

Supplementary Materials

A. Constructions excluded from causative-resultative constructions

A.1 Biclausal resultative/depictive constructions

There is a construction in Cantonese by an uninflected verb with no following argument, followed by a full clause introduced by 得 *dak1*, 到 *dou3*, or sometimes no morpheme. It has no negative potential form. Some examples are as follows. Note that the second one is not a CRC since *dak1* cannot be replaced by *m4* to form a negative potential form:

- (1) a. 嘩, 講 到 好 神聖 咁 喎
 waa3 gong2 dou3 hou2 san4sing3 gam2 wo3
 wow say DOU very sacred like SFP
 ‘Wow, you talk like it’s really sacred.’ [SEA004]
- b. 旺角 阿伯 講 得 好 準
 wong6gok3 aa3baak3 gong2 dak1 hou2 zeon2
 Mongkok grandpa say DAK very accurate
 ‘What the Mongkok grandpa said was very accurate!’ [SEA005]

A.2 Some quantitative particles

添 *tim1* is not considered, since it has rather different syntax as Matthews and Yip (2011) note, and it cannot take the potential form.

A.3 Clearly non-CRC SVCs

Coverb, purposive, simultaneity, temporal sequencing etc. serial verb constructions are not included as CRCs. Not only do these constructions not take potential forms, but they are also clearly semantically and syntactically distinct, and thus will not be elaborated on here. See Matthews (2006) for examples of such constructions.

A.4 Some directional particle constructions

The directional particle construction with the classifier 啲 *di1* ‘a bit’ has been discussed extensively in the literature (e.g. Yiu 2005, 2013). It has comparative meaning:

- (2) 你 移 過 啲 張 蓆
 nei5 ji4 gwo3 di1 zoeng1 zek6
 2sg move pass a.bit CLF mat
 ‘You move the mat over a bit!’ [SEA024]

According to Yiu, the directional particles that can take *di1* are those whose meanings involve both the source and the goal, whereas those particles that do not take *di1* only indicate either source or goal. However, in cases of actual usage, it is not always clear that these sentences always compare the source and goal of an action. Consider the following sentence:

- (3) 擺 枱邊 應該 解 到,
 baai2 toi2bin1 jing1goi1 gaai2 dou2,
 put tableside should unlock DOU

但	擺	入	啲	嘅	就
daan6	baai2	jap6	di1	ge3	zau6
but	put	inner	a.bit	NMZ	then
要	用	手機	座...		
jiu3	jung6	sau2gei1	zo2		
need	use	mobile.phone	stand		

'If it's put near the edge of the table, it should be possible to unlock it; but if you put it in an inner position (i.e. farther from the edge of the table), then you need to use a mobile stand.' [SEA028]

In (16), we are not comparing the source and goal of the position of a certain phone, but rather two possible static configurations. It is thus not clear that this use of *jap6* is really the same as the use of *jap6* as a (dynamic) directional verb, as in the usual CRC.

We believe the constructions with *di1* and other quantifying modifiers are not cases of the CRC. Firstly, they have no negative potential form, so they fail to meet our definition:

- (4)
- | | | | |
|--------------|-----------|---------------|------------|
| ~*擺 | 唔 | 上 | 啲 |
| <u>baai2</u> | <u>m4</u> | <u>soeng5</u> | <u>di1</u> |
| put | NEG | rise | a.bit |
- 'cannot move it up a bit' [unattested]

In addition to the lack of a potential form, there are other syntactic differences that point to the directional verbs that appear with *di1* as being from those that cannot. In particular, the verbs compatible with *di1* can appear in biclausal resultative/depictives marked with *dou3* and *dak1* along with adverbial modifiers or *di1* itself, with corresponding stative meanings such as *soeng5* 'high'. Compare 上 *soeng5*, which can take *di1*, with 嚟 *lai4*, which cannot:

- (5)
- a.
- | | | | | |
|----------|-------|------|------|--------|
| 已經 | 擺 | 到 | 好 | 上 |
| ji5ging1 | baai2 | dou3 | hou2 | soeng5 |
| already | put | DOU | very | high |
- 'It has already been put in a very high place.' [SEA025]
- b.
- | | | | | | |
|------|------|-------|------|-------|--------|
| 隻 | 杯 | 擺 | 得 | 太 | 上, |
| zek3 | bui1 | baai2 | dak1 | taai3 | soeng5 |
| CLF | cup | put | POT | too | high |
- 'The cup was put in a position too high; it was not at the centre of the plate.' [SEA026]
- | | | | |
|-----|------|-------|------------|
| 唔 | 喺 | 碟 | 中間。 |
| m4 | hai2 | dip2 | zung1gaan1 |
| NEG | at | plate | centre |
- c.
- | | | | | |
|-----------|-------|------|--------|-------|
| 但係 | 放 | 得 | 上 | 啲 |
| daan6hai6 | fong3 | dak1 | soeng5 | di1 |
| but | put | DAK | up | a.bit |
- 'but put it in a higher place' [SEA027]
- (6)
- | | | | |
|------|-----------|------|-----------|
| ~*過 | 到/得 | 好 | 嚟 |
| gwo3 | dou3/dak1 | hou2 | lai4 |
| pass | DOU | /DAK | very come |

Note that judging from the contexts of the sentences in (5), they do not involve any sort of movement. Even the third sentence was comparing the position of a trough on a computer chip with another trough, rather than comparing the position of a trough on a computer chip with its previous position. Thus, I believe that the cases with 啲 are best treated as instances of the biclausal resultative/depictive construction, and the ‘directional’ verbs there are actually stative verbs that give relative positions compared to another position (which may be the earlier position of the same object, but may also be another object) rather than paths. (Note that Yiu’s semantic explanation is likely still partially correct in that the fact that the original directional verbs refer to both source and goal is the reason why they could develop into stative verbs that invoke a point of comparison.)

We note that we are not the first to make this type of argument. Yue (2003) also argues that ‘complements’ with the degree adverb 咁 *gam2* should not, contra Cheung (1972), be classified as causative-resultatives in her terminology (CRCs in our terminology). She does not elaborate on her reasoning, but the lack of a negative potential form for sentences with *gam2* serves as a good reason in our framework.

In addition to the case above, the speaker-oriented directional particles 去 *heoi3* and 嚟 *lai4* do not seem compatible with the negative potential construction with most V1s:

(7)	~*過	唔	嚟/去
	gwo3	m4	lai4/heoi3
	pass	NEG	come/go
	‘to not be able to come over here/go over there’ [unattested]		

Thus, constructions with only these two directional particles are generally not considered instances of the CRC.

However, at least one exception exists, viz. when *heoi3* is paired with 走 *zau2* ‘to run, go away’:

(8)	我	諗	最終	你	都	走	唔	去
	ngo5	nam2	zeoi3zung1	nei5	dou1	zau2	m4	heoi3
	1sg	think	finally	you	also	go	NEG	go
	要	再	拍	多	啲。			
	jiu3	zoi3	paak3	do1	di1			
	need	again	take	more	a.bit			
	‘I think eventually you won’t be able to escape, and will have to take more [videos].’ [SEA028]							

A.5 Some resultative particle constructions

The resultative particles 錯 *co3* ‘wrongly’, 定 *ding6* ‘ready’,¹ and 極 *gik6* ‘to the limits’ do not have potential forms, and hence are not considered CRCs in this paper. (When 定 *ding6* means ‘certain’, both potential forms are possible, and therefore constructions in this sense *are* regarded as part of the construction.) 極 *gik6* ‘to the limits’ in particular seems to belong to an idiosyncratic construction, and must be followed by the focus marker 都 *dou1* ‘still’ plus a second clause.

¹ Examples of potential forms with *ding6* are frequently found on the Internet, but the ones I found all have the lexical meaning of ‘steady’, rather than the lexical meaning ‘ready’, from which we get the meaning ‘in advance’ in causative-resultatives.

A.6 Grammaticalised non-resultative uses of particles.

Non-resultative uses of (erstwhile) resultative, phase, directional etc. particles often fail to meet the potential form criterion. For example, 死 *sei2* ‘die’ is frequently used to denote continuing a certain action or state without flexibility:

- (9) 唔 想 做 死 一 世 文員-仔
 m4 soeng2 zou6 sei2 jat1 sai3 man4jyun4-zai2
 NEG want do die one life clerk-DIM
 ‘I don’t want to be a lowly clerk my whole life without changing.’ [SEA043]

However, instances of the potential construction with 死 *sei2* seem to *always* mean ‘to death’, literally or metaphorically.

A similar situation applies to 返 *faan1*, which has grammaticalised into a stance marker (Chor 2013). Consider the following common expression, which is unattested in the potential forms:

- (10) 冲 返 個 靚 涼
 cung1 faan1 go3 leng3 loeng4
 flush return CLF pretty shower
 ‘Let me take a nice shower.’ (Chor 2013)

To our knowledge, the only case of a CRC where V2 is *not* telling us about a result of V1 is the use of 過 *gwo3* ‘pass’ to refer to the worthiness of an action:

- (11) 係 啊, 呢 個 方法 諗 得 過 啊。
 hai6 aa3, ni1 go3 fong1faat3 nam2 dak1 gwo3 aa3
 yes SFP, DEM CLF method think POT pass SFP
 ‘Yes, this method is worth thinking about.’ [HKCanCor, as cited in Chor (2018: 128)]

According to Chor (2018), the first instances of this construction to occur are those like (12), which can also be construed as having a stative V1 where the ‘result’ predicate indicates a threshold that is either passed or not (Chor writes that the literally meaning of this sentence is ‘the level of trust can pass beyond a certain reference point’):

- (12) 估 信 得 佢 過 咯
 gu2 seon3 dak1 keoi5 gwo3 lok3
 guess believe POT 3sg pass SFP
 ‘thought you could trust him’ (Ball 1912, as cited in Chor (2018: 129))

It is only later that *gwo3* as a V2 came to be used in situations that cannot be construed this way, as in (11). Currently, since this construction also has a negative potential form, it is still considered a causative-resultative under our framework, even though its semantics is deviant. This is in fact to be expected under a dynamic network approach to filler-slot relations, since semantic compatibility is not the sole determinant of filler-slot connection strength: if a verb is frequently heard in a slot to which it is semantically incompatible, it can still be entrenched in that slot (Diessel 2019: 131-132). The situation is similar to the verbs *envy* and *forgive* in English, which continue to be used in double object constructions in English despite having divergent semantics from most other verbs participating in the construction: the two verbs also historically involved transfers of possession (Goldberg 1995: 152).