

# **Form-Meaning Mapping of Aspectual Distinctions across Languages: Implications for Second Language Learning**

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## **1 Introduction**

In this paper we will attempt to show and discuss some of the complexities in terminology that regularly come up in theoretical analyses of aspect in cross-linguistic research. Examples of terms that are often confused and that we focus on are grammatical aspect vs. lexical aspect, telic vs. perfective, and imperfective vs. progressive. This terminological confusion often leads to crucial misconceptions with regard to the functional description of aspectual systems, the way in which L2 acquisition of aspect is viewed, and also how it is taught in schools and language courses.

From a learning point of view, it seems nearly impossible for advanced learners to have full command of the aspectual distinctions in the target language and how they are used (e.g. Schmiedtová 2004; Slabakova 2005; v. Stutterheim and Carroll 2006). Equally challenging appears to be the task of learning to express temporal relations in non-aspect languages (for example German) by native speakers of aspect-dominant languages (such as Czech or Russian). This is particularly evident in learners' way of structuring information in narratives (e.g. Schmiedtová and Sahonenko in press; Carroll et al. in press).

The difficulties that second language learners of all proficiency levels face when dealing with aspectual relations in the L2 arise partly because of the high complexity, prominence, and differences between the L1 and the L2 systems. But perhaps they also arise because the standard analysis of the aspectual categories does not provide the necessary guidelines for teachers to formulate instructions that would make the acquisition of aspect more systematic and thus successful. In other words, we believe that the lack of clarity and systematicity in the terminology is directly connected to the issues in the L2 acquisition of aspect. These issues arise because learners have to gain competence not only of the form and the corresponding meaning(s), but also in connecting the form and meaning by principles of use in discourse. These kinds of competence have to be coherently integrated within the learning process, which is a difficult task for both teacher and learner to master.

The aim of this paper is to sketch some of the existing problems, increase awareness of them, and stimulate a discussion. We will address several

terminological concerns by introducing an empirically based approach to the classification of grammatical aspect including L1 as well as L2 data.

The structure of the present paper is as follows: we will discuss in the following section a number of terminological fallacies, then show some empirical data in order to support our claims, and finally draw our conclusions with a special focus on implications for second language learning. Our material includes data from Czech, Dutch, German and Russian native speakers as well as Russian and Czech learners of German.

## 2 Aspect terminology

One of the frequently occurring problems within the literature on aspect is the lack of uniformity concerning the theoretical notion of aspect. Usually, the notion of aspect comprises grammatical as well as lexical aspect (an exception to this trend is Bertinetto and Delfitto 2000). In line with this idea researchers assume that the acquisition of grammatical aspect is always guided by semantic features encoded on the verb (lexical aspect). The original proposal goes back to Andersen and Shirai's Aspect Hypothesis (also called Primacy of Aspect Hypothesis, Prototype Hypothesis, Aspect before Tense Hypothesis) from 1994, on the basis of which they accounted for different types of acquisitional data as well as Pidgin and Creole languages. Interestingly this hypothesis seems to be tenable for numerous L1 and L2 varieties; it has stimulated a lot research related to aspect (for example, Li and Shirai 2000; Stoll 2005; Johnson and Fey 2006) and has been useful for stating initial research hypotheses in the study of child language. It is important to realize that the correlation between lexical and grammatical features as can be observed in first language acquisition does not necessarily imply a description of the underlying linguistic system. Note, however, that a satisfactory description of an underlying system is a prerequisite for developing appropriate teaching methods.

Unfortunately, this influential hypothesis does not address the core issue of how to keep the notion of grammatical and lexical aspect apart, nor does it provide a systematic description of these categories. The *Aspect Hypothesis* formulates acquisitional patterns for aspectual notions in contrast (i.e., the order of acquisition of perfective vs. imperfective makers). Perhaps when concentrating on English, which has only one grammaticalized aspectual marker, the suffix *-ing*, it is plausible to set up an opposition between a verb marked for ongoingness (i.e. progressivity – I am sleeping) and a verb inflected with past tense (*He slept all day yesterday*), and label the latter as perfective. This seems to work because the perfective meaning here arises through the past tense morphology. However, note that simple past in English is an aspectually *unmarked* form that is open to +/- perfective interpretation. Thus, the verbal form in *He slept* is not inherently perfective, but receives its perfective meaning merely by pragmatic knowledge. It could very well be the case that the person who slept yesterday is in fact *He is still*

*sleeping*. This information is simply NOT part of the temporal semantics of this utterance, and also not grammatically encoded. In other cases, the pragmatic information is accompanied by lexical features of the verb as in *She broke my arm*. In this example, the verb *break* inherently expresses a change of state (which makes the perfective reading possible). But again, the verb is not marked for perfectivity by means of inflectional morphology and does not encode grammatical aspect.

This is very different from languages that operate with two aspectual markers whose meanings are truly contrastive. All Slavic languages, for example, can express both meanings – perfective and imperfective – grammatically on the verb. Although these systems do not apply to all verbs and there are many exceptions to the rule, we see a fundamental difference between the Slavic and the English systems. There is an opposition between two different aspectual categories in Slavic languages (none of them is expressed by past tense marking), whereas no such grammatical opposition exists in English.

We believe that this mix-up has been dominating and partially misleading the overall discussion about aspect typology and acquisition (see for example, general aspect analysis: Verkuyl 1993; Smith 1997; acquisition: Stoll 1998; Wagner 2006). An exception to this trend is Slabakova's review on recent research on the acquisition of aspect (2002). She points out that many studies have blended three different temporal contrasts, that is past vs. present tense, perfective vs. imperfective grammatical aspect, and lexical aspect distinctions (p. 176). In fact we would say that grammatical notions, including grammatical aspect, when fully grammaticalized, only interact (but do not merge) with other temporal categories, such as tense, adverbials, or lexical aspect. To a great extent the English progressive marker *-ing* is the ideal example of such a fully grammaticalized and independent grammatical category.

Another problem we would like to tackle is the confusion between the terms telic and perfective (as in Slabakova and Montrul 2002). Similar to the issues discussed above, this problem too is related to an inaccurate differentiation between lexical and grammatical aspect. In our view, the notion of *telicity* belongs to the domain of lexical, verb-inherent features while *perfectivity* is a grammatical category. It is in principle plausible to assume that all languages have verbs expressing +/- telicity. However, only a number of aspect rich languages can convey +/- perfectivity grammatically. In other words, although the two terms are closely related in meaning and can interact with each other at the level of expression, they involve two different layers of linguistic analysis and are thus not synonymous. To illustrate this difference let us consider the following examples from English and Czech.

- (1) *He ate an apple*

In example (1) the verb *to eat* is a one state verb (Klein 1994) and for the sake of argument we assume that together with the indefinite object *an apple* it forms a telic predicate. The same utterance in Czech is presented in example (2).

- (2) (On) *s-něd-l* *jablko*  
 He-Nom Perf-eat-Past-3sg apple-Acc  
 ‘He ate (an) apple’

In Czech the verb to eat (*jíst*) is also a one state verb, but unlike in English, in the example above it occurs as a perfective, marked grammatically by the prefix *s-*. Like in English, we are dealing here with a telic predicate – *to eat an apple*, but the verb is overtly marked as perfective. So the Czech utterance involves two different features: telicity on the predicate plus perfectivity encoded on the verb. Only the first feature is present in the English example. As discussed briefly above, we can see that telicity and perfectivity involve two different operations, yet, in these examples they result in a comparable semantic structure: having reached the right boundary of the situation.

In spite of this parallelism if we change the tense of the English verb from past to present we observe a shift from (-) aspect to (+) aspect. More precisely, from (-) progressive to (+) progressive.

- (3) *?He eats an apple*

In (3) the tense change makes the utterance ill formed because of the conflict between the use of the indefinite object and simple present. Normally this combination renders a habitual reading, but then further temporal specification is required (i.e. *He eats an apple every day*). Another option for how to make (3) grammatical is changing the simple verb form into the progressive: *He is eating an apple*. That means that a change in tense goes hand in hand with a change in aspectual meaning. Note that the addition of the *-ing* suffix or the temporal adverbial is obligatory in this utterance. What is relevant here is that despite the change in aspect, the *telicity* of the predicate remains unaffected. The Czech example in (5) demonstrates that a shift in tense does not influence the telicity or aspectual value of the utterance.

- (5) (On) *sní* *jablko*  
 He-Nom Perf-eat-Present-3sg apple-Acc  
 ‘He eats (an) apple (up)’

The interpretation of example (4) is that the situation to *eat an apple* will inevitably reach its endpoint in a very near future. This is very unlike the English predicate, which is telic (semantically), but by no means perfective (grammatically). In other words, the situation depicted in (5) is perfective because of the use of the perfective

prefix. In principle, the Czech aspectual system allows the expression of perfectivity in the present tense<sup>1</sup>, which is not possible for English. English, as shown in (3), requires the marking of ongoingness in such a context. This is evidence for the fact that in English the progressive aspect has been grammaticalized, but not the perfective. In this sense, perfectivity does not equal telicity.

Furthermore, the English aspectual system does not contain a systematic opposition between two different aspectual categories encoded grammatically. It leads to fundamental problems when the underspecified simple form in telic contexts is put in opposition to the aspectually marked progressive form. As we will show below, Slavic languages have both poles of this aspectual contrast at their disposal and thus represent a completely different system with not only different forms, but also with different underlying representations (for more detail, see section 3). With respect to learning, the difficulty arises when teachers draw parallels between a marked perfective and the English simple form: these are basically false friends.

The last term we would like to attend to is the notion of *imperfectivity*. Slavic languages use *simplex forms* (e.g. *psát* – ‘to write’) apart from the marked imperfective (the so-called *secondary imperfective*). These forms convey imperfectivity despite the fact that they are not grammatically marked for this feature. There is also a small group of frequently used simplex verbs denoting perfectivity (e.g. *dát* - ‘to give’). We are aware of the problem arising here, namely, the similarity to lexical aspect: these verbal forms lack any overt grammatical marking of their aspectual values. Despite this serious terminological concern, that has not yet been thoroughly investigated<sup>2</sup>, we hypothesize that Slavic simplex forms differ from those in English, German, or Dutch. A possible justification for this line of thinking is the following. Usually, adding a prefix to a Czech imperfective verb results in changing the aspectual features into the perfective, as in example (6).

(6)	Czech	<i>pít</i> →	<i>vy- pít</i>
	English	IMPF-simplex	PERFdrink
		‘to drink’	→ ‘to PERFdrink’

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1 The present perfective has often been claimed to have a future interpretation. Recent research, however, has shown that this is not necessarily the case for Czech, where perfectly marked verbs in present tense can have a present tense (here-and-now) interpretation (Schmiedtova 2004, 2005).

2 A possible way of testing whether the aspectual value of the unmarked simplex forms is part of the grammar (grammatical aspect) or the lexicon (lexical aspect) is to conduct a priming experiment. This research question will be addressed in our lab in the near future.

The situation is rather different when dealing with simplex perfective verbs (7).

(7)	Czech	<i>dát</i> →	<i>u-dat</i>
		PERF-simplex	PREF-PERFgive
	English	'to give' →	'to report'

In example (7), the prefix *u-* only changes the meaning of the verb, but not the aspectual value. That is, the verb remains perfective and a new lexical entry is derived. Because of this observation we theorize that the perfective value is encoded in the stem of the verb regardless of the lack of overt marker(s). There are no comparable cases in English, German, or Dutch. Therefore, we argue that (a) simplex forms in Slavic languages have a default grammatical aspect (in addition to their inherent lexical aspect), and (b) that simplex forms in English, German, or Dutch only make use of lexical aspect and are with respect to grammatical aspect underspecified. Turning back to L2 learners of Slavic languages, the dichotomy in the domain of simplex forms must pose an enormous learning challenge since simplex forms are unmarked by default, nevertheless carry an unambiguous aspectual meaning. Because of this, we are again dealing with a kind of false friend when translating (and teaching) the Czech *dát* as English 'give'.

A related issue concerns the notion of progressivity that is *not* identical with the notion of imperfectivity. We think that the difference between these two is not only formal, but primarily conceptual. This and other related matters will be elaborated on in the next section where we discuss empirical data and cross-linguistic differences.

### 3 Underlying concepts in cross-linguistic comparison

In this section, we will first explain, using production data from Czech, Dutch, and Russian native speakers as well as advanced L2 learners, that grammatical aspect is not only a matter of grammatical form, but also has a conceptual side. This conceptual structure is reflected in the preferences of native speakers when using different aspectual forms in their L1 as well as in the overall degree of grammaticalization within each system. This new take on analyzing aspectual distinctions is pursued by our research group at the University of Heidelberg and originates from Christiane v. Steutterheim and Mary Carroll.

The focus of their studies (e.g. Carroll and v. Steutterheim 2003; v. Steutterheim and Carroll 2006; Klabunde and v. Steutterheim 1999) was on Semitic, Germanic, and Romance languages. It has been shown that the way events are depicted is highly dependent on the feature +/- grammatical aspect. It has also been found that the underlying principles for event construal are perspective driven and strongly linked to patterns of grammaticalization. Additionally, recent L2 studies have provided evidence that even very advanced learners fall back on conceptualization

strategies from their L1 when construing temporal events in an L2 (cf. v. Stutterheim and Nüse 2003; Schmiedtová and Sahonenko in press). These findings go beyond the scope of encoding single events. Carroll and Lambert (2003) have shown that the use of aspectual categories influences the overall information structure in more complex tasks, such as composing written or oral narrative texts. The next sections will deal with conceptual representations that underlie the grammaticalized aspectual categories across languages.

### 3.1 Perfective vs. Imperfective: conceptual differences

This section focuses on the comparison between two binary aspectual systems: the Czech and the Russian systems. Although these two Slavic languages show many typological similarities, our research (Schmiedtová and Sahonenko in press) shows that in the aspectual domain there are crucial differences in native speakers' preferences (*perspective taking*), as well as in the distribution of the forms within the system.

As stated above, both languages encode two contrasting grammatical aspectual categories: the so-called perfective and the so-called imperfective. Also, both languages use a number of simplex verbs, but in what follows, we will only focus on the grammatically marked features of aspect. In principle, there are two operators that can change the aspectual value of a verb. The first operation is adding a prefix to the verbal stem. These prefixes (about 20 different types) do not only change the grammatical aspect, but can also affect the semantics of the verb, i.e. derive a new lexical item. Moreover, with some verbs it is only the lexical meaning that changes. So, the trouble here is that the lexical and the grammatical modification can hardly be taken apart (Comrie 1976; Schmiedtová 2004). The other operation is adding a suffix. Suffixation leads to secondary imperfectivization of the verb (regardless of the type of verb stem) and the change is only grammatical (from perfective to imperfective aspect). These claims hold true for Russian as well as Czech. Let us consider a couple of examples.

(8) Prefixation of the simplex imperfective form

CZ: *psát*, RUS: *pisat'*

IMPERF-simplex

CZ: *VY-psa(-t)* RUS: *VY-pisa(-t')*

PREF-writePERF

ENG: 'to write out/to announce'

In (8) a simplex imperfective is turned into a perfective by the prefix *vy-*, and the meaning changes. Note that one and the same operator affects two linguistic domains: lexicon and grammar.

- (9) Suffixation of the simplex perfective form  
 CZ: *dát* RUS: *dat'*  
 PERF-simplex  
 CZ: *dá-VA(-t)* RUS: *da-VA(-t')*  
 PERF-give-2ndIMPERF ENG: 'to be giving'

Example (9) illustrates the imperfectivization of a simplex perfective verb.

- (10) Suffixation of a prefixed perfective form  
 CZ: *vy-psat* RUS: *vy -pisat'*  
 PREF-writePERF  
 CZ: *VY-pis-OVA(-t)* RUS: *VY -pis-YVA(-t')*  
 PREF-2ndIMPERF ENG: 'to be writing out/to be announcing'

The same suffix *-(o)va/-(y)va* can be attached to a prefixed verb denoting perfectivity. As in (9) the suffix in (10) also changes the grammatical aspect.

The question to ask here is: what are the conceptual consequences of these operations? We do not completely adhere to how perfectivity and imperfectivity are usually described in the literature (for example, Bybee 1992: 144): "... perfective, which indicates that the situation is to be viewed as a bounded whole, and imperfective, which in one way or another looks inside the temporal boundaries of the situation ...".

We want to be more specific and claim that the crucial difference between the perfective and imperfective is the *degree* of focus on the *right boundary* of a situation. That is, the function of the perfective in these two languages is encoding that a situation has reached its right boundary and also that an assertion is made about the post state of this situation. In contrast, the secondary imperfective accesses the time interval prior to the right boundary, but (!) does not defocus the right boundary of the situation. So, in both instances, the perfective as well as the imperfective aspect, the attention centers around the right boundary. This view on the imperfective aspect puts the frequently assumed similarity between the progressive (e.g. in English or Dutch) and the imperfective into question. Even though such a comparison might be linguistically interesting, our analyses show that the two aspectual operations are very different (for more details, see section 3.2).

There was a prominent inclination to relate events to the right boundary in our production data from Czech and Russian native speakers. This means that when speakers construe simple everyday events shown in a video clip (e.g. somebody drinking a glass of water, a dog running into a house, etc.) in an on-line condition they mark the evident or inferred right boundary. There were two sets of scenes: in one the right boundary of a situation was visible in the clip and actually reached; in the other only a potential right boundary could be inferred but it was not depicted

as being reached in the clip. The difference between the ways in which native speakers of Czech and Russian verbalized these two types of stimuli lies in the fact that Czech native speakers predominantly use the perfective form, independent of the scene type. Russians, on the other hand, showed a clear preference for using the secondary imperfective in all scenes. When they used the perfective form it was exclusively for scenes showing the right boundary being reached.

In other words, speakers follow different preferential patterns when they encode events. We believe that these preferences that so far have been described from a linguistic point of view (i.e. surface structure) are rooted in differences in conceptualization of events<sup>3</sup>. In one and the same stimulus, Czech native speakers concentrate on the time interval at and after the right boundary whereas Russian native speakers are sensitive to the time interval preceding the right boundary.

At the same time, we observe that the distribution of the aspectual forms within each system differs. That is, in Russian the imperfectivizing suffix *-(y)va* is productive and can be applied to many verbs. In Czech, by contrast, this suffix only combines with a small group of verbs. Additionally, as pointed out by Schmiedtová (2004), the perfective form, when used in the present tense, can have a here-now-meaning in Czech. This is completely intolerable in Russian where the present perfective always refers to the future. This shows that in Czech the prominence of the perfective perspective is extending the use of the perfective form, while in Russian the imperfective perspective broadens the distribution of the secondary imperfective.

In summary, these data show that there is an interplay between grammatical categories and conceptual structures. It remains an open question in what direction this influence takes place. Furthermore, we see that even speakers of typologically related languages display different conceptually driven perspectives (preferential patterns) when selecting information for event construal.

With respect to L2 learning, we showed in Schmiedtová and Sahonenko (in press) that advanced Czech and Russian learners of German adhere to their respective L1 preference. For example, Czech learners use the concept of perfectivity in L2 German although German does not have grammatical aspect at all. This becomes apparent in more frequent mentioning of endpoints in the form of local adjuncts (e.g. into the house). Even though German native speakers are inclined to mention endpoints frequently (as pointed out in e.g. v. Stutterheim and Lambert 2005), the number of endpoints verbalized by Czech speakers of German exceeds the default. This is a relevant finding because it illustrates that patterns found for native speakers for event depiction in their native language still drive the perspectivization in L2 production. This important issue presents a considerable

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<sup>3</sup> We are currently testing our linguistically based hypotheses by means of eye-tracking methodology. Another psycholinguistic method we are pursuing in our lab is the measurement of Speech Onset Times. Preliminary results clearly indicate that grammatical features guide speakers' attention patterns and that patterns found in the production data have a psycholinguistic reality.

challenge to language teachers, since being aware of the meanings of various aspectual categories is a good starting point for achieving native-like competence in a second language.

### 3.2 Progressive: grammaticalization and conceptual structure

This part of the paper is devoted to the Dutch language. This is because we observed that in Dutch the progressive marker *aan het* + V-INF *zijn* is currently being grammaticalized (Flecken 2006). To this end, we will first present some empirical data illustrating the range of applications of this marker. Further, we will show that the range is expanding, following the grammaticalization process described in Bybee et al. (1994), which motivates our focus on verb type. We will briefly discuss some differences between the Dutch construction *aan het* + V-INF *zijn* and the German construction *am* + V-INF *sein* and will draw parallels between the Dutch and the English progressive marker. Finally, we demonstrate that progressivity and imperfectivity denote two different temporal concepts.

First of all, it is necessary to define our notion of grammaticalization. In general, grammaticalization means expansion of the range of contexts in which a particular construction is applied: The starting point for using a particular construction is the prototypical use (one which is inherently linked to the particular function of the grammatical feature) which spreads out to non-typical, or rather non-meaning related uses (Comrie 1976; Bybee et al. 1994,).

Regarding the meaning of the Dutch progressive marker, we observe that modifying a Dutch verb with the *aan het*-construction depicts situations as ongoing, as in example (11).

- (11) *Ik ben aan het lezen*  
'I am reading'

The aspectual marker in (11) defocuses both the initial and the final boundary of the situation and hence the temporal reference applies only to the *here-and-now*. The meaning of the Dutch *aan het*-construction is, therefore, identical with the meaning of the English *-ing* that has the same function. Let us take a closer look at the similarities between Dutch and English.

At first sight, the Dutch marker looks like a locative construction. Interestingly, the English progressive marker also evolved out of a locative construction, which looks similar to the contemporary Dutch periphrastic construction (12) (example taken from Bybee et al.: 132).

- (12) *He is on hunting*  
'He is hunting'

Comparing (11) and (12), we can see that the original meaning of both constructions is ‘to be *in the place* of doing something’. This originally locative meaning evokes a very deictic here-and-now context, and we assume that, in a way, this condition was the starting point for the grammaticalization of the *-ing* form (also in Jespersen 1949; Comrie 1976). We claim that it is also the starting point in the grammaticalization process of the *aan het*-construction in current Dutch. In English, we see that this precondition is no longer necessary for application of *-ing*, as is apparent when looking at examples (13) and (14).

(13) *Katja is having an affair with Christopher*

(14) *Doro is taking dance classes this term*

The meaning of the *-ing* form in (13) and (14) is not necessarily restricted to the deictic (locative) here-and-now, but it is extended over a longer period of time (as in (13)), and it can even describe a habitual feature (as in (14)).

In Dutch, this type of application of the *aan het*-construction is not (yet?) possible. The meaning of this construction only refers, at this point in time, to agentive subjects who are in the midst of an activity at reference time or in the very deictic past as in (15a + b).

(15a) *Ik ben aan het werken*  
‘I am working’

(15b) *Gisteren was ik aan het studeren*  
‘Yesterday, I was studying’

We presume that using the Dutch construction in habitual contexts is unacceptable (this is currently being tested). The traditional view on the *aan het*-construction in Dutch literature is that it is merely “a locative construction with a “progressive-like” meaning” (e.g. Boogaart 1999: 167), but its grammatical aspectual function is not acknowledged.

In our view, we take the above observations to mean that the Dutch progressive construction is *at the onset* of a common grammaticalization process, whereas the English progressive marker is in a far more advanced stage within the same process. In order to sketch a more accurate development of the *aan het*-construction, we focus on the types of verbs (Aktionsart, in line with Klein 1994) that take the marker *aan het*.

The first step of grammaticalization, thus the prototypical context for using progressive markers, is to use it in situations denoting an activity, e.g. *wandelen* (‘to take a walk’), *zwemmen* (‘to swim’), but also *een boek lezen* (‘to read a book’), *de tafel poetsen* (‘to clean the table’). In the prototypical phase, the prerequisite for using the *aan het*-construction is the possibility of defocusing boundaries. All

predicates that inherently refer to one of the boundaries (such as *to fall*) do not combine with the *aan het* marker at this stage of grammaticalization. The verb type which meets all these conditions is a one state verb, such as *zwemmen* ‘to swim’. In the next grammaticalization phase, a two state verb type referring to a rather *long* time span is included (e.g. *veranderen* ‘to change’) followed by a two state verb denoting a *short* time interval (e.g. *breken* ‘to break’) . The last step is the expansion to zero state verbs, such as *houden van* ‘to love’. Interestingly, in English the grammaticalization process of the *-ing* suffix has reached this last phase: It is grammatical to say *I am loving it* or *She is having a baby* (although they have two different temporal meanings).

To illustrate this process for Dutch, we present some preliminary results of an acceptability judgement task. We asked 30 Dutch native speakers to make a choice between a simple verb form and a verb marked by an *aan het*-construction in here-and-now contexts. We differentiated between the four types of verbs described above. It turned out that one state verbs (e.g. *lezen* ‘to read’, *tekenen* ‘to draw’, *schilderen* ‘to paint’, *knutselen* ‘to tinker’, *pianospelen* ‘to play the piano’, *springen* ‘to jump’) triggered the most frequent use of the *aan het* construction. The second best attractor for *aan het* was the two state verb with a long duration<sup>4</sup> (as in *afmaken* ‘to finish’, *afwassen* ‘to do the dishes’, *veranderen* ‘to change’), followed by the two state verb with a short duration, e.g. *vallen* ‘to fall’, *exploderen* ‘to explode’, *breken* ‘to break’. The zero state verbs did not elicit any choices for the *aan het*-construction.

As far as acceptability is concerned, this task has allowed us to interpret the values that the participants attached to the form they did not choose. They always had to grade the other form in terms of its acceptability in a given context. The most important finding was that participants rated the simple form as unacceptable in here-and-now contexts for the verbs expressing a game-like activity, examples of which are *zwemmen* ‘to swim’, *tafeltennissen* ‘to play table tennis’, *schilderen* ‘to paint’. Moreover, they rated the *aan het* form as unacceptable in clauses with motion verbs plus a depicted endpoint (as in *\*Ik ben in het water aan het springen* ‘I am jumping into the water’). These results make sense: The latter verb type expresses the shortest possible duration, namely the time interval right before reaching the final boundary, which makes defocusing of boundaries impossible.

Further interpretation of these results is that in a number of cases the *aan het*-construction was considered compulsory by the participants. As pointed out above, this is the case for situations expressing activities taking place in the here-and-now. The simple form in these cases was rated unacceptable because using the simple form renders a habitual meaning in these contexts. Again, this is identical to

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<sup>4</sup> The duration was brought about through the description of the situation. The verb itself does not reveal the duration of the situation. For example, in the case of *veranderen*, the situation was described as ‘changing the interior of one’s apartment’, elongated with several adverbials expressing that you have been working on this for a very long time so far and you will not finish this in the near future.

English, because the difference between *I am dancing* and *I dance* is that the former implies an activity that is taking place at the time of utterance, whereas the latter refers to a habitual activity (a hobby or perhaps even a job). Bybee et al. (1994) labeled this phenomenon as grammaticalization of zero (i.e. the unmarked form receives a different meaning in certain contexts). Of course we realize that the depiction of the grammaticalization process is rather different from the question of what the actual attractors are for using the *aan het*-construction: It cannot solely depend on the verb type, but will rather be a matter of the entire predicate.<sup>5</sup>

An interesting comparison to draw at this point is between Dutch and German. Both languages are typologically similar, however, one important difference is that Dutch is grammaticalizing a marker for ongoingness, whereas in German ongoingness is mainly expressed by lexical means. There is a construction available in German, which is form-wise very similar to the Dutch one. Consider example (16).

- (16) GER: *Rieke **ist** (gerade) am Kochen*  
NL: *Rieke is **aan het** koken*  
ENG: 'Rieke **is** cooking'

The German periphrastic construction is merely a regional variant of Standard German while in Dutch it is an obligatory marker in such a context. Furthermore, the progressive markers in English as well as Dutch are systematically used by native speakers for the expression of other temporal concepts, such as the expression of simultaneity between two events (see Schmiedtová 2004; Flecken 2006). The German construction is never produced in such contexts (Schmiedtová 2004). In other words, looking at these similarities from a learner's point of view, we have another occurrence of false friends. Learners have to deal with two very similar forms that do not show a similar distribution across verbs and, in addition, are employed by speakers for different purposes.

The last point to be addressed in this section is the difference between progressive and imperfective aspect. As we have shown in section 3.1, the marked imperfective in Slavic languages does not defocus the right boundary of the depicted situation, but rather includes it. In other words, by using this form speakers refer to the time interval anchored in the here-and-now AND to the linkage of this time interval to the right boundary. The Dutch and the English progressive, by contrast, are used to link situations to the deictic here-and-now without any explicit temporal information about the right (or left) boundary. This is especially true in Dutch where the grammaticalization process of the *aan het* marker has started out exactly from this context.

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<sup>5</sup> This approach to the *aan het*-construction is being pursued by M. Starren's research group at the Radboud University in Nijmegen, The Netherlands.

To relate this observation to the actual conceptualization of temporal events, we know from eye-tracking studies that Dutch and English speakers concentrate **only** on the ongoing process of situations regardless of whether they depict a right boundary (v. Stutterheim and Carroll 2006; Carroll et al. in press). We speculate that Slavic speakers, when using the secondary imperfective to describe ongoing situations of the same type as above, will *also* pay attention to the right boundary.

#### 4 Conclusions

The core of the present paper centers around the idea that the analysis of grammatical aspect contains (at least) two different levels: the form and the meaning. The usage and applicability of aspectual forms in context are determined by the preferences of native speakers.

When investigating aspectual forms cross-linguistically many similarities can be observed. The tricky issue is, however, that the mere presence of a form within and/or between systems does not necessarily entail an equally frequent production. To this end, we have demonstrated on the basis of a comparison between German and Dutch that similar forms with identical meanings do not show the same distribution in native speakers' production. The same holds true for the language pair Czech and Russian. Despite a big similarity between the two aspectual systems, Czech and Russian native speakers show different preferences for applying aspectual forms. These preferential patterns are closely linked to differences in conceptualization, which only become evident when examining empirical material.

The second level of analyzing aspectual systems is the level of meaning. We have claimed that categories such as progressive and imperfective aspect, albeit applicable in comparable contexts, encode different temporal meanings. Again the same statement holds for the terms telic and perfective. They too are not interchangeable and, in addition, belong to two different domains of aspect: lexical (telic) vs. grammatical (perfective).

Note that even when two forms and their temporal meanings are identical there can still be a difference with respect to the conditions under which these forms can be employed. This is directly connected to the degree of grammaticalization of the respective aspectual form. This has been presented on the basis of the progressive markers in English and Dutch.

These observations are highly relevant for teaching and learning. It is reasonable to assume that to focus on form is the least complex approach to teaching aspect, although we have illustrated that even at this level false friends can be identified. As far as meaning is concerned the issues are far more serious. Several aspectual categories that we dealt with are used synonymously in the literature, although they denote semantically and conceptually different correlates.

Another point to be mentioned here is that many divergences pointed out in this paper do not only occur between typologically distinct languages (such as Russian and German), but also between languages that are typologically closely related (e.g. languages within the Slavic or Germanic group).

Now, what about learning? It is true that at the onset of acquisition false friends can aid and support the learning process. Looking at advanced learners, on the other hand, provides a robust piece of evidence that false friends hinder learners in the possibility of achieving nativeness. Note that advanced learners are in a perfect command of the form and even of the meaning, but they do not successfully use the principles that govern the application of the forms. In other words, they do not follow native-like preferences, but rather rely on patterns of use from their respective L1s. We are not sure whether these preferences can be learned at all (discussion on ultimate attainment, e.g. van Boxtel 2005). Nevertheless, before giving up, it is essential to attempt to guide the learning of aspectual distinctions as *a whole*. That means that we have to realize that the debate on aspect is not only a matter of terminology, but that aspect is a conceptual category that requires empirical research. We believe that this approach would be beneficial to teachers as well as learners.

## References

- Andersen, Roger and Shirai, Yasuhiro  
1994 Discourse motivations for some cognitive acquisition principles. *Studies in Second Language Acquisition* 16: 133-156.
- Bertinetto, Pier Marco and Delfitto, Denis  
2000 Aspect vs. Actionality: Why they should be kept apart. In *Tense and Aspect in the Languages of Europe*, O. Dahl (ed.), 189-225. Berlin: Mouton de Gruyter.
- Boogaart, Ronny  
1999 Aspect and temporal ordering. A contrastive analysis of Dutch and English. PhD dissertation, Amsterdam. The Hague: Holland Academic Graphics.
- Boxtel, Sonja van  
2005 Can the late bird catch the worm? Ultimate attainment in L2 syntax. PhD dissertation, Nijmegen. Utrecht: LOT.
- Bybee, Joan  
1992 Entry on tense and aspect. In *International Encyclopedia of Linguistics*, Bright, William (ed.), 144. Oxford: Oxford University Press.
- Bybee, Joan; Perkins, Revere and Pagliuca, William  
1994 *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: University of Chicago Press.
- Carroll, Mary and Lambert, Monique  
2003 Information structure in narratives and the role of grammaticised knowledge: A study of adult French and German learners of English. In *Information Structure and the Dynamics of Language Acquisition*, Christine Dimroth and Marianne Starren (eds.), 267-287. Amsterdam: John Benjamins.
- Carroll, Mary and Stutterheim, Christiane von  
2003 Typology and information organization: perspective taking and language-specific effects in the construal of events. In *Typology and Second Language Acquisition*, Anna Ramat (ed.), 365-402. Berlin: Mouton de Gruyter.

- Carroll, Mary; Lambert, Monique; Natale, Silvia; Starren, Marianne and Stutterheim, Christiane von  
in press Being specific: The role of aspect in event construal when grounding events in context. A cross-linguistic comparison of advanced second language learners (L1 French–L2 English, L1 German–L2 English, L1 Dutch–L2 French, L1 Italian–L2 German). In *Dynamics of Learner Varieties*, Stefanie Habertzettl (ed.). Berlin: Mouton de Gruyter.
- Comrie, Bernard  
1976 *Aspect*. Cambridge: Cambridge University Press.
- Flecken, Monique  
2006 The expression of simultaneity in L1 Dutch. Unpublished MA thesis, Radboud University, Nijmegen, The Netherlands.
- Jespersen, Otto  
1949 *A Modern English Grammar: Part IV. Morphology*. Heidelberg: Carl Winter.
- Johnson, Bonnie and Fey, Marc  
2006 Interaction of lexical and grammatical aspect in toddlers' language. *Journal of Child Language* 33: 419-435.
- Klabunde, Ralf and Stutterheim, Christiane von (eds.)  
1999 *Representations and Processes in Language Production*. Wiesbaden: Deutscher Universitäts Verlag (Reihe Studien zur Kognitionswissenschaft).
- Klein, Wolfgang  
1994 *Time in Language*. London: Routledge.
- Li, Ping and Shirai, Yasuhiro  
2000 *The Acquisition of Lexical and Grammatical aspect*. Berlin: Mouton de Gruyter.
- Schmiedtová, Barbara  
2004 *At the Same Time... The Expression of Simultaneity in Learner Varieties*. Berlin: Mouton de Gruyter.
- Schmiedtová, Barbara  
2005 The notion of aspect in Czech and Russian. Paper presented at *Dynamics of Learner Varieties*, Berder, France, March 2005.
- Schmiedtová, Barbara and Sahonenko, Natalya  
in press Die Rolle des grammatischen Aspekts in Ereignis-Enkodierung: Ein Vergleich zwischen Tschechischen und Russischen Lernern des

Deutschen. In *Fortgeschrittene Lernervarietäten: Korpuslinguistik und Zweitspracherwerbsforschung*, Patrick Grommes & Maik Walter (eds.). Tübingen: Max-Niemeyer-Verlag.

- Slabakova, Roumyana  
2002 Recent research on the acquisition of aspect: An embarrassment of riches? *Second Language Research* 18 (2): 172-188.
- Slabakova, Roumyana and Montrul, Silvina  
2002 On viewpoint aspect interpretation and its L2 acquisition: A UG Perspective. In *Tense-Aspect Morphology in L2 Acquisition*, Yasuhiro Shirai and Rafael Salaberry (eds.), 363-396. Amsterdam: John Benjamins.
- Slabakova, Roumyana  
2005 What is so difficult about telicity marking in L2 Russian? *Bilingualism: Language and Cognition* 8 (1): 63-77.
- Smith, Carlota  
1997 *The Parameter of Aspect*. Dordrecht: Kluwer Academic Press.
- Stoll, Sabine  
1998 The role of Aktionsart in the acquisition of Russian aspect. *First Language* 18: 351-378.
- Stoll, Sabine  
2005 Beginning and end in the acquisition of the perfective aspect in Russian. *Journal of Child Language* 32: 805-825.
- Stutterheim, Christiane von and Nüse, Ralf  
2003 Processes of conceptualization in language production. *Linguistics (Special Issue: Perspectives in language production)* 851-881.
- Stutterheim, Christiane von and Lambert, Monique  
2005 Crosslinguistic analysis of temporal perspectives in text production. In *The Structure of Learner Varieties*, Henriette Hendricks (ed.), 203-230. Berlin: Mouton de Gruyter.
- Stutterheim, Christiane von and Carroll, Mary  
2006 The impact of grammaticalised temporal categories on ultimate attainment in advanced L2-acquisition. In *Educating for Advanced Foreign Language Capacities: Constructs, Curriculum, Instruction, Assessment*, Heidi Byrnes (ed.), 40-53. Georgetown: University Press.
- Verkuyl, Henk  
1993 *A Theory of Aspectuality*. Cambridge, U.K.: Cambridge University Press.

Wagner, Laura  
2006 Aspectual bootstrapping in language acquisition: telicity and transitivity.  
*Language Learning and Development* 2(1): 51 - 76.