross-cut

1185   lexical classes.

1186   As to the relationship between form, function and aspectual and

1187   semantic features in reduplication, in table 6 we summarise the

1188 main correlations which we found, focussing on the AA and

1189 AABB patterns:

1190

1191 <mark>INSERT TABLE 6 HERE</mark>

1192

1193   One of the most striking aspects of reduplication in Sinitic is

1194 that there appears to be a very tight correspondence between

1195 structure and meaning, in the very sense that word structure is able

1196 to determine the form and function of reduplication. This is

1197 apparent in Mandarin and in the Sinitic varieties where, for

1198 instance, the increasing AABB pattern targets only coordinative

1199 compound verbs, whilst the 'unmarked' option for verbs is the

1200 diminishing function, structurally realised as ABAB in the case of

1201 a disyllabic and bimorphemic base.

1202   However, the present survey highlighted a considerable variety

1203 of semantic nuances and structural patterns for verbal TR. The

1204 peak of variation is probably to be found in the domain of

1205 monosyllabic and monomorphemic verbs, which exhibit a wide

1206 range of behaviour in the languages considered. Reduplicated

1207 monosyllabic verbs, in particular, may express meanings as

1208 different as delimitative aspect, tentativeness, rapid completion,

1209 suddenness, greater intensity, etc. We proposed that these

1210 functions are all somehow connected to two semantic (macro-

1211)values, namely repetition over an unbounded time span, which

1212 appears to be the earlier use for verb reduplication in the history of

1213 Chinese, and repetition over a bounded time span, seemingly the

1214 innovative usage. These meanings were extended to include the

1215 disparate functions and values which reduplicative constructions

1216 possess in modern Sinitic varieties.

1217 As to disyllabic/bimorphemic reduplication, we showed that the

1218 association between functions and patterns is much more stable

1219 and consistent, both across word classes and across dialects. For

1220 instance, we did not find a single instance of a disyllabic (non-

1221 coordinate) verb reduplicating as ABAB and expressing increasing,

1222 rather than diminishing semantics.

1223 TR patterns in the non-Sinitic sample are less stable and

1224 uniform than what is found in the Sinitic sample, but all in all a

1225 general tendency emerges quite distinctly: i.e. TR mostly expresses

1226 increasing semantics. While on the one hand a varied array of

1227 semantic values are attested cross-linguistically, such as iterative

1228 or progressive aspect, reciprocal meaning and other 'pragmatic'

1229 correlates (i.e. emphasis and/or intensity), on the other hand these

1230 meanings can be more or less easily reconciled with one of the

1231 core values of verb reduplication in Sinitic: repetition over an

1232 unbounded time span. As to the diminishing value of verbal TR,

1233 attested in SM and some of the Sinitic varieties at issue, this

1234 emerges as quite rare across the non-Sinitic languages under

1235 examination. This cross-linguistic tendency could be interpreted as

1236 an indication that diminishing or delimitative semantics – an

1237 innovation of SM and some other Chinese dialects – might be

1238 derivative of a more iconic value of TR, i.e. increasing or

1239 intensifying semantics.

1240   The areal approach adopted in this study allowed us to highlight

1241 the alleged influence of SM on the semantics of TR in Dong; it is

1242 not clear instead whether Vietnamese and Indonesian, which have

1243 a few instances of TR with diminishing value, exhibit the same

1244 effect or developed this pattern independently. Interestingly

1245 enough, the few languages having diminishing reduplication

1246 exhibit instances of the verbal AABB pattern too, with the

1247 expected increasing semantics. Even in these languages, thus, there

1248 seems to be a division of labour between the patterns of TR, which

1249 unambiguously associate structure and semantics in the verbal

1250 domain. In languages lacking diminishing reduplication, the

1251 AABB pattern tends to surface as a constructional schema, posing

1252 looser constraints on the input and, often, tending towards an

1253 adverbial/adjectival status of the output (independently on the

1254 input category). As a concluding remark on the AABB pattern,

1255 especially in the light of the observations on the morphological

1256 constraints in §3.2, we may speculate that the similarities with

1257 Sinitic in this domain are dependent on language-specific

1258 morphological properties of the languages at issue, and that, if

1259 present, linguistic contact effects are most likely subordinate to

1260 these requirements.

1261   Needless to say, the present survey is just a first and possibly

1262 coarse attempt to shed light on a heterogeneous class of

1263 phenomena, which would deserve a larger set of data and a finer-

1264 grained investigation. We hope however to have paved the way for

1265 a better assessment of the structural and semantic properties of TR

1266 across Sinitic and other non-Sinitic languages of the East- and

1267 Southeast Asian area, by raising original research questions, and

1268 suggesting some guidelines for further studies in a typological

1269 perspective.

1270

1271

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Language	Group	Source
Xunxian	Mandarin	Xin (2006)
Chengdu	Mandarin	Yang (2005)
Nanjing	Mandarin	Committee (1993)
Taonan	Mandarin	Wang H. (2005a)
Taiyuan	Jin	Hou & Wen (1993)

Xiangtan	Xiang	Zeng (2001)
Taiwanese Southern Min	Min	Tsao (2004), Chuang (2007)
Quanzhou	Min	Li R. (2007)
Zhangzhou	Min	Ma (1995), Chen (2001)
Gutian	Min	Li B. (2006)
Hong Kong Cantonese	Yue	Matthews & Yip (2011)
Xinyi	Yue	Luo K. (1987)
Taiwanese (Siyen) Hakka	Hakka	Luo Z. (1984), Chang (1998)，Ye (2011)
Meixian Hakka	Hakka	Huang Y. (2006)
Shanghai	Wu	Zhu (2003)
Wenzhou	Wu	Chi & Wang (2004), Wang F. (2011)
Suzhou	Wu	Wang P. (2011), Fu & Hu 2012
Tiantai	Wu	Dai (2006)
Yanshan	Gan	Hu & Lin (2008)

Table 1: Our sample of Chinese dialects

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	Distinction/variable		**Description / comment**
Structure of the verb/verbal construction	Monosyllabic		Simplex verbs made of one syllable/morpheme
	Disyllabic	Non-coordinate	We distinguish between disyllabic/bimorphemic verbs whose constituents are in a relation of coordination and those in which the constituents are not in such a relationship
		Coordinate	
		Verb-object compounds	Compounds in which the righthand constituent is the object of the lefthand verbal constituent
	Di- or trisyllabic	Resultative verb construction (RVC)	A construction in which a verb indicates an action leading to the state expressed by the second constituent
Aktionsart and semantic features	Durativity		An action/event may take time or not (i.e. be punctual)

	Dynamicity		An action/event may be dynamic or stative
	Volitionality		An action/event may be controlled by the subject or not
	Boundedness		A predicate may have a temporal endpoint or not
Reduplication patterns	AA		TR pattern for monosyllabic verbs
	ABAB		Patterns of reduplication for disyllabic verbs (or trisyllabic RVCs); A stands for the first constituent and B for the second constituent
	AABB		
	AAB		
	ABB		
	BAA		
Functions	Increasing	Progressive/iterative	Indicating either progressive aspect or iteration of an action
		Intensification/emphasis	Indicating intensification of an action or state, or emphasis
		Complete affectedness	Indicating that the patient of the verb has been completely affected by the process
	Diminishing	Delimitative	Indicating short duration or 'tentativeness' of an action (or lighter meaning for states)
		Rapid completion	Indicating that an action is carried quickly to its completion
		Action performed hastily / in a rush	Indicating that an action occurred hastily, in a short time
	Others	Completed action	Indicating that an action has been completed
		Consecutive actions	Indicating that some other action will occur immediately after
		Reciprocal	Indicating that the action is performed

		reciprocally by and on the participants
	Adverbialisation	Turning the reduplicated verb into an adverbial modifier

Table 2: Distinctions and variables used in our research

Variety	Bare TR allowed?	Meaning of bare TR	Bare TR in specific sentence types?	TR in RVCs allowed?	Meaning of TR in RVCs	TR in RVCs in specific sentence types?	Other
Wenzhou	Only if another verb is present (23)	Action in progress	No	Yes (27a)	Action has not eventuated	Often in imperatives, also declaratives	With directional complements indicates hasty action (28)
Suzhou	Yes (24)	Action in progress	Background sentences?	Yes (31)	Completed action	Often in imperatives	
Taiwanese S. Min	No			Yes (27c)	Rapid completion / intensification	No	
Zhangzhou	Only delimitative			Yes (29)	Complete affectedness of the object	No	With directional complements, same as in RVCs
Quanzhou	Only if object is present (26)	Iteration of action	No	Yes	Iteration of action	No	
Taiwanese Hakka	Only delimitative			Yes (30)	Quick, rash completion	No	
Taonan	Yes (25)	Action in progress	Only background clauses	No			
Nanjing	Only delimitative			Yes (27b)	Emphasis of action and result state	Mostly in imperatives	

Table 3: Progressive/iterative TR and RVCs

Language	Group	Country	Source
Qiang	Sino-Tibetan, Tibeto-Burman, Tangut-Qiang	China	LaPolla & Huang (2003)
Yongning Na (Mosuo)	Sino-Tibetan, Tibeto-Burman, Lolo-Burmese	China	Lidz (2010)

Dong	Tai-Kadai, Kam-Tai, Kam-Sui	China	Long & Zheng (1998)
Vietnamese	Austro-Asiatic, Mon-Khmer, Viet-Muong	Vietnam	Nguyen (1997)
M'nong	Austro-Asiatic, Mon-Khmer, Banharic	Vietnam	Thu (1998)
Bahnar	Austro-Asiatic, Mon-Khmer, Banharic	Vietnam	Banker (1964)
Lao	Tai-Kadai, Kam-Tai, Tai	Laos	Enfield (2007)
Thai	Tai-Kadai, Kam-Tai, Tai	Thailand	Sookgasem (1997)
Zhuang	Tai-Kadai, Kam-Tai, Tai	China	Wei (1985)
Indonesian	Austronesian, Malayo-Polynesian, Malayo-Chamic	Indonesia	Sneddon (1996)
Khmer	Austro-Asiatic, Mon-Khmer, Eastern Mon-Khmer	Cambodia	Haiman (2011)
Jahai	Austro-Asiatic, Mon-Khmer, Aslian	Malaysia	Burenhult (2005)
Burmese	Sino-Tibetan, Tibeto-Burman, Ngwi-Burmese	Burma	Lay (1978), Soe (1999)
Singapore Bazaar Malay	Pidgin, Malay based	Singapore	Khin Khin Aye (2005)

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Table 4: Our non-Sinitic sample
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Language	Meaning of verbal TR	AABB pattern	AABB function
Qiang	Reciprocal (56)	No	
Yongning Na (Mosuo)	Reciprocal (55) Back and forth action (49) Added intensity (stative verbs)	No	
Dong	Diminishing (short duration or 'try out') (59)	Yes	Repeated action (62)
Vietnamese	Diminishing (57)	Yes	Repeated action, simultaneous actions (60)
M'nong	Repetition and continuation (46) Lightened meaning (with stative verbs)	Yes	Repeated action (61)
Bahnar	Consecutive actions (54)	No	
Lao	Intensification ('really, very V') (52)	No	
Thai	Intensification or emphasis (53)	No	
Zhuang	No reduplication (with the exceptions of AABB directional verbs)	Yes	Repetition (only for antonymous directional verbs) (48)
Indonesian	Continued action, either an action done over a period of time or an action performed repeatedly (51)	No	

	Action done in a casual or leisurely way (58) Intensity		
Khmer	Repeated action (45)	No	
Jahai	Continuative aspect (50)	No	
Burmese	Frequently repeated action (47)	Yes	Adverbialisation (63)
Singapore Bazaar Malay	Iterative or durative aspect (44)	No	

Table 5: Verbal TR in the non-Sinitic sample

Pattern	Function	Aspectual / *Aktionsart* features	Restrictions on input	Other features
AA	Delimitative	TR provides a temporal boundary to the predicate; compatible with perfective aspect marking	Typically, only [+controlled] [+dynamic] [+durative] verbs	Rarely used with stative verbs, indicates lightened meaning
	Rapid completion Action performed hastily / in a rush Intensification / emphasis Complete affectedness	The boundary is provided by another state	Typically, [+dynamic] verbs	Often found within RVCs in imperative sentences
	Progressive / iterative	The boundary is provided by another event		Typically found in background sentences
	Completed action Consecutive actions	TR operates on grammatical aspect		
AABB	Progressive / iterative	Typically describes unbounded events, iterated over an undefined time span	Normally requires two coordinate lexical morphemes (no aspect / *Aktionsart* restrictions)	
	Adverbialisation			The output is mostly intransitive

Table 6: Main correlations between form, function and aspectual/semantic features of AA and AABB verbal TR in our sample

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