

Predicates with Both Eventive and Stative Properties*

Hiromi Onozuka

English predicates such as *lie*, *stand*, and *wear* show a peculiar behavior in that they act like eventive predicates in the simple present tense, while they often display a non-eventive, stative characteristic when they occur with the simple past tense. The latter case can be found especially in the environment of point adverbials. Thus, from an aspectual viewpoint these predicates pose a rather interesting problem. In this paper, we consider how we can treat this behavior of the predicates and present an account employing Michaelis's (2004) theory of aspect. It is also shown that point adverbials serve to reveal a distinctive behavior of the predicate *live*.

1. Introduction

In this paper we will deal with a certain peculiarity displayed by a class of predicates shown in (1).

(1) wear, lie, stand, sit, hang, live¹

The predicates in (1) have frequently been regarded as stative predicates or verbs, as can be seen from several citations drawn from the literature given below.

- (2) a. Thus *live in London*, a stage-level predicate but surely a **state**, admits the progressive. (Mittwoch 1991: 76)
- b. However, it must also be acknowledged that there exists a small class of English **stative** predicates, including (mostly postural) verbs such as *stand*, *lie*, *live*, etc., which pose a serious problem to this view (Bertinetto 1994: 403)
- c. unlike other **stative** predicates like *lie* (Zucchi 1998: 353)
- d. The following are among the most frequent verbs typically used as '**STATE VERBS**,' listed in order of frequency: *be*, *have*, *know*, *live*, *stand*, [...] (Leech 2004: 9)

However, as observed in several previous researches, the predicates in (1) in fact behave just like eventive predicates such as activities when they appear with the simple present tense in that they in general cannot report situations ongoing or existent at speech time. On the other

hand, these predicates show the same behavior as a class of stative predicates shown in (3) in a certain context when they occur with the simple past tense.

(3) be angry, be hungry, be happy, be at home, be alone²

The predicates in (3) are so-called stage-level state predicates (see Kratzer 1995 for details; we will hereafter call these predicates S predicates for convenience's sake). Thus the predicates in (1) possess both eventive and stative properties; they will henceforth be called E-S predicates for the sake of convenience. We will address the problem of accounting for their rather unique behavior. It will be shown that Michaelis's (2004) theory of aspect provides us with a good way to deal with that problem.

The structure of the paper is as follows: in section 2, we present some empirical facts concerning E-S predicates and S predicates. Specifically, we first examine the behavior of the two classes of predicates when they are joined with the simple past tense and so-called point adverbials such as *at three o'clock* (Filip 1999) and indicate that the two classes behave similarly. Then we examine the behavior of the two classes of predicates when they combine with the simple present tense and show that in this case they act differently. Section 3 reviews and compares the two analyses provided by Dowty (1979) and Michaelis (2004), both of which cover the two classes of predicates. In section 4, we put forward an account of the unusual property of E-S predicates utilizing Michaelis's theory of aspect and show how this account cope with the free alternation of the simple form and progressive form of these predicates in the past tense. Section 5 is devoted to a brief discussion about the status of the predicate *live*. Section 6 is a conclusion.

2. Similarity and Difference between E-S Predicates and S Predicates

This section will present the similarity and difference between the two classes of predicates based on certain cooccurrence relations.

2.1. Similarity

In this subsection we will show that E-S predicates and S predicates share the ability of cooccurring with point adverbials such as *at noon* in the simple past tense.

First, when E-S predicates appear with the simple past tense, they allow point adverbials, as shown in the following:

(4) a. **At three o'clock** the socks **lay** under the bed. (Filip 1999: 113)

- b. Dybvig came two hours early to the University of Minnesota Sports Pavilion. **When Kerry appeared at noon**, he **wore** a classic candidate's outfit of navy suit with red tie. (<http://www.fraterslibertas.com/2004/06/why-we-fight-time-once-for-our-semi.html>)
- c. **At nine o'clock** he **sat** at home awaiting his visitor. (<http://www.bookrags.com/ebooks/4310/125.html>)
- d. My two-year-old played with the defunct Wally sub I gave him in his pool today. **At noon**, it **sat** flat on the bottom, completely immersed. (http://www.rcuniverse.com/forum/m_3216107/mpage_2/tm.htm)
- e. The angle which the midrib formed with the horizon was measured in one case at different hours: **at noon** it **stood** horizontally; late in the evening it depended vertically; then rose to the opposite side, and **at 10.15 P.M.** **stood** at only 27° beneath the horizon, being directed towards the stem. (http://www.schulers.com/books/ch/p/The_Power_of_Movement_in_Plants/The_Power_of_Movement_in_Plants60.htm)
- f. Her commanding officer **stood** there, **at three in the morning**, worriedly looking around her house. "Sir?" she asked. He spun round. "What are you doing here?" (<http://www.samandjack.net/stories/sjarchive1/mbluckycharm.html>)

At this point a caution is in order about the so-called verbs of spatial configuration, such as *lie* and *stand*, because they have several different meanings (Rappaport Hovav & Levin 2000:276). Those which belong to the class of E-S predicates describe the spatial configuration of animate or inanimate subjects and when they take animate subjects, they have the 'maintain position' meaning, and when the subjects are inanimate, they have the 'simple position' meaning. In the following we will not distinguish these two meanings because the distinction is not important for our discussion (but see section 2.2). The verbs of spatial configuration has another meaning. It is the 'assume position' meaning found in sentences such as the following:

- (5) a. The girl **sat** (down) on the swing.
 b. The man **lay** (down) beside the tree.

It should be remembered that the verbs of spatial configuration with this meaning are not E-S predicates and out of the scope of the present discussion (but see note 14).

Now we turn to S predicates. They also accept point adverbials in the simple past tense, as shown in (6):

- (6) a. The victim **was alone at the time that the incident occurred.**
 (<http://www.cdc.gov/niosh/face/stateface/mn/95mn070.html>)
- b. I tried to give myself an edge today by sleeping later than usual, but I **was hungry at 6 a.m.**, and I had to go to the bathroom. And once I'm up, I'm up.
 (http://www.epinions.com/review/Hollywood_48_Hour_Miracle_Diet_41383569/well-review-3AA3-CC3F539-39881E05-prod1)
- c. First, his mother said that he **was at home at 9:45 a.m.** that day--which, if true, wouldn't have given him enough time to drive some 45 minutes to Shady Shores. (http://news.zdnet.com/2100-9588_22-150047.html)

By the way, Bertinetto (1994: 399) states that point adverbials cooccur with only a small sub-group of statives, referring to Mittwoch (1988: 234), and judges the following example to be odd.

- (7) ?**At 3 o'clock, John was hungry.**

In fact, however, *be hungry* does admit of point adverbials, as shown by the example (6b). See also the following:

- (8) The author actually ate twice at a Waffle House and liked the food, even the hash browns. And he was happy that the food was served up in record time when he **was hungry at 2:30** on Sunday morning and nothing else was open.
 (<http://www.fansview.com/2004/ikasucon/iknotes.htm>)

Besides, we can find in Mittwoch no support for the above statement of Bertinetto. What Mittwoch is actually saying is this: 'Ordinary statives can be evaluated both at a moment and for a [*sic*] extended interval. There is a sub-group of statives which can only be evaluated at a moment, e.g., *it is 6 o'clock*, [...].'

Thus it has become clear that E-S predicates and S predicates show the same behavior with respect to the cooccurrence with the simple past tense and point adverbials.³

2.2. Difference

This subsection will reveal that E-S predicates and S predicates diverge when they appear in the simple present tense.

Dowty (1979) directs attention to the fact that E-S predicates behave differently from other stative predicates when they appear in the simple present tense. Langacker (2001) and Michaelis

(2004) also take notice of the fact that E-S predicates are different from ordinary states, especially S predicates, when they are associated with the simple present tense, as in (9).

- (9) a. *Fred **lies** on the beach right now. (Langacker 2001:258)
 b. She's the one in the corner. #She **wears** a Fendi blazer. (Michaelis 2004:36)
 c. #Your socks **lie** on the floor. (Michaelis 2004:36)

The examples in (9) show that the E-S predicates in boldface type cannot describe a specific situation ongoing or existent at the time of utterance. As is well known, this fact features non-stative, eventive predicates in general. Therefore E-S predicates have a property in common with eventive predicates.

Here some caveats are necessary. First, when the verbs of spatial configuration with the 'simple position' meaning take nonmoveable objects as their subjects, the simple present tense form describing the presently existent state is possible and moreover the progressive form sounds strange, as shown in the following (Dowty 1979:174-175):

- (10) a. New Orleans **lies** at the mouth of the Mississippi River.
 b. ??New Orleans **is lying** at the mouth of the Mississippi River.
 (11) a. John's house **sits** at the top of a hill.
 b. ??John's house **is sitting** at the top of a hill.

These cases will be excluded from our discussion. Second, the verbs of spatial configuration which we are concerned with do occur with the simple present tense, but when they do, they usually denote habits and therefore do not describe particular situations existent at the moment of speaking. Here examples with adverbs of frequency are presented in order to make habitual meanings explicit.

- (12) a. "After about a year of being here, she started playing the piano. I didn't teach her it at all," said Alexander. "She **always sits** on the bench when she plays. Sometimes she plays so much at a student's lesson, I have to pull the bench away."
 (<http://www.wcsh6.com/news/watercooler/article.aspx?storyid=53154>)
 b. A floor tom is a double-headed tom-tom drum which **usually stands** on the floor on three legs. (http://en.wikipedia.org/wiki/Floor_tom)

Turning to S predicates, they can report a state existent at speech time, as shown in (13).

(13) He is **angry/happy/hungry/alone** (at the moment/right now).

Thus when E-S predicates take the simple present tense, they act like eventive predicates and cannot report an ongoing situation at speech time. They present a sharp contrast with S predicates which can describe a situation existent at speech time in the simple present tense.

2.3. Summary

In this section, we have shown that E-S predicates and S predicates act alike in the simple past tense, while they are dissimilar when they link with the simple present tense. Especially interesting is the behavior of E-S predicates, which exhibit a Janus-like characteristic in that they are like stative predicates in one respect and not in another. This indicates clearly that regarding E-S predicates simply as states is insufficient. Given the eventive nature of E-S predicates in the present tense, we must look for a means to account for their behavior as S predicates in the simple past tense.⁴

3. An Overview and Evaluation of Two Previous Analyses

In the previous section, we have observed that E-S predicates and S predicates manifest semblance and disparity. In this section, we will give an overview of two previous analyses dealing with these predicates, namely, Dowty (1979) and Michaelis (2004), and at the same time try to evaluate the two analyses as to the compatibility with the empirical facts observed in the previous section.

3.1. Dowty (1979)

Dowty (1979:184) classifies E-S predicates into the group of states. For Dowty, states include stage-level states, object-level (that is, individual-level) states, and some others, in addition to E-S predicates. Further, among states, E-S predicates are distinguished from other states, because the former belong to interval predicates and the latter momentary predicates, and therefore E-S predicates are called interval statives. Dowty's classification of predicates into aspectual classes is shown below with some modifications added for the sake of explanation and brevity.

(14) Dowty's classification of predicates

States

momentary statives: *be asleep, be in the garden* (stage-level) (S-predicates);

love, know (individual-level)

interval statives: *sit, stand, lie* (E-S predicates)

Activities: *make noise, roll, rain, walk, laugh, dance*

Single change of state (Achievements): *notice, realize, ignite, kill, point out*

Complex change of state (Accomplishments): *flow from x to y, dissolve, build (a house),
walk from x to y, walk a mile*

According to Dowty, interval predicates are those predicates that require more than one moment, that is, an interval in order for them to be judged to be true, while momentary predicates need just one moment for their truth conditions. To use relatively widely accepted terms, activities, accomplishments and achievements also belong to the class of interval predicates. Interval predicates cannot describe an ongoing situation at speech time because of their interval nature. The reason is that speech time is momentaneous and usually it is not compatible with the interval predicates.⁵ Thus, Dowty can account for the behavior of E-S predicates when they appear in the simple present tense, shown in (9). They cannot report a situation existent at speech time because they are interval predicates. On the other hand, S predicates are momentary statives; consequently, they can report a state present at speech time. In this way, Dowty's analysis correctly predicts the well-formedness of the examples in (13).

Now let us direct our attention to the case in which the two classes of predicates are combined with point adverbials in the simple past tense. At this point we need to examine and elucidate the distributional property of point adverbials in this context, especially the aspectual circumstances in which they appear. In this regard, the paradigmatic examples shown in (15), which are given by Filip (1999:113), are very helpful.

- (15) (a) ?At three o'clock Boris was Russian. (static state)
 (b) At three o'clock the socks lay under the bed. (dynamic state)
 (c) ?At three o'clock the fly swam in the soup. (process)
 (d) ?At three o'clock Irv built a cabin. (protracted event)
 (e) At three o'clock Emily won the car race. (culmination)
 (f) At three o'clock the light flashed. (happening)
 (g) At three o'clock, he found his watch. (happening)⁶
- (16) Today, she was busy. At 5 a.m., she was at the Alhambra Athletic Club.
 (<http://www.sacbee.com/107/story/748405.html>)

(15b) is an example of Dowty's interval statives and we have added (16) as an example of S predicates, which is lacking in the paradigm in (15).

Firstly, putting aside (15b) for the moment, we would like to focus on the contrast between (15c, d) and (16). The latter involves an S predicate and is acceptable, while the former include an activity and accomplishment, respectively, and are odd. The reason why S predicates permit point adverbials is that they are momentary predicates in Dowty's sense and here point adverbials just serve to specify a particular moment at which the state holds (Smith 1997:113).⁷ In other words, point adverbials require predicates to have a momentary property. S predicates can satisfy this requirement by their momentariness. Activities and accomplishments, on the other hand, do not have this property and fail to meet the requirement.

Now, we turn to the examples (15e-g), which include predicates describing punctual situations (henceforth called punctual predicates just for the sake of convenience) and are acceptable. Punctual predicates correspond to achievements and semelfactives in the sense of Smith (1997). They either denote an instantaneous change of state or an instantaneous happening. Therefore, although the predicates do not have a momentary property, their compatibility with point adverbials comes from the punctuality of the situations the predicates express.⁸

Thus we will assume that in the simple past tense environment point adverbials are allowed when they cooccur with either momentary predicates or punctual predicates. Given this assumption, Dowty's analysis can handle S predicates and correctly predicts that the examples in (6) repeated below are acceptable because of the momentariness of the predicates involved.

- (6) (a) The victim **was alone at the time that the incident occurred**.
 (b) I tried to give myself an edge today by sleeping later than usual, but I **was hungry at 6 a.m.**, and I had to go to the bathroom. And once I'm up, I'm up.
 (c) First, his mother said that he **was at home at 9:45 a.m.** that day--which, if true, wouldn't have given him enough time to drive some 45 minutes to Shady Shores.

Now we turn to (15b). Although Filip (1999:113) states that with (15b) 'it is informative to assert that the denoted property obtains at one particular moment,' she does not distinguish interval states and stage-level states, regarding (15b) as members of dynamic states which presumably correspond to the stage-level state category. That is, it is highly likely that Filip is regarding (15b) as an example of S predicates.⁹ However, as observed above, for Dowty the predicate in (15b) is an interval stative and does not have a momentary property, which causes us to expect the predicate to be incongruous with point adverbials in common with activities and accomplishments. Thus the interval property of the predicate in (15b) would lead Dowty's

analysis to make a wrong prediction that it is incompatible with a point adverbial and hence (15b) is unacceptable. Dowty's analysis as it stands would also decide that all the examples in (4) be unacceptable, contrary to the facts.¹⁰

To sum up, this section has revealed that Dowty's analysis handles well the difference between E-S predicates and S predicates discussed in section 2.2, but it seems not to be able to account for the similarity between these predicates observed in section 2.1. The problem is that E-S predicates act like S predicates when they cooccur with point adverbials in the simple past tense, which Dowty's analysis as it is cannot seem to deal with. Then, what we need is a means to account for this stative property shown by E-S predicates in this particular context.

3.2. Michaelis (2004)

Michaelis's theory of aspect is based on the framework of construction grammar.¹¹ The aspectual meaning of a sentence is assumed to constitute a kind of constructional meaning. Constructions have their own aspectual requirements and when basic morpho-syntactic structures called radicals enter into some construction, they either accord with or conflict with that construction; the former is a case of concord and the latter conflict or mismatch, resulting in type-shifting or coercion. The important point for our discussion is that the tense morphemes are considered as constituting tense constructions and making important contribution to aspectual meaning. It will be shown that Michaelis's approach to the aspectual effects brought about by the simple past tense in English may be able to supply us with a key to a solution of the problem established in the previous section.

3.2.1. Michaelis's Classification of Situation Types

First it is necessary for us to introduce Michaelis's classification of situation types shown below, in order to look at how she handles E-S predicates and S predicates.

(17) Michaelis's classification of situation types

(I) Verification via 'tracking'

(A) Directed events

(a) effected (Accomplishment)

(b) manifested (Achievement)

(B) Episodic events

(c) Activity

(i) non-particulate (Homogeneous Activity) (E-S predicates)

(ii) particulate (Heterogeneous Activity)

- (d) Phase
 - State Phase
- (II) Punctual verification
 - State (S predicates)

Situations are first divided into two major categories based on the difference in the way of verification. The first major category (I) requiring verification via tracking basically corresponds to Dowty's interval predicates in that at least two moments need to be tracked to verify their truth and the second major category called punctual verification (II) is similar to Dowty's momentary predicates and needs only to refer to a moment for verification. This category seems to include individual-level state predicates and stage-level state predicates and therefore we understand S predicates to belong to this category as indicated above. The category (I) is further divided into directed events (A) and episodic events (B). Directed events consist of two classes, namely, effected events which correspond to accomplishments (a) and manifested events which correspond to achievements (b). Episodic events comprise activity (c) and phase (d). Activity in turn is divided into heterogeneous activity (ii) and homogeneous activity (i) and as shown above, E-S predicates correspond to the latter. Phase (d) is bounded state and called state-phase, whose examples involve *be sick for three days* and *be short as a child*. State-phases are regarded as eventive in nature, because they are enumerable as in *Anna was ill for two weeks twice* and cannot report a state present at speech time (**Anna is ill for two hours*).

To repeat, according to Michaelis's classification, E-S predicates correspond to the class of homogeneous activity and S predicates belong to the class of state. The handling of S predicates is the same for both Dowty and Michaelis, but that of E-S predicates is distinct. Dowty regards E-S predicates as a kind of state, whereas Michaelis takes them as a kind of activity. Despite this difference, as far as the impossibility of the occurrence with the simple present tense is concerned, both can account for it almost in the same way. The cause of this impossibility is attributed to the irreconcilability of the momentariness of the simple present tense with the verificational property of E-S predicates. Then how about their occurrence with point adverbials in the past tense? One might expect Michaelis's analysis will result in failure just as in Dowty's analysis. However, Michaelis seems to have a way to deal with the matter. This is due to her handling of the simple past tense, or the tense in general.

3.2.2. The Simple Past Tense and its Two Constructions

Michaelis assumes that the simple past tense in English yields two constructions, one

of which is semantically identical to the perfective construction and the other of which is semantically identical to the imperfective construction, parallel with French *passé composé* (perfective) and *imparfait* (imperfective). The difference is that in the former, reference time includes a situation, while in the latter it is included in a situation. Based on this assumption, Michaelis deals with the ambiguity of the following sentences, with appropriate contexts supplied in square brackets (original italics).

- (18) (a) She *remembered* where the money was hidden [but no one else did].
 (b) She *remembered* where the money was hidden [but only after some incentives were offered].
- (19) (a) [Sue decided to look dramatic that day.] She *wore* a pink Chanel suit and an Hermès scarf.
 (b) [I studied Sue's elegant outfit.] She *wore* a pink Chanel suit and an Hermès scarf.

The ambiguities involved in the above examples are as follows: in (18), the predicate of (b) example is an achievement and that of (a) example is a state. The predicate in (19a) is an activity and that in (19b) a state. Michaelis takes this type of ambiguity to be a result of aspectual coercion, taking one member of the pairs as basic: namely, (18a) and (19a). She assumes that this coercion effect is brought about by the simple past tense construction which is aspectually ambiguous. In (18a) the verb *remember*, which is stative, is given a stative interpretation under the imperfective interpretation of the simple past tense and this is a case of semantic concord between predicate and construction. (18b) is a case of coercion, where the stative verb is forced to have an inchoative interpretation. The coercion results from the conflict between a stative verb and the perfective interpretation of the simple past tense. In (19a), the homogeneous activity verb *wear* has an episodic interpretation based on the perfective interpretation of the simple past tense, which is a semantic concord just like (18a). Specifically, the interpretation of (19a) involves Sue's putting on and taking off the outfit. (19b) has a stative interpretation via coercion. Here, the coercion effect is caused by the mismatch between activity and the imperfective interpretation of the simple past tense, resulting in the selection of the state part of the causal representation of the verb shown below:

- (20) The causal representation of the verb *wear*
 [x HOLD [x <STATE>]]

Michaelis assumes that situation types have frame-semantic property and dimensional

property. The former is characterized by the causal chain the situation types denote, expressed by causal representation, an example of which is given in (20), and the latter by temporal representation. Only the former will be focused on in the present discussion. The causal representation (20) is constructed based on Rappaport Hovav & Levin's (1998) event structure templates and is given to the homogeneous activity predicates. HOLD is an operator and takes two arguments; *x* stands for an effector argument, which is responsible for the maintenance of the state designated by the STATE constant in the angled brackets, which is also an argument of the operator HOLD.¹² The part of the representation selected by the coercion in question is [*x* <STATE>], which is the representation for homogeneous stative predicates. (See Michaelis 2004:12-14, 37 for further details of causal representation.) The coerced interpretation of (19b), in contrast with (19a), does not include the putting on and taking off of the outfit as the scope of the situation.

Thus far we have given an illustration of the aspectual effect of the simple past tense, as envisioned by Michaelis. It is significant to notice that Michaelis's analysis of (19b) which contains the verb *wear*, one of the members of E-S predicates, has direct relevance to our discussion; for the imperfective interpretation of the simple past tense seems to be able to bring about the stative reading necessary for E-S predicates' cooccurrence with point adverbials. Thus it will give us an important clue to the solution of the problem posed by E-S predicates.

3.3. Summary

This section has given an overview and evaluation of the two proposals which deal with E-S predicates and shown that among the two, Michaelis's analysis with its aspectual effect of the simple past tense is preferable, because it seems to enable us to handle the problem posed by E-S predicates. In the next section we will present a way of accounting for the stative property shown by E-S predicates when they occur with the simple past tense and point adverbials, employing Michaelis's theory.

4. An Account Based on Michaelis's Theory

In this section, first we are going to consider how we can account for the stative property of E-S predicates when they are in the simple past tense and linked with point adverbials in terms of Michaelis's theory. Then we will briefly discuss the free alternation between the progressive form and the simple form of E-S predicates in the past tense.

4.1. A Possible Account

In section 3.2, we have surveyed those parts of Michaelis's theory of aspect which have

relevance to our discussion. Especially crucial is the aspectual effect of the simple past tense. As shown in the examples in (19), the simple past tense can cause E-S predicates to yield two aspectually different interpretations. Among the two, the interpretation brought about by the imperfective aspect is a stative reading of E-S predicates. Here we give additional examples in which the imperfective interpretation of the simple past form of E-S predicates can be found.¹³

- (21) (a) As I pointed out the work to Linda, I noticed that it **lay** on top of what looked like a sales sheet. “Linda,” I said, “isn’t that a great little Sherrie Wolf? Too bad it’s probably already sold.” (<http://www.theartcounselor.com/articletwo.html>)
- (b) She **sat** at the kitchen table with her special cup in front of her. An open bottle of juice **sat** on the table beside a box of cheese-and-bacon flavoured crackers. (http://www.lulu.com/items/volume_2/99000/99877/2/preview/baileypreview.doc)

This aspectual effect of the simple past tense is what we need to account for the stative characteristic shown by E-S predicates when they appear with point adverbials in the simple past tense. Let us repeat the relevant examples below:

- (4) (a) **At three o’clock** the socks **lay** under the bed.
- (b) Dybvig came two hours early to the University of Minnesota Sports Pavilion. **When Kerry appeared at noon**, he wore a classic candidate’s outfit of navy suit with red tie.
- (c) **At nine o’clock** he **sat** at home awaiting his visitor.
- (d) My two-year-old played with the defunct Wally sub I gave him in his pool today. **At noon**, it **sat** flat on the bottom, completely immersed.
- (e) The angle which the midrib formed with the horizon was measured in one case at different hours: **at noon** it **stood** horizontally; late in the evening it depended vertically; then rose to the opposite side, and **at 10.15 P.M.** **stood** at only 27° beneath the horizon, being directed towards the stem.
- (f) Her commanding officer **stood** there, **at three in the morning**, worriedly looking around her house. “Sir?” she asked. He spun round. “What are you doing here?”

Following Michaelis, we would like to assume that the examples in (4) are all cases of the imperfective interpretation of the simple past tense and as a result the predicates are given stative readings, just like those in (21). This enables us to explain why these examples allow the occurrence of point adverbials. E-S predicates shift their aspectual status from activity to

state when the imperfective interpretation of the simple past tense are imposed on them, which in turn lead to the predicates' congruity with point adverbials.

As a matter of fact, within Michaelis's framework, it is highly likely that point adverbials themselves work as the original trigger of the above coercion effect, judging from her treatment of other temporal adverbials which constitute constructions themselves and require specific interpretations when predicates appear in these constructions (Michaelis 2004:33ff.). Therefore, put informally, the stative interpretations found in the examples in (4) would be obtained in this way: when E-S predicates occur in the context of the simple past tense and point adverbials, the point adverbial construction first requires either the punctual or stative (momentary) interpretation of the predicates (see section 3.1.). Then because E-S predicates are not punctual predicates, the latter interpretation is chosen. Now to meet this interpretation it becomes necessary for E-S predicates to shift to states, which is possible because of their internally homogeneous nature (see the causal representation in (20)). This aspectual shift is brought about by the simple past tense construction producing the imperfective aspect interpretation of the predicates.¹⁴

4.2. The Free Alternation between the Simple Form and the Progressive Form of E-S Predicates in the Past Tense

E-S predicates can describe states when they are in the simple past tense, although basically they are activities. What is interesting at this point is that the sentences given in (4) which contain E-S predicates in their simple past tense can be paraphrased into progressive sentences as shown in (22).

- (22) (a) At three o'clock the socks **were lying** under the bed.
 (b) At nine o'clock he **was sitting** at home awaiting his visitor.
 (c) When Kerry appeared at noon, he **was wearing** a classic candidate's outfit of navy suit with red tie.
 (d) At noon, it **was sitting** flat on the bottom, completely immersed.
 (e) ... at noon it **was sitting** horizontally; ... and at 10.15 P.M. was standing at only 270 beneath the horizon ...
 (f) Her commanding officer **was sitting** there, at three in the morning, ...

This fact has been noted, though not frequently, in the literature. Observe the following pair of sentences taken from Mittwoch (1988:229).

- (23) (a) John **wore** sunglasses when I had lunch with him.
 (b) John **was wearing** sunglasses when I had lunch with him.

Mittwoch comments on this pair as follows:

Semantically, [(23a)] and [(23b)] are in free variation. [...] both forms of the verb are possible with no truth-conditional difference in meaning (in my speech the progressive would be preferable). This is because *wear* is semantically stative.

We see that this statement is almost in accord with what Michaelis's analysis brings about. Both sentences in (23) express temporary states and in (23a) its stative reading comes about through the effect of the imperfective aspect of the simple past tense, whereas in (23b) the progressive aspect produces its stative reading. The same holds of the contrast between (4) and (22). Therefore, English allows E-S predicates to express their imperfective interpretation in two different means: the one is the imperfective aspect brought about by the simple past tense and the other is the progressive aspect, although there seems to be a general tendency for the progressive form to be preferred to the simple form. This means that as Michaelis has shown, the English simple past tense has an aspectual effect similar to German or French in certain restricted domains including E-S predicates.

4.3. Summary

To sum up, we have put forward an account of the problem on hand. We have made it clear that Michaelis's theory of aspect enables us to account for the stative interpretation of E-S predicates in the context of the simple past tense and point adverbials. The interpretation in question has been shown to be the result of the effects of the two constructions, the point adverbial construction and the simple past tense construction. The former requires the stative interpretation and the latter serves to furnish the imperfective interpretation to give rise to the stative interpretation of E-S predicates. It has also been shown that Michaelis's theory can deal with the same imperfective and stative readings found, for example, in (21). Furthermore, it can cope with the free alternation between the simple and progressive forms in the past tense found in E-S predicates.

5. The Status of *Live*

Before ending our discussion, we would like to briefly consider the status of the predicate *live*. As we have already referred to in section 1, Mittwoch (1991:76) and Bertinetto (1994:403) regard this predicate as a state, namely an S predicate. Michaelis (2005:5) just states that it is a state and it is not clear if she takes it to be an S predicate. On the other hand, Langacker (2001:

258) includes it in E-S predicates, as referred to in section 2.2. In this section, we would like to give evidence that treating this predicate as a member of E-S predicates or as an S predicate may, strictly speaking, be incorrect.

First, we present evidence showing that this predicate may not be an S predicate. When it occurs with the simple present tense, it does not accept point adverbials.

(24) *He **lives** here **right now**.

This fact clearly indicates that it is different from S predicates. By the way, notice that (24) becomes acceptable if it is given a habitual interpretation, but then the adverbial *right now* indicates an interval, not a point in time. Moreover, the fact that this predicate in its habitual interpretation can occur with temporal adverbials in turn suggests that it is not an individual-level state predicate, either, because the individual-level state predicate is atemporal in nature and generally refuses temporal adverbials. Further evidence to the same effect is that the predicate *live* can be used in the progressive form, which in general is not the case with individual-level states.¹⁵

The fact that the predicate *live* is not an S predicate does not mean that it is an E-S predicate, however. The reason is that when this predicate is used in the simple past tense, it exhibits behavior different from E-S predicates in that it is not compatible with point adverbials, as shown by the following:

(25) *John **lived** there **at three o'clock**.

Thus this predicate cannot seem to take point adverbials not only in the simple present tense but also in the simple past tense. In this respect it differs from the other members of E-S predicates. This incompatibility with point adverbials reminds us Binnick's (2005: 43) remark that 'a habit cannot be true at a point in time [...], only over an interval of time [...].' This property of habit sentences is shown in the following examples.

- (26) (a) ***At noon**, Sue used to eat/would eat/ate bananas for lunch.
 (b) **For years/in her youth**, Sue used to eat/would eat/ate bananas for lunch.

Thus, it seems that the predicate *live* in combination with the simple tense gives rise to a habitual interpretation, which may be the reason that it is dissonant with point adverbials.¹⁶ This assumption would help us to account for the fact that *live* resists occurring with durational

adverbials expressing a very short period, as seen in the following:

(27) *I lived there just **for ten minutes/two hours**.

A relatively longer period would be necessary for something to be regarded as a habit.¹⁷

In fact, even in the progressive the predicate *live* appears to be out of harmony with point adverbials, as shown in (28).¹⁸

(28) (a) *I **am living** here **at this moment**.

(b) ***At noon**, she **was living** in this town.

This can be explained by supposing that the progressive *live* also expresses a habit, even though it is a temporary one.

The above considerations have shown that the predicate *live* is different both from E-S predicates and S predicates. We have suggested that one possible way to account for this behavior would be to assume that it expresses a habitual meaning both in the simple tense and in the progressive, making it incompatible with point adverbials.

6. Conclusion

We have dealt with the peculiar behavior of E-S predicates. They show different aspectual property depending on the tense they combine with. In the simple present tense, they act like activities, while in the simple past tense they can behave just like stage-level state predicates. We have employed Michaelis's aspect theory in which point adverbials constitute an aspectual construction and impose certain interpretations on the predicate which appears in this construction and the past simple tense yields two aspectual constructions, which in turn give two aspectual interpretations. One of these aspectual interpretations gives rise to the stage-level state interpretation of E-S predicates, which is required by point adverbials. Further, our account based on Michaelis's theory has been shown to be able to deal with the free alternation of the simple and progressive form of E-S predicates in the past tense context. We have also shown that the predicate *live* is distinct both from E-S predicates and S predicates.

Notes

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Ishida, who has given me invaluable information on some of the examples presented in this paper.

¹ Several other predicates belong to this class. For example, *sleep* and *hold one's breath*. Although we include it in this class of predicates for the moment, the predicate *live* actually has a distinctive characteristic, which distinguishes it from other predicates listed in (1), as we will see in section 5.

² The predicates shown in (3) are all adjectival predicates, but this class involves verbal predicates as well. For example, *belong to*, *matter*, and *contain*.

³ This amounts to mean that E-S predicates have a stative property in this context just like S-predicates and to that extent the remarks by several linguists cited in (2) are correct.

⁴ As will be seen in section 3.2.2, E-S predicates can, in fact, be ambiguous between an eventive reading and a stative reading in the simple past tense.

⁵ Exceptions are the uses of the present tense describing ongoing events: sport commentaries, step-by-step demonstrations, and so on. See, for example, Leech (2004) and Langacker (2001) for details.

⁶ The names of eventuality types added in the parentheses in (15) are given by Filip herself. In this order, they correspond respectively to individual-level state, interval stative in Dowty's (1979) sense, activity, accomplishment, achievement, semelfactive in Smith's (1997) sense. Notice that Filip herself does not seem to make a distinction between E-S predicates and S predicates. She seems to be regarding both as belonging to the single and same category 'dynamic state.'

⁷ The similar observation is found in Rothstein (2004:25).

States can occur with *at a time* since they are totally homogeneous, and thus hold at instants, [...], and achievements, which are instantaneous changes of states, can also be punctually located, [...].

By the way, (15a) indicates that individual-level predicates are odd with point adverbials, in spite of their being momentary predicates. The reason is that, as is well-known, these predicates describe atemporal properties, which prevents them from occurring with point adverbials that specify a particular point in time (Filip 1999:113).

⁸ Note that in the case of activities with an interval property, which is illustrated by (15c), in order to get an acceptable reading, reinterpretation is necessary. This reinterpretation is brought about by coercion or aspectual type-shifting. In this case, the shift is from an activity to an achievement, so that the point adverbial is allowed owing to the punctuality of the resultant inchoative interpretation. The same holds of accomplishments exemplified by (15d), although there seem to be speakers who do not allow such reinterpretation of accomplishments. See, for example, Rothstein (2004:25).

⁹ It should be noted that Filip's observation is nonetheless correct, because in the context of (15b) the predicate in question is interpreted as a state, as will be seen in section 4.

¹⁰ Recall that here we are assuming that the verb *wear* is a member of interval predicates.

¹¹ Here, we will be referring only to those aspects of Michaelis's theory which are relevant to our discussion.

¹² Taken literally, this remark only applies to the case of verbs of spatial configuration with a ‘maintain position’ meaning. When these verbs express a ‘simple position’ meaning, the sense of maintenance seems not to be relevant. Or if it was necessary to talk about the responsibility even for this case, it would be better to attribute it to the causer of the situation. Anyway, it is unclear whether (20) is intended to cover this case as well.

¹³ It is important to notice that the choice between the perfective and imperfective interpretations of the simple past tense depends on context as can be seen not only from the contrast in (19) but also from the examples in (21).

¹⁴ By the way, under Michaelis’s assumption, when point adverbials require the punctual interpretation of E-S predicates in this context, the episodic or perfective interpretation caused by the simple past tense does not accord with the required punctual interpretation; presumably this would invite coercion and result in the inchoative reading of the predicates, as in (i):

- (i) Rudy Mattes, vice president, **sat** at the table **at the start of this meeting** which began with secretary Karen Trynoski reading an email from president Rick Pisasik who was unable to attend because he was out of town. (http://www.susquehannatranscript.com/archives/02_22_05v4n35/main.htm)

This means that within Michaelis’s theory it is likely that the ‘assume position’ reading of the verbs of spatial configuration is obtained from the ‘maintain position’ reading of these verbs under coercion.

¹⁵ The assertion that the predicate is not an individual-level state may get support from the fact that it can occur in the complement position of the perception verb *see*, which is said to exclude individual-level state predicates (Bertinetto 1994). Observe the following:

- (i) (a) I also **saw** the man **live** in Montreal! (<http://www.formatmag.com/art/spraycan-stories/scribe/>)
 (b) I actually **saw** the man **live** in Paradiso when he did his first solo tour.
 (<http://prince.org/msg/8/197101>)

¹⁶ Although habits or habituals are often claimed to be a kind of state, we will treat them as distinct from states in line with Bertinetto (1994) and Binnick (2005).

¹⁷ This does not seem to be an absolute constraint, for the predicate sometimes allows adverbials expressing a quite short period, as the following examples indicate.

- (i) (a) Not saying I want to **live** there forever (well, because I never lived there), **just for *now***
 (<http://www.amitymama.com/vb/archive/t-384945.html>)
 (b) Wish I **lived** there.....**just for the day**, anyway!!!
 (<http://www.chefsucces.com/archive/index.php/t-27315.html>)

However, they are probably exceptions, describing a nonfactual or counterfactual situation which serves to relax the constraint.

¹⁸ Michalis (2004:36-37) seems to regard the progressive form of *live* as a homogeneous activity. Thus she can account for the incompatibility between the progressive *live* and point adverbials; however, the behavior of the simple tense form of *live* with regard to point adverbials remains unaccounted for.

References

- Bertinetto, Pier M. 1994. Statives, progressives, and habituals: analogies and differences. *Linguistics* 32, 391-423.
- Binnick, Robert I. 2005. The markers of habitual aspect in English. *Journal of English Linguistics* 33(4), 339-69.
- Butt, Miriam & Wilhelm Geuder (eds.). 1998. *The Projection of Arguments*. Stanford, CA: CSLI Publications.
- Carlson, Gregory N. & Francis J. Pelletier (eds.). 1995. *The Generic Book*. Chicago: The University of Chicago Press.
- Coopmans, Peter, Martin Everaert & Jane Grimshaw (eds.). 2000. *Lexical Specification and Insertion*. Amsterdam: John Benjamins Publishing Company.
- Dowty, David. 1979. *Word Meaning and Montague Grammar*. Dordrecht: D. Reidel Publishing Company.
- Filip, Hana. 1999. *Aspect, Eventuality Types and Nominal Reference*. New York: Routledge, Taylor & Francis Group (Garland).
- Kratzer, Angelika. 1995. Stage-level and individual-level predicates. In Carlson & Pelletier (eds.), 125-75.
- Langacker, Ronald W. 2001. The English present tense. *English Language and Linguistics* 5, 251-72.
- Leech, Geoffrey N. 2004. *The Meaning and the English Verb* (Third Edition). Harlow, England: Pearson Education Limited.
- Michaelis, Laura A. 2004. Type-shifting in constructional grammar: An integrated approach to aspectual coercion. *Cognitive Linguistics* 15, 1-67.
- Mittwoch, A. 1988. Aspects of English aspect: On the interaction of perfect, progressive, and durational phrases. *Linguistics and Philosophy* 11, 203-54.
- Mittwoch, A. 1991. In defense of Vendler's achievements. *Belgian Journal of Linguistics* 6, 71-86.
- Rappaport Hovav, Malka & Beth Levin. 1998. Building verb meanings. In Butt & Geuder (eds.), 97-134.
- Rappaport Hovav, Malka & Beth Levin. 2000. Classifying single argument verbs. In Peter Coopmans, Martin Everaert & Jane Grimshaw (eds.), 269-304.
- Rothstein, Susan (ed.). 1998. *Events and Grammar*. Dordrecht: Kluwer Academic Publishers.
- Rothstein, Susan. 2004. *Structuring Events*. Massachusetts: Blackwell Publishing.
- Smith, Carlota S. 1997. *The Parameter of Aspect* (Second Edition). Dordrecht: Kluwer Academic Publishers.
- Zucchi, Sandro. 1998. Aspect shift. In Susan Rothstein (ed.), 349-70.