## Agents and causers as (in-)direct causers

**Setting the stage**: Among current syntax-oriented approaches to event and argument structure, there is a debate as to how fine-grained the thematic interpretation of external arguments should be. Some authors argue that their thematic role is underspecified, and a broader notion of "initiator" is all that is relevant for the grammar (Hale & Keyser 2002; Borer 2005; Ramchand 2008). Others argue that finer-grained distinctions are necessary for the role of external arguments: they can be agents—i.e. animate, volitional and intentional subjects, cf. (1a)—or causers—inanimate, non-intentional subjects, cf. (1b) (Alexiadou & Schäfer 2006; Alexiadou 2014; Fábregas 2014).

(1) a. *Peter* broke the window. (Agent) b. *The blast of wind* broke the window. (Causer) **Previous accounts**: Accounts who propose a distinction between agents and causers assume that the former are higher in the structure than the latter. Fábregas (2014) provides evidence from adjectival passives (APass) in Spanish to show that adjectivizing morphology attaches right above the causer projection, effectively blocking the introduction of agents by the relevant higher structure. He provides evidence from *by*-phrases, which allow causers, but not agents (cf. (2b)).

(2) a. {Moriarty/ El plomo} contaminó Londres.

Moriarty the lead polluted London

'{Moriarty/ lead} polluted London'

b. Londres está contaminada por {\*Moriarty/ el plomo}

London is polluted by Moriarty the lead

London is polluted by {\*Moriarty/ lead}

Alexiadou (2014) has recently advocated a similar picture for English and Greek, focusing on a class of typically unaccusative verbs (eg. *blossom, rot, corrode...*) that may causativize, but when they do, they only accept causers as subjects (cf. (3b)). She argues that these verbs cannot project VoiceP, where agent subjects are licensed. Causer subjects are introduced lower, in (Spec,vP).

(3) a. The crops withered. b. {\*John/ the severe drought} withered the crops. **Problems**: Fábregas' (2014) proposal for APass faces many counterexamples: Spanish APass do allow agent-oriented adverbs (cf. (4a)) and can be derived from strictly agentive verbs (cf. (4b)).

(4) a. La ciudad está controlada por los rebeldes {a propósito / deliberadamente}.

the city is controlled by the rebels on purpose deliberately

b. El país está {gobernado/ dirigido/ supervisado} por un grupo de expertos.

the country is governed directed surveilled by a group of experts With respect to Alexiadou's proposal, I note that agent subjects can be aceptable with her typically unaccusative verbs under a scenario where the agent has the ability to directly cause the event throughout its development (say, for (5), that Pedro has special powers that allow him to rot food by holding it). Crucially, agentivity is preserved under that "causer" reading, as shown in (5).

(5) Pedro pudrió la manzana {intencionadamente/ a propósito}.

Peter rotted the apple intentionally on purpose

Agentivity, then, does not seem to be the relevant notion at stake for the contrasts with APass and *blossom*-type verbs. The crucial question now is how to account for the contrasts in (2) and (3).

**The proposal**: I argue that the gramatical distinction between agents and causers is to be reformulated as indirect vs. direct causers (partly inspired in Folli & Harley 2008), which in turn is read off from the syntactico-aspectual structure of the VP. I adopt in essence Ramchand's (2008) model, which decomposes the VP into three universally ordered heads: *init(iation)*, *proc(ess)* and *res(ult)*. *Init* and *res* denote an initiational and a resultative stative sub-event, respectively, whereas *proc* denotes a dynamic sub-event. These sub-events are interpreted from the syntactic configuration as being causally related (represented by  $\rightarrow$ ). The main idea is illustrated in (6).

(6) Syntax: *init*P < *proc*P < *res*P Semantics:  $\exists s_1, e, s_2 [s_1 \rightarrow e \rightarrow s_2]$ 

Building on and modifying Ramchand, I argue that there are two positions where external arguments can be merged: either low in (Spec,*procP*), where they will be *direct causers*, simply because they are subjects of the causing dynamic sub-event and are thus actively involved throughout its development until its completion, i.e. until the result state denoted by *resP* starts to hold. The second possible merging site is (Spec,*initP*), where the argument is interpreted as an *indirect causer*, because it is now a subject of an initiational sub-event (*init*) distinct from the dynamic sub-event (*proc*) that directly brings about the result state. I illustrate my proposal in (7).

(7) [*initP indirect causer* [*procP direct causer* [*resP theme/resultee* ]]] Both types of causers, note well, can be "agentive" in the standard sense, provided they denote an animate entity and context allows for an intentional reading. Thus, we can have direct causer "agents" as in (5): they only project up to *procP* (translating Alexiadou's account to this system), and hence only a direct causer reading, agentive or not, is available for the subject: (3b), with an animate subject (*John*), is ungrammatical if John is understood as indirectly causing the eventuality (i.e. what would be paraphrased as *John made the crops whither*).

My account also explains the data with APass observed by Fábregas. In (2b), the contrast is not due to agents vs. causers in the classic sense, but rather, to the fact that *Moriarty* is an indirect causer: he is not a polluting agent, but rather, someone who does something to bring about pollution, such as passing laws in favor of it or by introducing harmful substances in the air and water. Note that in (4) we have direct animate causers that can (and must, in the case of (4b)) have agentive readings, and yet are allowed in APass. I follow García-Pardo (2014) in that the verbs in (4) are stative causatives, formed by two causally related states (Kratzer 2000). This translates in this system as *init* and *res* heads, without *proc*. However, since now the sub-event denoted by *init* is the one that directly causes the result sub-event denoted by *res* (given that there is not a process sub-event in between), it follows from the structure that the subject will be a *direct causer*.

There is also the logical possibility of having indirect causers that are inanimate and non-volitionals (i.e. "causers" in the classical sense). These exist, and it is actually noted by Fábregas (cf. (8)). He argues for further functional structure above agents that introduces indirect causers and which would be equally inhibited from projecting in APass. Such a distinction is unnecessary under my account: *the earthquake* in (8) and Moriarty in (2b) are equally indirect causers.

(8) Fukushima está contaminada {\*por el terremoto/ por la radiación}.

Fukushima is polluted by the earthquake by the radiation

**Conclusions**: I have shown that, while there are grammatically relevant thematic differences between external argument roles, these are best formulated as indirect vs. direct causation, rather than agents vs. causers. Agentivity, in this view, is not a grammatically relevant notion, but is pure world knowledge. My proposal thus reconciles these two opposing views in the literature, showing that each is right in its own sense. I have focused on APass and a certain set of unaccusative verbs, but my proposal also makes the right predictions for other phenomena, such as subject effects with aspect-alternating verbs like *threaten* or *forbid*, which I could not discuss here for space reasons.

**References**: Alexiadou, A. 2014. The problem with internally caused change-of-state verbs, *Linguistics* 52(4): 879-909 ■ Fábregas, A. 2014. Un análisis sintáctico de dos tipos de causante, *Estudios de Lingüística de la Universidad de Alicante* 228: 191-214 ■ García-Pardo, A. 2014. The aspectual composition of adjectival passives. Paper presented at *CLS50* ■ Kratzer, A. 2000. Building statives. *Proceedings of the 26th Meeting of the Berkeley Linguistics Society*, 385-99 ■ Ramchand, G. *Verb meaning and the lexicon*. Cambridge University Press ■ Folli, R. & H. Harley. 2008. Teleology and animacy in external arguments, *Lingua* 118: 190–202