Pier Marco Bertinetto

Notes on the progressive as a 'partialization' operator.

(work in progress)

1. Introduction.*

The attempt at formalizing the semantics of the progressive has given rise, in the past three decades or so, to a number of proposals. It is not an easy task to sum up in little space this development, making justice to all scholars who took position in this debate. The difficulty of the endeavour is increased by the fact that the various tendencies are mutually intertwined, so that it is sometimes impossible to assign a given contribution exclusively to one or another line of thought. The competent reader will certainly detect a number of over-simplifications in this account. Despite this, I believe the assessment presented here is fair enough to yield a comprehensive view (cf. also Rohrer 1981, which provides a useful summary of the early stages of this development).

To make things clear from the beginning, I propose to isolate the following stages:

- The seminal works by Montague (1970), Scott (1970) and Bennett & Partee (1972);
- (ii) The proposal, shaped in terms of modal logic, pur forth by Dowty (1979);
- (iii) The entirely new proposal by Parsons (1988), which takes the progressive as an "actionality sensitive" operator;
- (iv) The recent developments which insist on the idea that the progressive be a "partialization" operator, i.e. as a device which highlights only a portion of the event.

As the quotations show, this list corresponds to some extent to a chronological sequence. However, except for the very first one, it is not always the case that each stage is totally superseded or inglobated by the following. Although each new proposal is designed with the purpose of solving specific problems left open by the preceding literature, no treatment put forth so far has been able to accomodate all the theoretical data. Indeed, one often observes that while a (certain set of) proposal(s) looks appropriate for solving a given cluster of problems, it also seems to leave open other important issues. Another fact that I would like to point out at the outset is that, with very few exceptions, virtually all papers in the formal semantics literature (concerning the progressive) deal exclusively with English. Moreover, they concentrate on what I would like to call the "prototypical" usage of the progressive. However, the notion "progressive" is a fuzzy one, which presents peripheral as well as core meanings (not to speak of the considerable variation among languages). Nevertheless, although no final assessment will be reached until all usages of the progressive will be formally expressed in a satisfactory way, it is fair to say that any attempt at finding an explanation should begin with the most typical usages.

2. Accounting for the 'imperfective paradox'.

Bennett & Partee (1972) riformulated a previous proposal by Scott (1970) and Montague (1970). Minor details aside, they essentially suggested the following solution (where "Prog (ϕ) " stands for a sentence containing a progressive):

(I) Prog (ϕ) is true at interval t iff there is an interval t', such that t is a non-final subinterval of t', and ϕ is true at t'.

This definition captures the intuitive idea that an event expressed by the progressive is viewed as a phase of a larger event of the same kind. Consider the following example:

(1) When Mary phoned, Igor was having a shower.

I wish to thank the following people for their very useful suggestions and comments: Denis Delfitto, Östen Dahl, Luca Dini, Vittorio Di Tomaso, Alessandro Lenci, Mario Squartini. I have to admit that I did not include all their suggestions; not because I fond a better solution, but rather out of my imperfect comprehension of the subtleties of the formal language. I simply did not dare to go any further in this territory which remains largely misterious to me.

On the matter of typological variation, cf. Bertinetto (1995) and Bertinetto et al. (to appear).

Here, one may easily imagine a situation such that, at the time when the telephone rang (let us call it "focalization point", henceforth **FP**), the event of having a shower was taking place, and the same event carried on for some time afterwards. However, there is no requirement that the event should continue beyond the FP, for it is equally plausible that Igor interrupted his shower to answer the call and never resumed it. The higher or lower plausibility of one or another situational development depends very much on the kind of event, and on the context (see below), but it is enough to observe that the event must not necessarily continue beyond the FP, for us to conclude that definition (I) is not a very accurate statement. This can be seen in particular with accomplishment verbs, such as: *build a house, draw a picture* and the like. Indeed, according to definition (I), one might be led to the conclusion that (2,a) entails (2,b):

- (2) a. Ed was building his house
 - b. Ed built his house.

However, progressive sentences based on telic verbs do not allow this entailment. This observation, put forth by several authors since at least Garey (1957), is generally known as the "imperfective paradox", although the denomination is not particularly felicitous.□²

Dowty's (1979) proposal was specifically devised to remedy this flaw. His suggestion was to consider, among the possible worlds subsequent to FP, those that instantiate the continuation of the event up to its natural conclusion, i.e. up to the full attainment of telicity in the case of telic predicate. In order for this treatment to be effective, Dowty adds the condition that the relevant possible worlds w' be connected to the real world w by an "inertial link", such that they are a natural development of the preceding situation (i.e., w is exactly like w' at all moments leading to the relevant portion of w'). This can be formulated in the following way:

(II) Prog (ϕ) is true at interval t in w iff for some interval t', such that t is a non-final subinterval of t', and for all w' standing in an inertial relation with w, ϕ is true at $\langle t', w' \rangle$.

With this reformulation, the entailment from (2,a) to (2,b) may plausibly be defended. Although the event of building might have been interrupted beyond FP, nothing prevents us from imagining a possible world where the event carries on and the completion of the event occurs.

However, as several authors (to whom I cannot make justice here) have pointed out, there are conceivable events for which no obvious continuation of a progressive event may be envisaged. Consider the following sentence:

(3) Max was crossing the street, when he was hit by a truck.

Here it is unlikely that Max eventually managed to reach the other end of the street, for this would force us to suspend the physical laws which regulate our world.

Considerations such as these led, through a very intense discussion, to the completely new proposal formulated by Parsons (1988). According to this view, the progressive is taken not only as an aspectual operator, but above all as an "actionality sensitive" operator, i.e. as a device which demands atelic verbs, or turns (when necessary) telic verbs into atelic ones. To achieve this, Parsons allows the progressive to instantiate an abstract predicate HOLD, which is satisfied precisely at the focalized interval of time:

(III) Prog (ϕ) is true at interval t of event e iff e holds at t.

In Parsons' analysis, HOLD is defined as a stative predicate, so that the actional character of Prog (ϕ) is considered to be stative. Since, as is well-known, the progressive cannot apply to originally stative verbs, \Box^3 this proposal amounts to claiming that whatever the actional character of the verb (activity, achievement or accomplishment), the progressive turns it into

A better denomination would be "telicity paradox", for telicity is what is really involved. In fact, with atelic verbs things change altogether, as is shown by *Tony was sleeping*, which does entail that *Tony slept*.

There are, as is well-known, apparent exceptions to this statement. For a discussion, cf. Bertinetto (1994).

a stative one. This is coherent with the views expressed by several authors (such as Langacker 1987, Mittwoch 1988, Mufwene 1984, Saurer 1984, Vlach 1981 and 1993), according to which progressive sentences present strict analogies with sentences containing stative verbs. The very exclusion of stative predicates from progressive sentences would be due to the fact that the application of the progressive operator would be purely redundant in these cases. However, this view cannot be maintained as such, for it can be demonstrated that sentences containing stative verbs may convey a wide range of aspectual values, which are only in part accessible to progressive sentences. Indeed, as Bertinetto (1994) has shown, the analogy between stative and progressive sentences holds just when the former instantiate a typical progressive situation, in which the state of affairs is viewed as valid at a given FP. Obviously, this reduces the analogy to a truism. There is however a way to incorporate the essence of Parsons' proposal, without adhering to the corollary relative to the stativity of Prog (φ). This consists in assuming that HOLD (or whatever abstract predicate one wishes to postulate) is an activity predicate, which applies freely to activity verbs and turns telic verbs (achievements and accomplishments) into activities, i.e. into the only atelic class compatible with progressivity. As to statives, they may receive a progressive interpretation in the relevant contexts; but since they normally cannot assume the progressive morphology, we may suppose that they remain inert to the abstract predicate HOLD (cf. again fn.3 for some details).

Whatever is the case, it is clear that Parsons' solution dissolves the "imperfective paradox". Consider again (3). Since *crossing the street* is turned by the progressive into an atelic verb (i.e. the pure activity of "street-crossing"), there is no reason to be bothered by the fact that the telicity of the verb will never be satisfied in any possible world. But what happens then if, subsequent to uttering (2,a), Ed's house is eventually completed? The answer that Parsons's proposal suggests (in the reinterpretation given here) is that the situation considered at FP is the mere instantiation of an activity of "house-building", which in itself says absolutely nothing with respect to the subsequent development of the event. The fact that the house is eventually completed is totally immaterial to the semantics of (2,a).

Note, however, that although one might agree that the continuation of the event beyond FP is totally irrelevant for the formal definition of the progressive, this problem cannot be neglected from the point of view of our capacity to draw textual inferences. Supposing that Parsons' definition provides a satisfatory account of the semantics of the progressive, it is nevertheless the case that an expert system (just as human speakers) should be able to make plausible inferences as to the further development of a progressive contained in a narration. This is precisely the starting point assumed by Asher (1992).

It is important to realize that Asher's contribution should be taken as an account of the pragmatics of the progressive, i.e. as an assessment of its textual usage and of the inferences that it may lead to, rather than as a truly semantic account. In fact, he does not even discuss examples presenting atelic verbs, for which he has nothing relevant to say. From this point of view, there is little doubt that Parsons proposal provides a superior solution. But with respect to the specific goal that Asher has in mind, it cannot be denied that the idea he puts forth, cast in terms of non-monotonic logic, is very ingenious. His approach consists in assuming that any progressive involves a set of "perspectives" on the event, based on our knowledge of the world. For instance, with respect to (3) the most natural course of events dictates that Max never managed to cross the street. The argument goes as follows: Normally, when one crosses a street, s/he typically gets eventually to the other side; however, in particular cases, such as the one we are considering, "a more specific default rule applies, and this application defeats the use of the more general statement" (p.471). Note that in quite a lot of cases our inferences are less straightforward. The following is an extreme example (4):

(4) Irene was cooking fish stew, but the cat was eating the fish.

Here there is a conflict between two possible courses of events, to the effect that they cannot both be fulfilled. Obviously, we cannot state on principled grounds which one will be carried out to its final goal. However, it is equally abvious that each of them, if not contrasted, would reach its goal. As Asher puts it: "It suffices for the truth of the progressive that there be just one perspective π on the state s such that the normal course of events based on having a state with characteristics given in π leads to a completion of the appropriate kind" (p.479). Thus, in a case like (5), although we are uncertain as to the final result, we may nevertheless

reasonably assert that there is at least one perspective compatible with the completion of the event:

(5) Franz was crossing a minefield.

As can be seen, Asher's proposal is a return to Dowty's basic intuition, the difference being that modal logic is replaced by a non-monotonic approach. There may still be a problem, though. Consider the following case, imagining that the sentence is uttered on the beach by proud Little Eveline:

(6) Look daddy, I am emptying the sea with a spoon.

Suppose that little Eveline is persuaded that she is performing a perfectly reasonable thing. According to the physical laws that regulate our universe, there is no "normal" (or typical) perspective, according to which the event may be completed. One could then imagine a different universe, but this would make Asher's solution unfalsifiable, hence vacuous. There would be no justification for the notion "normal course of events" if this could be suspended at will. Yet, (6) is a legitimate instantiation of the progressive, given the circumstances. Even an example such as: *Phil was jumping to the moon from the roof of his house*, although admittedly hard to swallow, could be accepted if referred to the persuasion of an insane person. This suggests that, after all, any attempt at incorporating a solution to the "imperfective paradox" into the semantics of the progressive is probably bound to fail. There are clearly "impossible" events which can be described by means of a progressive sentence.

3. On the progressive as an 'actionality sensitive' operator.

Interestingly, a Parsons-like approach would not be challenged by (4-6). In each of these cases, the event would be viewed as "holding" at FP, regardless of the subsequent course of events. However, even Parsons' approach is not immune from difficulties. Consider the case of "inherently telic" verbs. These cannot be detelicized by any of the devices commonly used for this purpose, such as the adverbials "for X Time" or "until t_x ", as is shown by (7,a) as opposed to (7,b):

- (7) a. ?? The doctor extracted a tooth for five minutes / until the clock rang
 - b. Molly draw a picture for five minutes / until the clock rang.

It belongs to our deepest ethical persuasion that a surgical operation such as that in (7,a) cannot be voluntarily interrupted. Thus, this type of event is inherently telic, in contrast to events such as that in (7,b) which can easily be detelicized (or, as some scholars would put it, are ambiguous with respect to telicity). Yet, we can meaningfully say something like:

(8) Suddenly, while the doctor was extracting the aching tooth from the patient, the roof collapsed.

This shows that the progressive may very naturally be employed even with inherently telic predicates, although the usual detelicizing tools are normally incompatible with them. Consequently, the most relevant function of the progressive cannot be that of detelicizing telic predicates, as assumed by Parsons (and indeed detelicizing adverbials like those in (7) are incompatible with the progressive itself). This can be observed also with achievement verbs, a subclass of telic predicates. According to Parsons' treatment, the progressive should transform an achievement into an atelic predicate, i.e. into an activity (or even, in his original formulation, into a stative). This might, in fact, account for the impression of durativization that speakers often perceive in sentences such as (9,a). However, as (9,b) demonstrates, these contexts are not compatible with durative adverbials, even in languages which allow for them in the combination of perfective tenses and durative verbs, as in (9,c): ⁴

Mario Squartini has pointed out to me the following sentence, found in a Spanish novel:

The reason why I present here a Spanish example, is that the combination of these adverbials with the progressive is not accepted by all English speakers. As to Contemporary Italian, this combination is totally excluded by the ungrammaticality of the progressive with perfective tenses (in fact, that this particular type of temporal adverbials demands perfective tenses, as shown in Bertinetto 1986).

(9)a. Pedro estaba saliendo / muriendo / gañando was-IMP leaving / dying / winning b. * Pedro estuvo saliendo / muriendo / gañando durante dos horas was-PRET leaving / dying / winning two hours c. Pedro tocando el piano / comiendo / curriendo durante dos horas estuvo P. was-PRET playing the piano / eating / running two hours.

What all this seems to tell us is the following. First, the progressive does not operate on the telic value of the predicate, witness (7,a) with respect to (8). This does not mean, however, that the imperfective paradox costitutes, as stressed by Dowty, a major problem for the semantic treatment of the progressive. On the contrary, the possibly strict telicity of the verb is totally irrelevant for its employment (cf. (8) again). Second, the progressive does not durativize non-durative verbs, witness (9,b). This can also be gathered from examples based on "strictly punctual" verbs (Dini & Bertinetto 1995), which (in contrast to normal achievements) only allow for a reading where the event is seen as actually occurring at FP. Consider:

- (10) a. At that very moment, Luca was pressing the button
 - b. At that very moment, the bullet was hitting the target
 - c. At that very moment, the rocket was touching the ground of the misterious planet.

It is not easy, in these sentences, to get the imminential reading that is commonly available to true achievements. This is due to the fact that strictly punctual verbs do not involve any preparatory phase. Thus, there is no way to yield an effect of apparent "durativization" of the event, as is the case with achievements. Besides, since punctuals merely consist of a single "atom" of event, once they start they necessarily "occur": the event may not be suspended. Yet, the progressive may be employed even with these verbs, provided the relevant pragmatic conditions obtain. This is a striking exception to the general rule, stating that a progressive event needs not reach its completion. Clearly, this statement is subject to pragmatic restrictions, for some events may not possibly be interrupted.

Even if one wished to contend that punctuals are a fairly specific class of verbs, for which special stipulations should be made, there are further arguments suggesting that achievements and accomplishments differ in significant ways, to the effect that we cannot simply conceive of progressive achievements as predicates that are contextually turned into activities (i.e. the kind of predicates which detelicized accomplishments are turned into). Compare the following cases:

- (11) The wounded man was brought moribund to the hospital:
 - a. he died half an hour later
 - b. * he finished dying in half an hour.
- (12) The author left to her holidays place with the first draft of her book in the suitcase:
 - a. * she wrote it two weeks later
 - b. she finished writing it in two weeks.

The achievement in (11) and the accomplishment in (12) show a simmetrical behaviour in contexts (a-b). As it happens, the event of dying includes a preparatory phase, but the culminating phase instantiates something completely new, occurring at the end of the preparatory phase. By contrast, the event of writing a book is truly durative: every moment comprised in this interval of time is a phase of writing. Thus, when the progressive applies to an achievement, there is no way to derive from it a detelicized accomplishment (i.e. an activity). A progressive achievement may correspond either (i) to the culmination phase, in which case we obtain a situation comparable to that described in (10) above; or (ii) to the preparatory phase, in which case we get the so-called imminential meaning. But even in the

⁽i) Estuvo muriendo durante siete años be-Past-3sg dying for seven years.

This seems to be a case of durativization of an achievement. However, it is fair to consider it a hyperbolic usage, i.e. a rhethorical violation of the normal restrictions impinging on this class of verbs.

latter case, the event retains its actional properties, which are clearly different from those that are typical of an accomplishment.

As a consequence of all this, it is wrong to view the progressive as an "actionality sensitive" operator, whose main function consists in checking, and possibly changing, the actional nature of the predicate. Its function is purely aspectual, and presumably resides in its being a "partialization operator" on the event. In the remainder of this paper, I shall examine a few recent proposals, all of which agree on the claim that the progressive be a device which presents only a portion of the event, rather than a complete event.

4. The progressive as a 'partialization' operator.

First consider Landman (1992). An important ingredient of his approach is the distinction between the "part-of" and the "stage-of" relation. "An event is a stage of another event if the second can be regarded as a more developed version of the first" (p.23). Furthermore, in order to be a stage "a part has to be big enough and share enough with [the event] e so that we can call it a less developed version of e" (ibid.). Note however that an event can be a part of another event, without being a stage of it. For instance, reading a book may be regarded as part of preparing an exam, without it being a stage of the latter, for the exam may eventually be prepared even though the book is not read to the end. In fact, "we cannot say that when an event stops in a world, there is no bigger event of which it is part in that world, but we can say that when it stops, there is no bigger event in the world of which it is a stage" (ibid.). Suppose now that e, f, g, h ... are the various stages of the event of reading a book, and that they are linked pairwise to one another in such a way that they build up a "continuation branch" of the event e in the worlds to which they pairwise belong (for instance, e and f belong to w, f and g belong to w', g and h to w", and so on).

Informally, here is Landman's definition of the progressive:

(IV) PROG (e, P) is true in w relative to f if in some world on the continuation branch of f(e) in w, some event realizes the event type P.

According to this definition, example (3) would be treated like this. "We follow Max's crossing in w until it stops because the truck hits him. We go to the closest world where his crossing continues. There the truck doesn't hit him. On the basis of his crossing and his usual skill of road-crossing he had a very reasonable chance of getting in the real world as far as he gets in this world. In this world he manages to cross" (p.28-29, with adaptations). But what happens with (6)? As formulated, Landman's solution requires that there be a world in which the event type is realized, but we saw above that in certain cases it is quite unlikely that the event may be completed. The event of empting the sea with a spoon by little Eveline may go on for some time after FP, but there is no world in which it will ever be completed. Ultimately, Landman's is a revitalization of Dowty's approach, and seems to meet the same difficulties.

Kearns (1991) has a different approach. Her conception rests on the idea that the progressive locates the event "at least" at the stated time (our FP), thus implying that the event may (but needs not) continue beyond FP. With some adaptations, Kearns' definition is reported in the following formula:

(V) (the t) \exists t' (t \P t') \exists e (P (e)) (at (e,t) v at (e,t')) [where: the = individual quantifier; = the relation of proper subpart; P = the relevant predicate of events]

In prose: For an individually quantified interval t, for some t' (where t is a proper subset of t') and for some event e instantiating the predicate P, e occurs at t or e occurs at t'. Let us consider a simple case:

(13) At 5 o'clock, Jane was playing the piano.

Here, 5 o'clock individuates the FP (corresponding to t in (V)). But even when FP is not overtly stated, it can always be recovered through a broader context as a precisely localizable

instant (or possibly, in languages like English, as a larger interval ⁵). What (13) says is that the event of playing the piano was going on at least at 5 o'clock, but it may also be the case that it went on for some time afterwards. Indeed, this sentence is compatible with any of the following situations:

- Jane starts to play at 4, is still playing at 5, and stops immediately afterwards
- Jane starts to play at 4, is still playing at 5, and carries on until 7
- Jane starts to play more or less at 5, and stops immediately afterwards
- Jane starts to play more or less at 5, and carries on until 7. 6

Example (13) as such says nothing for or against these possible developments. All it says is that the event of playing is going on at 5 o' clock. This corresponds quite naturally to the speakers' intuitions about progressive sentences. ⁷

But what about the problematic cases that we considered above, those involving telic predicates? In this connection, Kearns seems apparently satisfied with both Parsons' and Dowty's solution. On the one hand, she incorporates Parsons' idea of the recategorization of telic predicates (p.293). However, she claims that it is not the progressive as such which performs the transformation, for the predicates that undergo it are intrinsically ambiguous between a telic and an atelic reading. This clearly amounts to depleting the real impact of Parsons' treatment. But since, as shown in § 3, the solution viewing the progressive as an 'actionality sensitive' operator ultimately does not work, we may disregard this aspect. 8 On the other hand, Kearns also incorporates a counterfactual version of Dowty's view concerning the "imperfective paradox". Roughly, this says that if the event of e.g. (3) could continue beyond FP, it would be completed. At the same time, however, she adds (among other criticisms) that this is not part of the actual definition of the progressive, but a mere pragmatic extension of it. The counterfactual analysis is just "a highly productive predicate formation rule, generally used for purposeful human activities or processes where custom and experience support the classification of a process as of a typically goal-directed kind" (p.299). In other words, it is natural to expect that telic predicates eventually reach completion if nothing prevents it, but obviously this is not a necessary requirement. Indeed, the "at least at

Kearns is among the few scholars who implicitly admits the possibility for FP in English to be an interval, rather than a single instant, as shown by her main example: *John was playing the piano from 10 to 11*. As shown in Bertinetto (1995) and Bertinetto et al. (to appear), this is a relevant feature which opposes some languages to others.

One might wonder whether the following situation is also allowed by (V):

⁻ Jane started exactly at 5, and stops immediately afterwards. Although this sounds pragmatically implausible, there may be cases which lend themselves pretty naturally to this interpretazion, such as:

⁽i) When the mother entered the room, Paul was watching out of the window.

Suppose that Paul has been prohibited to watch out of the window until he finishes his school duties; being weakly inclined to obedience, he turns his eyes to the window, but right at that moment his mother opens the door to check what he is doing. In this case, it is conceivable that the event of watching lasts for no more than a single instant. If this is so, then definition (V) would not do, for t would not necessarily be a proper subset of t'. This is additional reason to consider the reformulation provided in fn. 7. However, it is possible that even in a case like (i) the total duration of the event must be larger than a single instant, so that Kearns' formulation would still hold in this respect.

However, there seems to be a problem with this formulation. The presence of the disjunctive operator, given its standard interpretation, makes the validity of the second disjunct vacuous with respect to the validation of the whole formula. Note, by the way, that I am assuming that the first disjunct be true, for otherwise even the second would be false and the entire disjunction could not be satisfied. But there is a way to circumvent this problem. This consist in replacing the disjunctive operator by a conjunctive one, and the relation of proper inclusion by one of improper inclusion. Here is the proposed reformulation: (V') (the: t) \exists t' (t \subseteq t') \exists e (P (e)) (at (e,t) & at (e,t')).

The reader may easily check that sentence (10) is satisfied by this formula for exactly the same circumstances specified above, with the advantage, though, over Kearns' formulation, that the validity of each conjunct (hence, its contribution to the validity of the entire formula) is explicitly stated.

As observed in (7,a), not all accomplishments are ambiguous between a telic and an atelic reading. Thus, Kearns' solution is in this respect even worse than Parsons' one. The latter scholar could at least claim that the progressive on the one hand and the remaining detelicizing devices on the other hand have a different behaviour with respect to the detelicization of the predicate (compare (7,a) and (8)). Although the details of this proposal would be difficult to implement, Parsons could try to defend the idea that there are different degrees of detelicization. Kearns, however, is forced to defend the highly implausible position that there are two homophonous predicates *extract a tooth*, one telic and one atelic.

FP" relation expressed by (V) holds for both atelic and telic predicates, because a telic event may go on for some time beyond FP, regardless of whether or not it reaches its final goal. Thus, the rationale for Kearns' move concerning the imperfective paradox seems to be the following. The speaker is obviously invited to draw pragmatic inferences from progressive sentences containing telic predicates, but these inferences do not pertain to the semantics of the progressive, whose satisfaction is insured by the fact that the event goes on "at least at FP", and may possibly go on afterwards provided no impediment occurs (possibly reaching completion if the predicate is telic).

As Kearns (1991), Delfitto & Bertinetto (1995) make use of the notion of subpart, but they refer it to the event itself, rather than to the time at which the event takes place. This modification allows a unified treatment of both the progressive and the habitual aspect within the category of imperfectivity, a move motivated by the existence of many languages in which the same tenses may express both aspectual values. It is impossible to develop here all the details of the argumentation. Suffice it to say that an important ingredient of the approach is the assumption that FP is the object of a presupposition of "familiarity". This means that speaker and adressee must know the temporal localization of FP, even when it is not overtly stated in the sentence containing the progressive. Further, the cardinal quantifier "one" (in its standard meaning of "at least one") is applied to the event variable e, which is temporally localized at t. This yields the following formula, which aims at rendering the overall meaning of the imperfective aspect:

(VI') (
$$\forall$$
t: contextually relevant (t)) (One e: P(e) & at (e,t)).

In the case of the habitual aspect, the part of the formula saying "there is at least one event of P-ing" receives a straightforward interpretation: The event is repeated in a number of occasions, whose frequency of occurrence is specified by the context. But note that this implies a plurality of times of occurrence of each event comprised in the global (habitual) macroevent. This interpretation is clearly ruled out in the case of the progressive, which demands a semelfactive reading. Given this restriction, the cardinal quantifier is forced to operate on entities other than times, namely subevents. Thus, the second part of (VI') is necessarily expanded in the following way, which captures the essential insights of Kearns' formulation, avoiding its pitfalls:

(VI'') (One e:
$$P(e)$$
) & $\exists e'(P(e') \& e \subseteq e') \& at (e,t)$.

Take e.g. (3) or (13): There is at least one subevent e of crossing (or of playing), and this is an improper subpart of the event e'. Obviously, the same implications stemming from (V) apply here too, suggesting that the continuation of the event beyond the time t is a possible, but not necessary, development, in full agreement with the speakers' intuitions on the meaning of progressive sentences.

5. Provisional conclusion.

The story of the progressive obviously does not stop here. ⁹ As a provisional conclusion, I would just dare to propose the following points, which appear to me to be fairly robust:

- The progressive is a truly aspectual operator, rather than an actional operator (cf. § 3);
- the progressive is a "partialization operator" on events (cf. § 4);
- the possible telicity of the predicate does not constitute a semantic problem, for no more than a single portion of the event is put into focus by the progressive (cf. § 2);
- in the extreme case, i.e. with strictly punctual verbs, the portion of the event put into focus by the progressive may be the only atom of event of which the predicate consists (cf. § 3);
- nevertheless, the possible completion of telic events may be the matter of relevant pragmatic inferences in a decision-making procedure; this seems to be the ultimate impact of the long debate on the so-called 'imperfective paradox' (cf. § 2).

⁹ Further proposals essentially incorporating the view of the progressive as a "partialization operator' may be found in Jackendoff (1991) and Mc Clure (1994).

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