ACTIONAL SHIFT ACROSS ASPECTUAL MORPHOLOGY IN L2 ITALIAN: AN EVENT PHASE-SENTENCE MATCHING STUDY.

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1. Research topic: aspectual heads split. Generative L2 theories assume that not only native grammars, but also the second language tree is endowed with the Inner vs. Outer ASP distinction. Inner ASP encodes Lexical Aspect, featuring the distinction between telic and atelic predicates in between the VP shells. Outer ASP encodes Viewpoint Aspect featuring perfective/imperfective morphology at INFL or at S level. The separateness of Inner and Outer ASP bears on crosslinguistic and parametric variation in the computation of L1 and L2 telicity. As to the second language, telicity can be morphologically encoded at a Outer ASP projection (e.g. the preverbal telic morpheme in Slavic languages) or lexically and syntactically encoded at Inner ASP placed within the VP-shells domain, totally independent of Outer ASP (like in Germanic and Romance languages). L2 learners of a language such as Italian compute telicity by looking at the semantic properties of V and at the presence of a Direct Object-Determiner Phrase measuring out the event. The fact that aspectual morphology is not involved in the computation of telicity assures that L2 Italian learners' competence encompasses that (a) any past event can be described as bounded or unbounded; (b) a subset of predicates (telic predicates such as *cadere* 'fall', *arrivare* 'arrive') are held to be inherently terminative. "Inherently" here means: regardless of [±perfective] morphology. In practice, learners can use also non-terminative verbs such as *dormire* 'sleep' with the past Perfective to express a bounded event (e.g. *ho dormito fino alle 9*, 'I slept until 9'). But they also know that the inherent [-telic] feature of *dormire* will make it incompatible with the past Perfective if punctual adverbials are added in the computation (^?? *ho dormito in un secondo* 'I slept in a second', unless aspectual coercion, see below). In sum: generative (but also and functional) approaches agree that lexical aspect and viewpoint aspect are read off the L2 syntax separately. L2 Italian learners compute telicity independently of Outer asp. This is why normally we do not expect that aspectual morphology changes or affects the actional template of verbs in L2 Italian (with a few exceptions).

2. Research hypothesis. Learner corpora studies show that initial and also intermediate L2 Italian learners are not aware of verb actionality. Indeed, they often exchange verbs that share general meaning but not their actional content (e.g. *andare* 'go' and *arrivare* 'arrive', *vedere* 'see' and *guardare* 'look at', *dire* 'say' and *parlare* 'talk'). This could be scaled down to a problem of defective lexical knowledge if it weren't systematically correlated with the phenomenon of "actional shift" across aspectual morphology exemplified by sentence [1]:
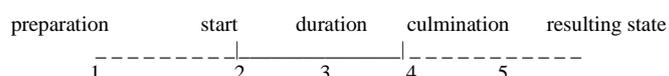
[1] *Dopo il bambino ha dormito, la rana ha provato di scappare*
    after the child hasAUX sleptPERF, the frog tried to escape
'When the child *falls asleep*, the frog tried to escape'

Here the atelic, activity verb *dormire* 'sleep' seems to having been enhanced with a non-targetlike morphological endpoint (similar to the telicity marking in Slavic languages) by the presence of the Past perfective suffix *-to*. Therefore *dormire* becomes equivalent of the achievement predicate *addormentarsi* 'fall asleep'. These phenomena suggest that the separateness of Inner and Outer ASP in a second language might be overspecified. If also in L2 Italian telicity exits the VP shells and reaches out the Outer ASP domain, then Inner ad Outer ASP cannot be kept apart.

3. **Rationale of the study** We wanted to test whether adult L2 Italian learners having different backgrounds (and different L1-L2 pairs) build telicity artificially like in sentence [1]. To do this, we contrasted native speakers' and learners' sensitiveness of the so-called «imperfective paradox» according to which in the Past perfective telic (accomplishment) events (*Elena ha dipinto un quadro* 'E. painted a picture') are true only after the final point has been reached, while atelic events (*E. ha spinto un carrello* 'E. pushed a shopping cart') are true at every point. By using the imperfective paradox we did not mean that L2 learners should discriminate between the properties of telic and atelic events across aspectual morphology like native speakers do. Indeed, the interactions between Inner and Outer ASP may be far beyond initial L2 learners' competence. What

we wanted to test is whether the presence of the past Perfective suffix on V is enough to make L2 Italian learners judge that predicates have a culmination regardless of Inner ASP (the telic/atelic split). Learners' sensitiveness to the imperfective paradox could be developmentally moderated especially because of the phenomenon of actional shift over atelic verbs.

4. The study. *Participants*. 94 adult (mean age = 23.7) L2 Italian learners – all attending Italian language courses in various universities in Italy – were selected from a larger number (n. 123) with a screening procedure (untimed translation task + crossmodal picture-sentence matching) using *z* scores aimed at testing their knowledge of the meaning of the verbs and of all words used in the experiment sentences. Better scorers (34 L1 Chinese, 30 L1 Russian and 30 L1 Spanish learners) were eventually included in the group (plus 57 Italian native controls). Subjects' L1s are representative of main parametric distinctions as to L2 telicity (§1). Subjects proficiency levels (via an official written proficiency test administered immediately before the experiment), length of residence in Italy, and onset of acquisition entered the regression as between-subjects independent variables. *Method and materials*: Participants looked at a computer screen displaying short (10-12 sec.) videoclips representing telic and atelic events. Each clip displays five "phases":

preparation	start	duration	culmination	resulting state
1	2	3	4	5

As an instance, the event of *spingere un carrello* 'pushing a shopping cart' is composed by the following subevents on uneven length; [1] *approaching the cart from some steps distance;* [2] *grabbing the handle and start pushing;* [3] *keeping on pushing the cart towards the row of parked shopping carts* (4) *until getting there and* (5) *removing the coin from the mechanism and moving away from the cart*. A sentence in Italian describing the event in the past tense is displayed permanently on the screen (e.g. *Mario ha spinto il carrello*). Participants were asked to push a button as soon as they judge that what was happening in the scene matched the meaning of the sentence. Sentences always displayed a transitive verb with NP direct object. We used a 2x2 factorial design, with telic vs atelic and Past perfective vs. Past imperfective conditions. 64 experimental sentences based on 8 events + 50 filler sentences were then pseudorandomized in a Latin-cross design across four groups of subjects. Reaction times were recorded and the software was instructed to record clicks timing across and within phase-boundaries. Each videoclip was shown twice to let subjects familiarize with the task, the scene and the sentence. *Results***:** according to a multifactorial ANOVA with pairwise post-hoc Tukey HSD test, only in the nonnative group with atelic verbs there is a strong correlation ($p < 0.00015$) between the presence of the perfective past and the clicks between phases [4] and [5][1]. This correlation does not reach significance (all *p*s > 0.1) with telic events and with the imperfective past and it is irrespective of learners L1s, age of onset and length of residence. Learners' proficiency scores significantly affect clicks migration across phases in that (a) higher competence (high-intermediate and advanced) yields atelic clicks migration towards the [2]-[4] segment ($p < 0.00027$; $R^2 = 0.78$) (b) the higher proficiency, the shorter reaction times within [2]-[4] segment.

5. Discussion As expected L2 learners' sensitiveness to imperfective paradox is developmentally moderated. Our data show that the source of native vs. non-native divergence is that atelic events can systematically receive a telic interpretation with perfective morphology ("actional shift"). If the distinction between Inner and Outer asp in initial and intermediate interlanguages is too overspecified, there are two possible consequences on developmental theories: (a) acquisition at the (internal) syntax-semantics interface is more problematic than it is thought; (b) it is very unlikely that telicity drives the acquisition of the Tense/Aspect system (like in the functionalist or emergentist views) or that telicity is a parameter in L2 acquisition. Initial learners may in fact use verbs just for their "basic meaning"and meaning itself may divorce from actionality.

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[1] This correlation explains more than 60% of overall variance ($R^2=0.62$)