Developing actional competence and the building blocks of telicity in L2 Italian

STEFANO RASTELLI AND MIRTA VERNICE

Abstract

The Aspect Hypothesis assumes that - in early interlanguages - the perfective past spreads from telic to atelic verbs because events occurring in the past are easier to be associated with predicates having an inherent endpoint in their lexico-conceptual representation. In this study it is questioned whether for initial L2ers knowing the general meaning of a verb entails knowing also its actional template and that learners have innate principles that drive them to distinguish telic and atelic verbs from scratch. Data from our experiment of prompted narrative suggest that L1 English, L2 Italian tutored learners – although having knowledge of some telic verbs of motion – prefer to use the underspecified andare ‘go’ and to build telicity compositionally. The overuse of most frequent and “basic verbs” and the promotion of adjuncts to the rank of real arguments is a challenge for both the Aspect Hypothesis and the parametric view to the acquisition of the tense-aspect system in a second language.

1. The topic of research

1.1. Rationale of the study

This study is about verb actionality in learner language and namely the expression of telicity in L2 Italian. We use the term ‘actionality’ to refer to what is also known as lexical aspect, inherent aspect, semantic aspect, inner aspect, situation aspect or Aktionsart. Actionality is contrasted with ‘aspect’, which is also referred to as grammatical aspect, outer aspect or viewpoint aspect (see Andersen 1998; Andersen 1991; Salaberry and Shirai 2002). By ‘actional content’ of a predicate we mean the lexical aspect features matrix of that predicate,

1. Sections 1, 2, 3, 5, and 6 were written by Stefano Rastelli. Section 4 was written by Mirta Vernice. We want to thank two anonymous reviewers for their helpful comments.

IRAL 51 (2013), 55–75
DOI 10.1515/iral-2013-0003
©Walter de Gruyter
Stefano Rastelli and Mirta Vernice

that is, its specification for being \([\pm \text{durative}]\) and \([\pm \text{telic}]\) in learners’ representations. The feature specification adopted in this study is minimal and — according to many authors — it can proliferate further depending on whether the predicate is also \([\pm \text{punctual}], [\pm \text{semelfactive}], [\pm \text{homogeneous}]\) etc. (for an update account see Shirai 2013).

The telic/atelic distinction has played an important role in theories on L1 and L2 acquisition of tense-aspect system. According to the Aspect Hypothesis (AH) (Section 2.1), learners of L2 Italian start to use the perfective morphemes of the Past Tense first with telic verbs (such as *arrivare* ‘arrive’ or *finire* ‘finish’) and then spread them to atelic verbs (such as *cantare* ‘sing’). Also in generative studies on tense and aspect in a second language the telic/atelic distinction in a learner’s mental grammar is held to be innate and the lexical properties of telic/atelic verbs are assumed to project higher up in syntax (Section 2.2). These theories share the idea that all L2 learners come to the learning task equipped with the notion that L2 verbs split in two categories: telic and atelic. The learning task consists of discovering how this split is encoded in the target-language. In this article, we claim that (1) in early learners’ representations L2 verbs may remain actionally underspecified for a certain time; (2) In the meantime L2 learners prefer to derive telicity structurally rather than lexically, by over-using a restricted number of “basic verbs”, adjuncts and aspectual morphemes as building blocks. We present an experiment of prompted narrative where non native subjects who already know some Italian telic verbs of motion are asked to provide a short written description of a movie clip where two telic state-of-affairs (henceforth simply ‘events’) occur one after the other. The aim of our study is to see how learners at different proficiency levels express these telic events and to verify whether a developmental trajectory from compositional to lexical encoding of telicity exists. The article is divided as follows: Sections 1.2 and 1.3 provide information on actionality in L1 Italian and on the structure targeted in this study. Section 2 provides the theoretical framework underpinning the experiment and the experimental hypothesis. Section 3 describes the subjects and the stimuli. In Section 4, the result is shown and in Section 5 they are discussed in the light of the idea that actionality too is learned. A conclusion is sketched in Section 6.

1.2. Aspect and actionality in L1 Italian

Actionality in L1 Italian is covert category since it is expressed lexically, while aspect is an overt category since in the past tenses a \([\pm \text{perfective}]\) distinction is encoded in morphology. Most studies on the Italian tense-aspect system adopt the classical vendlerian classification among states, activities, accomplishments and achievements (see Section 2.1). Shirai (2013), lists and dis-
cusses other possible classifications, concluding that vendlerian categories “are sometimes even considered innate” and that L1-L2 discrepancies in semantic representations and lexical conceptualization are rarely taken into account in the acquisitional literature. The vendlerian classification is elusive also in first languages and the judgement on the belonging of a verb to a class or another is far from being clear-cut even for native speakers. A corpus-based research (Lenci and Zarcone 2009) showed that in L1 Italian the actional shift – or actional hybridism as it is called in Bertinetto (1986) – seems to be the norm rather than the exception. Under the appropriate phrasal conditions (kind of internal and external arguments, kind of adjunct etc.), almost every Italian verb may be regarded as belonging to two, three and even four different actional classes. Among 3429 verbal tokens of 33 verb types extracted from the TreSSI corpus (a corpus of written modern Italian), the cases of unique actional assignment amount to about 20%. In spite of the fact that there are a few verbs (like vincere ‘win’ or arrivare ‘arrive’) which are always telic, but most verbs - such as chiamare ‘call’ and portare ‘bring’ - may cover all actional classes in terms of their distribution in the native input.

Past time reference is differently encoded with respect to the aspectual distinction perfective/imperfective (Giacalone Ramat 2002: 225). Having evolved from an originary present perfect value and having absorbed the aoristic (punctual) value of a competing past tense (the Passato Remoto), the modern Italian Passato Prossimo (e.g., Mario ha giocato a tennis ‘M. played tennis’) is a compound tense which encodes the perfective past. Instead, the Italian Imperfetto (e.g. Mario giocava a tennis ‘M. used to play/ was playing/played tennis’) encodes the imperfective value to convey unbound, habitual or ongoing events occurring in the past. Since the subjects of our experiment are all L1 English, a comparison between tense-aspect system in L1 English and in L1 Italian is useful. English does not undergo the systematic conflation between the traits of tense and aspect in past tenses which characterize the tense-aspect system in Italian. While in L1 Italian aspect in overtly (morphologically) coded in the past, in the English Simple Past converge both perfective and imperfective aspect. Furthermore, the English Present Perfect, though being formally similar to the Passato Prossimo, has not a real correspondent in Italian since the former refers to an interval which comprises the time of utterance, while the latter mostly conveys a punctual, aoristic value for events occurred in the past. The fact that learners’ L1 (English) blurs the aspectual traits in the past tenses may affect the rate of acquisition of the tense-aspect system L2 Italian (Giacalone Ramat 2002; Rocca 2002).
In this study we single out a feature of the actional competence of L2 English-speaking learners of Italian. This feature is the difference between inherent and compositional telicity in terms of its interpretive focus. Because their actional competence is still developing, non-native speakers of Italian might not be aware of this difference from scratch. The Italian motion verbs *uscire* and *andare fuori*, despite both meaning ‘go out’, in some contexts are not interchangeable. In native Italian, *uscire* is an unaccusative, inherently telic core verb (Sorace 2000), while *andare fuori* is compositionally such. The verb *andare* ‘go’ alone may have also an atelic, activity reading and it can be used for ongoing, durative events, like in the sentence *la macchina va* ‘the car goes’. When in conjunction with the locative *fuori* ‘outside’, *arrivare* becomes compositionally telic. In terms of Event Structure (Pustejovsky 1995), both *uscire* and *andare fuori* are classifiable as transitions verbs, but only the former may have an interpretive focus on the resulting state. In fact *andare fuori* is commonly used to express the direction of motion rather than the attainment of a final state. This fact is responsible for making sentence (2) less acceptable than (1) to native speakers of Italian:

(1) *quando è uscita vede che piove*

  when hasAUX gone out see3SG that rain3SG

  ‘after she has gone out she sees that it is raining’

(2) *quando è andata fuori vede che piove*

  when hasAUX gone out see3SG that rain3SG

  ‘after she has gone out she sees that it is raining’

Both these sentences were graded not fully acceptable to a sample of native controls (n=41, see Section 3.2), possibly because of the contrast between the past tense in the subordinate clause and the present tense in the matrix clause. Sentence (1) was more acceptable to the control sample though (mean acceptability score on a five-points scale for sentence (1) = 3.9; for sentence (2) = 2.5, the difference reaches significance because it allows a semantic coercion, with the [+resultative] feature overriding the temporal (past) feature, so that *quando è uscita* ‘when she has gone out’ may be interpreted as equal to “when she is outside”. Instead, sentence (2) resists this coercion. A comparable difference in acceptability judgments – even though not fully significant this time – emerges when these verbs are used in participial absolute constructions like (3) and (4):

(3) *una volta uscita, vede che piove*

  ‘once she has gone out she sees that it is raining’

(4) *una volta andata fuori, vede che piove*

  ‘once she has gone out she sees that it is raining’
In sentence (3) the predicative reading of V (where è is the copula and uscita ‘gone out’ the adjectival predicate) is legitimated, while in sentence (4) it is legitimated, but only to a lesser extent. Again, this can be accounted for because either because uscire is unaccusative (while andare fuori is not) or because these two verbs differ for the presence (or absence) of a resultative predicate be-at (x,y) in their Logical Structure (cf. Dowty 1979; 1991; van Valin 1990).

Our study investigates whether the level of proficiency in the target language, the presence of the [+perfective] aspectual morpheme of the verb and of adjuncts (AdvP and PP) are possible factors in learners’ choice between inherently and compositionally telic verbs of motion in order to express the resulting state of ‘being outside’. It is predicted that initial learners will tend to express the resulting state compositionally, in a non-target-like fashion. If initial learners in our sample conceptualize a resulting state in the semantics of andare fuori, they are probably missing the fact that in the target-language this property – if not exclusive – is typical of inherent telic verbs of motion. As long as a learner’s actional competence is defective in such a way, one could doubt that the telic/atelic split represents the cornerstone the whole learners’ developing temporal-aspectual competence is built on.

2. The Aspect Hypothesis and related problems

2.1. The Aspect Hypothesis (AH)

According to the AH, actionality affects the acquisition of tense-aspect morphology because in both L1 and L2, learners start acquiring the temporal-aspectual morphemes selectively (Andersen and Shirai 1994; Bardovi-Harlig 2000; Andersen 2002; Salaberry and Shirai 2002; Ayoun and Salaberry 2005; Salaberry 2008). In L2 Italian, it is predicted that the morphemes of the perfective Passato Prossimo are firstly associated to telic and then, later on, also to atelic verbs, while as far as the morphemes of the Imperfetto are concerned, the opposite holds. First and second language learners would be cognitively equipped to scan the verbal lexicon of the input they are exposed to in order to figure out which verbs are telic and which are not. L2 learners would be driven to distinguish telic from atelic predicates because this distinction is innate (Andersen and Shirai 1996: 532). There are guiding principles that help learners through this task. Andersen and Shirai (1994: 133) specify that: “[...] a small set of cognitive operating principles and the notion of prototypicality account for this behavior in learners”. According to Andersen (2002: 81) learners are cognitively predisposed to “to find real realized unitary bounded events encoded in language”. The associations having primacy in acquisition are the “prototypical association” which reflects the principle of congruence between
forms and functions (Taylor 1989; Giacalone Ramat 2008). Telic verbs associate prototypically with past tense and with perfective morpheme because their most relevant phase is the final one. Since inherent endpoint, boundedness and past align, telic verbs will tend to be presented in the perfective past (e.g., in the Italian Passato Prossimo) more easily than atelic verbs. Prototypical associations are simpler to learn than non-prototypical associations (Shirai and Andersen 1995: 758) also because they are reinforced by the distribution of form-function mappings in the input. In the emergentist approach (Li and Bowermann 1998; Li and Shirai 2000; Li 2000; Li 2002) it is stressed that the early associations between aspectual morphemes and actional classes are also a consequence of learners’ capacity to analyze and to record the probability of co-occurrence of forms and meanings in the input they are exposed to. Perfective morphemes are most often associated to telic than to atelic verbs. The frequency of co-occurrences activates a number of dynamic, adaptive-associative patterns (gradually more and more generalizable), which in their turn provide the ground for shaping the semantic categories underlying the four vendlerian classes (Li 2000: 309). The semantic categories emerge as a result of a bottom-up, non rule-driven process of acquisition (Li 2002: 84). Learners would then acquire the atelic/telic distinction in virtue of the fact that frequent associations reinforce a critical number of neural networks. The prototypical associations are both determined mentally and reinforced statistically.

According to syntacticians working in the generative framework, L2 learners are claimed to project all the lexical information on the tree, that is, to compute all elements within the vP shell structure (between VP1 and VP2) and to check some of them at spec position of the functional head AspP (Aspect Phrase) in order to express telicity. Since the lexical properties of predicates are encoded and read off the Syntax, the main task for L2 learners is to recognize which features of the target language (bare plurals DPs, quantified object DPs, PP, AdvP) must be checked or not in AspP spec position in order to express telicity (or atelicity). According to (Slabakova 2001) the UG roots the functional categories of aspect which – in their turn – shape four surface-templates corresponding to the four vendlerian actional classes. As a consequence, telicity is a parameter whose value is waiting to be learned by children or possibly to be positioned again by adult learners of a second language. Since the aspectual heads are functional heads to all effects, learners would have a privileged, direct and “once and for all” access to the actional content of verbs. This would also mean that once one aspectual parameter is set for a certain predicate, learners would know which structural properties are associated with that predicate, which configurations it is allowed to enter and with which temporal frameworks it is compatible.
2.2. Four problems with the AH

Shirai (2007: 58) acknowledges that the AH assumes more semantic representations on the part of the learners than warranted. Many studies supporting the AH – both in the innatist and in the emergentist territory – take for granted that what seems to be a telic verb to them should be such also in a learner’s interlanguage. Points (a)-(d) below provide four reasons why that could not be the case. Section 2.3 suggests an alternative way to explain how a feature of actionality (telicity) could work and be detected in learner language.

(a) Proponents of the AH acknowledge that L1 and L2 actionality is a property of both the lexical head V and of its constellation (external and internal arguments and adjuncts) (e.g. Salaberry and Shirai 2002: 2). Many quantitative studies supporting the AH report row scores and percentages of perfective/imperfective morphemes across actional categories and the other way round (see Bardovi-Harlig 2002 for commentaries). In these studies, the actional categories taken as dependent variables are represented by bare verbs, not by their constellations. To make one example, when authors count up telic predicates, what they really count is how many ‘jump’, ‘catch’, ‘ride into’ are in their data and how they are inflected (see as an instance Rhode 2002). As long as L2 actionality in theory is conceived compositionally but in practice is computed lexically, the AH is at stake of committing comparative fallacy.

(b) Comparative fallacy or closeness fallacy (Bley-Vroman 1983) is overinterpretation of learner data. If actional classification is L1-biased, it commits comparative fallacy. Lakshmanan and Selinker (2001), Lardiere (2003) and Shirai (2007) have given rise to a point-counterpoint debate around the question “how do we know what learners know?”. Lakshmanan and Selinker suggest that actionality is a valid criterion to discriminate genuine (non target-like oriented) obligatory contexts for past tense markings because telic verbs and foreground events attract past perfective markings independently of the standpoint of the target language. In her reply, Lardiere (2003) states that: “the Aspect Hypothesis studies appear to assume native speakers intuitions about the meaning of verb stems in assigning coding categories such as activity, achievement, etc. to the data, and in applying diagnostic tests for those categories […] these assumptions may indeed obscure our understanding of the L2 idiolect” (136). Shirai (2007) concludes that: “[…] in the analysis of production data, one should attempt maximum rigor in classification without reading in too much about learners’ semantic representation” (60). Maybe we can avoid the comparative fallacy by refining actional tests, as it is suggested by Shirai (2013).

(c) Giacalone Ramat and Rastelli (2008; 2013) and Rastelli (2008; 2009) show that some actional tests (among those listed in van Valin 2005) which ensure data comparability in L1 Italian are of little help, if not misleading, when...
applied to L2 Italian. To give an example, in sentence (5), a German learner of Italian uses the telic verb *arrivare* ‘arrive’ combined with an expression of duration *per un po’ di più giorni* ‘for some more days’. This combination is illegal in Italian because most telic verbs are incompatible with expressions of duration (with the exception of punctual achievement verbs, which are coerced towards an iterative interpretation).

(5) quando arriva *per un po’ di più giorni* ti telefono
when arrive3SG for some more days youCL2 call1SG
‘when she arrives for a few more days I will call you’

Sentence (5) fails one of the most known actionality test also because the temporal framework of learner sentences is unclear. Time expressions (adverbials such as *quando* ‘when’, *mentre* ‘while’ or PPs such as *in*/*per un’ora* ‘in/for one hour’) are often used by learners in an unexpected, unpredictable or underspecified way, so that the relationship between actional membership and the outcome of actional tests is established on slippery ground.

(d) Learners over-use the so-called basic verbs (Viberg 2002) in place of more actionally specified verbs that they already know and use. For instance, in many Italian learner corpora, the basic verb *andare* ‘go’ is often used instead of *arrivare* ‘arrive’, *uscire* ‘exit’ and the other way round; the verb *parlare* ‘talk’ is used instead of the *dire* ‘say’ (Rastelli 2008; Giacalone Ramat and Rastelli 2008; Giacalone Ramat and Rastelli 2013). In sentence (6), a Tigrinya learner of Italian uses the verb *imparare* ‘learn’ to talk about teaching his dog to do something:

(6) cane se io *imparato bene*
dog if I learned well
‘If I taught the dog well’

Since these learners seem to be aware of what is common between verbs such as *see* and *look* (perception with the eyes), *walking, going, coming* (displacement), *listening and hearing* (perception with the ear), Giacalone Ramat and Rastelli (2013) concluded that general meanings have primacy in acquisition over the [*±telic*] distinction. Cases of basic verbs substitution occur also with learners of different L1 backgrounds (Rastelli 2008).

(e) Learners happen to exchange verbs belonging to “phasal pairs”, that is, verbs that can be looked at as being different phases of the same event (for the meaning of *phase* in the event structure see Moens 1987). For example, *cercare* ‘search’ may serve as the preparatory phase of the event, while *trovare* ‘find’ can serve as its culmination point. Similar to phasal verbs are the *reversive* verbs (Cruse 1997) such as teach/learn, give/receive. A corpus-based research on intermediate L2 Italian L1 Chinese learners (Giacalone Ramat and
Rastelli 2013) show that phasal pair verbs are often exchanged regardless of their actional features.

2.3. The building blocks of L2 telicity as features of developing actional competence

To account for fact (a)–(e) we propose that there are at least two developmental features which we will refer to as (1) grammaticalized telicity and (2) actional underspecification. The former means that learners may happen to assign a culmination and a resulting state also to basic verbs which would lack it (from a native speaker’s standpoint at least). The latter means that learners use basic and phasal verbs especially in virtue of their general meaning, disregarding whether they are telic or not. These developmental features are the building blocks of L2 telicity. Figure 1 refers to sentence (7) which is written by a learner who describes a short clip where two telic events overlap. In the scene, a woman goes out of the autogrill and when she is outside, she sees her bus leaving without her (see Section 3.2):

(7) quando lei è andata fuori il suo autobus
    when she hasAUX gone outside DET her bus
già parte
already leave3SG
‘When she goes outside, her bus has already left’

In this sentence the two building blocks are at work simultaneously. Grammaticalized telicity applies because the separation between the inflectional (outer aspect, OAsp) and the lexical (inner aspect) domain (Verkuyl 1993; 2005) is blurred, so that the inflectional perfective morpheme -ta of andata ‘gone’ is checked in a unique AspP rather than being set apart in OAsp (which would be above the event phrase EP, in the inflectional domain not visible in the syntactic tree above). Actional underspecification applies because lowest XP complements (AdvP and PP) expressing the goal of motion are upgraded to the rank of external arguments at Asp head Spec position. In cases like (7), Asp may host raised PPs and AdvPs (whose landing site is Asp Spec position), to signal that the resulting phase of event – regardless of the fact that it is a part of the logical structure of V – is the relevant dimension for the correct interpretation of the event. The aim of the experiment described in the next section is to look for a correlation between the choice of the actionally underspecified andare ‘go’ (to express event A), the presence of a PP or AdvP to express the goal of the goal of movement (the Adv fuori ‘outside’) and the presence of the perfective morpheme (see Section 3.3).
Why would a developmental theory of tense and aspect need to postulate the existence of such building blocks of telicity in interlanguage? In Section 2.2 it was pointed out that in many studies on L2 actionality, compositionality is invoked in theory but contradicted in practice, because what are counted up systematically are lexical entries, not phrasal contexts. In Section 2.2 it was stressed that phrasal items (adverbs, prepositions) in interlanguages are unreliable when used to establish the actional content of verbs. One might ask how can we compute consistently compositional telicity and how compositional telicity is realized in a second language. We propose to assume that L2 learners – at least up to a certain point in the developmental path – find it feasible to derive telicity structurally rather than lexically because it is less costly in terms of processing and representational resources. When L2 actional competence is still developing, instead of learning whether a verb is telic or atelic per se or in specific phrasal configurations, learners could find it easier to recycle
Developing actional competence

Basic and phrasal verbs they already know by actional underspecification. Moreover, they might find it convenient to add these verbs an artificial resulting state by means of a perfective morpheme and a few adjuncts (this is grammaticalized telicity). Building blocks of L2 telicity as abstract features of developing actional competence are justified in terms of acquisitional and processing costs.

3. The experiment

3.1. Participants, task, stimuli

An initial group of subjects included 143 undergraduate American students spending one semester of their 2nd or 3rd university year at a study abroad program in Italy. They were expected to start attending Italian language courses twice a week. All subjects were native English speakers. Controls (n = 41) were native Italian peer graduate students at the University of Pavia. Students were asked to provide a written description in Italian (between 80 and 100 words) of a 26 seconds clip taken from the film Pane e tulipani according to the elicitation formula: “Describe what you’ve just seen: what are the characters doing?” They were free to decide whether to tell the scene in the past or present tense. The task was timed (10 min.). A test of lexical comprehension preceded the experiment. In this test students were asked to translate from Italian into English 30 sentences containing different motion verbs, among which uscire ‘exit’ ‘go out’, andare fuori ‘go out’ and other telic and atelic verbs such as camminare ‘walk’, arrivare ‘arrive’, ritornare ‘return’. Verbs were presented both in the present and in the past tense. Fail/Pass threshold was fixed at correct translation of 80% of verbal occurrences (Z scores are then used in a logistic regression, see Section 4). As 42 subjects failed at this test, they are excluded from the experimental session. 21% of students were beginners, another 44% intermediates and the remaining 35% are advanced students.

The linguistic level of students was established with a placement test score based on CILS (Certificate of Italian as a Foreign Languages, designed by the University for Foreigners of Siena) level 3 (B1 according to the Common European Framework of Reference for Languages). Students who scored between 100–70 were considered advanced (respectively, C2 and C1 levels), students who scored from 40 to 69 are placed in two intermediate classes (B2 and B1 levels); students who scored less than 40 are placed in beginner classes (A2 and A1).

The stimulus used to prompt the written narrative is a 26 seconds video clip where a woman who used the bathroom in an Autogrill returns to the bar and does not see her fellow travelers (slide 1 in Figure 2). Then she goes out and looks around (slide 2) realizing that the bus is leaving without her (slide 3).
and eventually chasing it for a while (slide 4) before giving up. Event A (the woman going out) and event B (the bus leaving) were consecutive or partly overlapping as indicated in slide 2. In this exact moment, the woman is outside and sees her bus leaving. The resulting state of being outside is then crucial for the correct interpretation of the whole event. We assume that subjects should have wanted to express somehow the fact that the woman realizes that the bus is leaving when she is outside.

3.2. **Experimental variables**

Descriptive independent variables in the experiment were: (i) learners’ proficiency level (values: A = absolute beginner; B = false beginner; C = low intermediate; D = high intermediate; E = low advanced, F = high advanced). Linguistic independent variables were: (ii) the motion verb (values = telic | atelic) chosen to express the event A (the woman ‘going out’ (see slide 2); (iii) presence (values = yes | no) of the perfective morpheme on the motion verb; (iv) presence (values = yes | no) of PP or AdvP to express the goal of motion. Four verbs were classed as telic in L2 data: uscire ‘exit’, arrivare ‘arrive’, tornare ‘return’, venire ‘come’. All this verbs were inherently telic; in L1 Italian they may express the resulting state of ‘being outside’ of event A (Section 1.2) without need of AdvP or PP, as in sentences (8) and (9), written by two advanced learners: Figure 2. *Frames from the clip used as stimuli*
Developing actional competence

(8) è tornata e ha trovato che l’autobus
(she) isAUX returnPASTP and found that the bus
è partito
isAUX leavePASTP
‘she returned and found that the bus has already left’

(9) lei è arrivata solo in tempo a guardare
she isAUX arrivedPASTP just in time to see
l’autobus andando via
the bus leaving away
‘she arrived just in time to see the bus leaving’

Three verbs were classed as atelic: andare ‘go’, camminare ‘walk’ and correre ‘run’. These verbs may be compositionally telic in conjunction with an AdvP or a PP, like in sentences (11) and (12). As far as adjuncts are concerned, the PP head is often the preposition a ‘at’, ‘to’, as in sentence (10):

(10) la donna è andata all’ autobus
the woman hasAUX goPASTP to-theCONTR bus
fermata
stop
‘the woman went to the bus stop’

The AdvP head was expressed exclusively by the adverb fuori ‘outside’ like in sentence (11):

(11) è andata fuori e ha visto l’ autobus partendo
isAUX goPASTP outside and hasAUX seePASTP the
bus leaveGER
‘she went outside and saw the bus leaving’

3.3. Research questions and predictions

Research questions are: (a) Is there a correlation between the level of proficiency of learners and the choice of a telic or atelic verb to express event A? (b) Is the choice of an atelic verb a predictor of the presence of PP or AdvP? (c) Is the choice of an atelic verb a predictor of the presence of a perfective morpheme on the verb expressing the event A?

We predict that low proficient learners (levels A, B) will prefer to use atelic verbs rather than telic verbs in order to express the resulting state compositionally. Additionally, we expect that the atelic verb is a strong predictor of overt PP or AdvP and that the atelic verb (rather than telic verb) is a predictor of
the presence of a perfective morpheme and that this holds especially with low proficient learners.

4. Results

4.1. Scoring

Participants’ responses were scored as telic vs. atelic (Section 3.2). Descriptions were scored as telic if they contained a telic verb and as atelic if they employed an atelic verb. We regarded as a factor, whether the prompted descriptions included a PP or AdvP or not. Because the data of this experiment are categorical, we analyzed the data with logit mixed effects models, as recommended by Dixon (2008) and Jaeger (2008). The main analyses included the proportion of prompted descriptions which employed a telic verb out of all responses.

4.2. Results

Overall Italian native speakers tended to produce more telic verbs (83%) than L2 speakers (53%). Data was fit to a logit mixed model implemented in R (R Development Core Team 2008). The model included Language (L1 vs. L2) as fixed effect and participants and items as random effects. The model revealed a main effect of Language, indicating that L2 speakers tended to produce less telic verbs than L1 speakers (Wald Z = −3.287, p < .001). Table 1 shows the distribution of telic and atelic verbs across proficiency levels (A–F): according to our data, learners chose uscire or andare almost 80% of times.

Then we asked whether the likelihood of producing a telic verb could be affected by the level of proficiency in Italian of L2 speakers. Indeed, we observed

<table>
<thead>
<tr>
<th>prof</th>
<th>uscire</th>
<th>arrivare</th>
<th>tornare</th>
<th>venire</th>
<th>andare</th>
<th>camminare</th>
<th>correre</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>6</td>
<td>1</td>
<td>–</td>
<td>–</td>
<td>5</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>C</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>–</td>
<td>12</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>1</td>
<td>–</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>13</td>
<td>–</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>–</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Developing actional competence

Table 2. Means (M) and Standard Deviations (SD) of telic verbs (telic), prepositional phrases (pp), adverbial phrases (advp) and perfective morpheme (perfective) for each level of proficiency

<table>
<thead>
<tr>
<th>Prof level</th>
<th>telic M</th>
<th>telic SD</th>
<th>pp M</th>
<th>pp SD</th>
<th>advp M</th>
<th>advp SD</th>
<th>perfective M</th>
<th>perfective SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>.52</td>
<td>.51</td>
<td>.22</td>
<td>.42</td>
<td>.30</td>
<td>.47</td>
<td>.70</td>
<td>.47</td>
</tr>
<tr>
<td>B</td>
<td>.25</td>
<td>.45</td>
<td>.33</td>
<td>.49</td>
<td>.25</td>
<td>.45</td>
<td>.42</td>
<td>.51</td>
</tr>
<tr>
<td>C</td>
<td>.43</td>
<td>.51</td>
<td>.38</td>
<td>.50</td>
<td>.24</td>
<td>.44</td>
<td>.48</td>
<td>.51</td>
</tr>
<tr>
<td>D</td>
<td>.54</td>
<td>.52</td>
<td>.23</td>
<td>.44</td>
<td>.38</td>
<td>.51</td>
<td>.54</td>
<td>.52</td>
</tr>
<tr>
<td>E</td>
<td>.67</td>
<td>.48</td>
<td>.10</td>
<td>.30</td>
<td>.38</td>
<td>.50</td>
<td>.38</td>
<td>.50</td>
</tr>
<tr>
<td>F</td>
<td>.73</td>
<td>.47</td>
<td>.09</td>
<td>.30</td>
<td>.36</td>
<td>.50</td>
<td>.55</td>
<td>.52</td>
</tr>
</tbody>
</table>

Figure 3. Percentage of telic responses in level of proficiency. Error Bars refer to the Standard Error of the mean.

that there was a total of 52% telic verbs in level A, 25% in level B, 43% in level C, 54% in D, 67% in E and 73% in F, as it is shown in the first column of Table 2 and in Figure 3.

To test this, we fit our data to a model including Proficiency (from A level, low proficient, up to F level, high proficient) as fixed effect, and participants and items as crossed random effects. Proficiency did not appear to be a significant predictor of the production of a telic verb in the prompted narrative task (all \( p \)'s for Levels A, C, D, E, F > .26). However, in Level B, this effect approached significance (Wald \( Z = -1.51 \), \( p = 0.13 \)), indicating that, in Level B (false beginner) speakers tend to produce less telic verbs than other L2 speakers, even though this difference is not fully significant. We then excluded Level A from analysis to see whether the effect of proficiency on telic responses was stronger. Excluding Level A, production of telic verbs significantly differed
between Levels B and E (Wald Z = 2.20, p < 0.02), and Levels B and F (Wald Z = 2.18, p < 0.02), whereas there was no difference between Levels B, C and D.

We run other mixed effect models on the L1 and L2 samples separately to assess whether the presence of the perfective morpheme, which we included as a fixed factor, significantly predicted the production of a telic verb. In the L1 data, the sign of the coefficient for the fixed factor ±Perfective assumes a positive value, denoting that the odds for telic=1 become larger when the Perfective=yes. Conversely, in the L2 data, the sign of the coefficient for the fixed factor assumes a negative value, indicating that odds for telic=1 decrease when the morpheme is perfective. Analyses revealed that, neither in the L1 speakers (p = .99), nor in the L2 speakers (p = .67), the presence of the perfective morpheme in the sentence was associated to the occurrence of a telic verb. Only in level C the correlation between telic and perfective was significant (Wald Z = −1.93, p < .05). However, there is a difference between L1 and L2 data under this respect. Additionally, note that the value Perfective=no did not significantly predict the presence of an atelic verb (p = .60) both in L1 and in L2 groups. We fit our L1 and L2 data respectively to a further model, including Prepositional phrase (PP) and Adverbial phrases (AdvP) as fixed factors and items as random effect. This model confirmed main effects of PPs and AdvPs in L2 speakers: The presence of a PP (Wald Z = −2.340, p < .02), and of an AdvP (Wald Z = −4.910, p < .001) in the sentence, significantly predicted the production of an atelic verb. That is, L2 speakers were more likely to produce an atelic verb associated to a PP or an AdvP. Conversely, when we considered only the L1 sample, we observed that neither a PP (p = .87), nor an AdvP (p = .99) in the sentence, were associated to the use of an atelic verb in the prompted description. Finally, a regression analysis was carried out to study correlations between the Z scores of the translation test (Section 3.1) and the choice of telic vs. atelic (levels of proficiency and sentences as random factors). However, this correlation was not significant for all levels of proficiency (all ps < .05).

5. Discussion

Our data confirms that L2 speakers – independently of their performance in the translation test – express the resulting state compositionally, by using atelic periphrases more frequently than native speakers do. Our data also show that L2 speakers produce less telic verbs than L1 speakers. The correlation between all Proficiency (A–F) of L2 learners and the choice of inherently telic verbs is not as strong as we would expect, but when we excluded absolute beginner subjects of level A, then the correlation became significant and less proficient
Developing actional competence

learners (group B) were found to produce less inherently telic verbs than advanced learners (groups E and F). However, the fact that the percentage of telic responses of Level A (absolute beginner) is as high as group D (intermediate students) challenges the assumption that non-proficient learners prefer atelic verbs (Section 3.3). If we take a closer look at the sentences produced by group A, we observe that in 4 cases out of 7 telic verbs are not used alone but in conjunction with a PP or an AdvP, like *a l’autobus* ‘to the bus’ and *a fuori* ‘to outside’ in sentences (14) and (15).

(12) \( \text{lei usci a l’autobus} \)  
\( \text{she exits to the bus} \)  
\( \text{‘she exits to go to the bus’} \)

(13) \( \text{la donna uscie a fuori} \)  
\( \text{the woman exits to outside} \)  
\( \text{‘the woman goes out’} \)

The number of these non target-like, supplementary and external endpoints, decreases as proficiency increases to the extent that no such adjuncts are found with *uscire* in more advanced levels D, E and F. Moreover, unlike it is found in native controls data and in more advanced students’, most occurrences of *uscire* (5 out of 7) of A Level are at Present Tense. We conclude that – despite they use it very often – absolute beginner students of Level A neither perceive the telic verb *uscire* as being inherently telic nor attach a perfective morpheme to it. As far as research question (b) is concerned, for L2 speakers, but not for native speakers, the choice of an atelic verb is also a strong predictor of the presence of PP or AdvP. Even though the choice of an atelic verb is often associated with the perfective morpheme by L2 learners (and dissociated by native speakers), this correlation was not significant.

These results altogether support the idea of actional underspecification, but not the idea of grammaticalized telicity. According to the former, L2 learners would be more likely to encode the resulting state compositionally rather than lexically (the PP and AdvP heads working as building blocks), but the role of the perfective morpheme as a building block – despite of being observed – is not statistically confirmed. As far as the developmental trajectory (from compositional to lexical telicity) is concerned, there is only a weak evidence that it could be the case.

Overall, our results deviate from the prediction of the AH (Section 2.1). With the partial exception of participants of Level A discussed above, telic verbs produced by initial learners in our data are not found to attract the perfective morpheme of the *Passato Prossimo*: yet, the less proficient are learners, the more likely they express an important feature of telicity (the resulting state) by means of actionally underspecified verbs. These results also differ from those
of previous studies based on naturalistic L2 Italian data (Giacalone Ramat 1992), but only to a limited extent. In fact former analyses (Giacalone Ramat 1995) had already stressed the fact that – for instance – durative predicates emerge first with the perfective marking, contrary to the AH predictions. On this basis, Giacalone Ramat and Rastelli (2008; 2013) have attempted a partial revision of the AH adopting another research design. While in previous research on L2 Italian spontaneous learners were recorded on the basis of personal narratives and film retelling in which no referent control was possible and no repeated task was carried out, new data were collected from instructed learners using more controlled tasks. The outcomes of these recent studies support two ideas: (1) initial learners may have a representational actional deficit in that they are not aware of the actional properties of predicates from scratch; (2) in the meantime, any basic or phasal verb at hand may project into a telic structure.

Finally, the hypothesis that actionality is learned leaves unanswered the question of how it is learned, which cannot be sidelined and dealt with only in a closing remark. This is a very different issue though. We limit ourselves to observe that developing actional competence (telic/atelic distinction) can not simply accounted for as being a direct function of exposure and lexical enrichments (Wulff et al. 2009). In our data, learners exchange basic verbs and phasal pairs also for years before eventually focusing on their distinctive features. Learners who have been studying Italian for four semesters and more, still overuse andare instead of venire or arrivare (Section 2.2, points c and d) or freely exchange cercare ‘look for’ and trovare ‘find’ (Giacalone Ramat and Rastelli, 2013). We find it very unlikely that lexical enrichment and mere exposure to input alone are the only meaningful variables for learners’ choices. Defective actional competence seems rather to be a general developmental factor, relatively independent of the distribution of telicity patterns in the input of the target language. On the other hand, we also find it hard to conciliate our data with the fact that learners have innate knowledge of the parametric telic/atelic distinction, as it is proposed in the UG framework (Section 2.1), unless these parametric values take much more time to be fixated than one may assume.

6. Conclusion

The hypothesis that learners’ actional competence develops over time is useful to avoid the risk of comparative fallacy which is naturally embodied in theories which deal with the reconstruction of verb actionality in learner data. Analysis of longitudinal data can address future research towards some possible indicators of the development of a learner’s actional competence which can be tested further with experimental methods. These methods could include psycholin-
Developing actional competence

guistic and neuroimaging studies, alongside with behavioral data. For instance, once basic verbs and phasal verbs are identified in a learner’s Interlanguage by means of longitudinal analysis, they could be used to test whether and when learners develop intuitions for actional distinctions going beyond the general meaning of verbs.

University of Pavia
⟨stefano.rastelli@unipv.it⟩

University of Milano Bicocca
⟨mirta.vernice@unimib.it⟩

References


Stefano Rastelli and Mirta Vernice


Jaeger, Tim Florian. 2008. Categorical data analysis: away from ANOVAs (transformation or not) and towards logit mixed models. Journal of Memory and Language 59 (4). 434–446.


Developing actional competence
