## When can you passivise causatives? A phase-based account Michelle Sheehan, Anglia Ruskin University Michelle.sheehan@anglia.ac.uk

It is well known that causatives (and verbs of perception) often resist passivisation (Higginbotham 1983, Williams 1983, Basilico 2003). This is true in English, but also in at least Swedish, Danish, Hungarian, German (Wurmbrand 2001), Dutch (Bennis and Hoekstra 1989/2004), French (Kayne 1975), Korean (Jung 2014, Harley 2017), Italian (Folli & Harley 2007, 2013), European and Brazilian Portuguese (Hornstein, Nunes and Martins 2010, Sheehan & Cyrino 2018) and Spanish (Tubino Blanco 2010). In English, where these verbs can take a range of different complements, only bare verbal complements are incompatible with passivisation:

- 1) a. Some progress was made t by the team of experts.
  - b. Sylvie was made t sad by the news.

DP object Small clause complement To-infinitival complement Bare verbal complement

c. Sam was made t to slip by the water on the floor. d. \*Kim was made t slip by the water on the floor.

This strongly suggests that the ban on passivisation in (1d) is due to the complement not the causative verb itself (contra many previous approaches). These bare verbal complements can host passive and progressive auxiliaries and so can be as large as progP, and must contain a full vP including an external argument (if the verb requires one). They cannot be as large as TP, however, as they ban future time reference and lack *to*;

- 2) a. I made the children [ $_{progP}$  be sitting quietly when the headteacher arrived].
  - b. I made the prepetrators [voiceP be fired].

ProgP/voiceP are argued to the be v-related phases in English, based on evidence from 'VP-ellipsis' and 'VP-fronting' (see Harwood 2015, Ramchand and Svenonius 2014, Wurmbrand 2012, Aelbrecht and Harwood 2015). In this way, (1d) is precisely a context where a (light) verb selects a v-related phase (voiceP) directly, with no T-related projection intervening. This can also be shown, by fronting and ellipsis patterns. If the complement of the phase head is what ca be fronted, the data in (3a-b) show that the complement of voice (vP) must be fronted where prog is not present. Where prog is present, however, voiceP must be fronted (3c), and vP cannot be (3d):

- 3) a. You wanted the kids to be punished, so [punished] I made them be.
  - b. \*You wanted the kids to be punished, so [be punished] I made them.
  - c. You wanted the kids to be being punished, so [being punished] I made them be.
  - d. \*You wanted the kids to be being punished, so [punished] I made them be being.

Because they are contained in a spell-out domain, in such contexts, all of the arguments of the lower verb will be spelled out before the matrix T probes (phase heads are in **bold**):

4) \*[TP T [voiceP was [vP made [voiceP voice {vP v [vP slip DP\_1]]]]]

In short, the ungrammaticality of (1d) and parallel examples with let/have/see/hear etc. can be attributed directly to phasal transfer.

Compare this scenario with 'normal' ECM contexts, which permit passivisation. These are generally taken to be TP complements:

5)  $[_{\text{TP}} T [_{\text{voiceP}} \text{ was} [_{vP} v [_{vP} \text{ expected} [_{\text{TP}} \mathbf{DP_1}] \text{ to} [_{\text{voiceP}} \text{ voice} \frac{[_{vP} v [_{vP} \text{ arrive } \mathbf{DP_1}]]}{[_{vP} v [_{vP} \text{ arrive } \mathbf{DP_1}]]}]$ 

Examples like (5) are correctly predicted to be grammatical unlike (4), because the presence of the TPlayer provides an escape hatch for interphasal A-movement. When matrix T probes, the highest argument of the embedded verb has raised to the intermediate spec TP rendering it visible as a goal. This EPP-driven movement to T therefore facilitates cyclic A-movement. Where there is no window of opportunity, A-movement is phase bound.

After establishing how this explanation works for English, the main focus on this talk will be to examine whether it can also capture parametric variation in this domain. It is well known that causative morphemes/verbs can take different sized complements (both within and across languages), diagnosable via the scope of agent-oriented adverbials, the availability of auxiliaries/passives, interaction with high applicatives, number of binding domains etc. Pylkkanen (2002, 2008) proposes a

three-way typology of causatives, which can be stated as follows in our terms (putting aside potential variation in the bundling of voice, v and caus):

- (i) root-embedding causatives,
- (ii) VP-embedding causatives (with an optional adjunct external argument),
- (iii) vP-embedding causatives (with an obligatory external argument).

To this we can add phase-embedding ECM causatives of the English type, which are also attested in Romance languages (Strozer 1976, Torrego 2010, Martins 2004, Sheehan & Cyrino 2018):

(iv) phase-embedding causatives

I show that, as predicted, type (i) causatives permit passivisation and type (iv) do not, but what about types (ii) and (iii)? Type (ii) causatives appear to generally allow passivisation. VP-selecting causatives are attested in some Romance languages (the so-called *faire-par* causative) and in Bemba, Finnish, (Pylkkanen 2008) and Turkish (Key 2013). At least Finnish, Italian, and Turkish permit passivisation here (Nelson 1999, Folli & Harley 2007, Çetinolu et al. 2007):

6)	Süt	bütün	çocuk-lar-a	iç-ir-il-di		[Turkish]
	milk.NOM	all	child-PL-DAT	drink-CAUS-PASS -PAST		
	Lit: 'The milk was made drink to the children.'				(Cetinolu et al.	2007: 3)

Type (iii) causatives have been posited for Venda and Luganda (Pylkkanen 2008) as well as Korean (Jung 2014), French, Spanish, European Portuguese, Catalan and Italian (the *faire-infinitive*). While Luganda permits passives of these causatives (Ssekiryango 2006), Korean and Italian do not (Jung 2014, Folli and Harley 2007, 2013). In the case of Korean, passives are possible in the complements of causatives, suggesting the complement might actually be a voiceP. Romance languages pose certain challenges. If vP were a phase (as per the dynamic view of phases advocated by Boskovic 2014, 2016), then we predict that only external arguments should be available for passivisation, as they originate in what would be the phase edge. In actual fact, in both Italian and Spanish, the facts are reversed: unaccusative verbs are compatible with passivisation, whereas unergatives are not (Folli & Harley 2007, Tubino-Blanco 2010). I propose that, in the faire-infinitive, v-v sequences lead to clause union whereby the causative verb itself comes to function as a phase head. This does not happen in languages with morphological causatives, such as Luganda. So vP complements are not phases. The implication is that despite the strong evidence that verbal phases are somewhat dynamic, there is both an upper and lower boundary on which heads can function as phase heads (cf. Boskovic 2014).

In terms of parametric theory, the implication is that cross-linguistic variation in the possibility of passivizing causatives reduces largely to differences in the size of selected complements without the need to parameterize phasehood size or status. In some cases, though, language-specific mechanisms such as Romance clause union do, nonetheless, play a role.