

Areal-typological aspects of word-formation

The case of aktionsart-formation in German, Hungarian, Slavic, Baltic, Romani and Yiddish*

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Aktionsart is defined as the modification of verb meaning by morphological means. The article claims that languages in which aktionsarten are derived by preverbs form a Sprachbund. The central area of the Sprachbund is occupied by Slavic languages. The Sprachbund includes Yiddish, Lithuanian, Hungarian, and to a lesser extent German and Romani. English and Romance don't have any aktionsarten. In the discussion of the aktionsarten in the area Russian is taken as the language of reference. The development of aktionsarten may follow various paths. In Yiddish most aktionsarten were developed under the influence of Slavic. In Hungarian, on the other hand, no direct Slavic influence can be identified but borrowing from German played a role in the development of aktionsarten. Language contact and parallel development have brought about very similar aktionsart systems in genetically unrelated languages. At the same time, languages may differ in the number of aktionsarten, in the range of base verbs for which the derivation is possible, and in the productivity of aktionsart-formation.

1. Introduction

In the present paper aktionsart is considered a morphosemantic category and aktionsart-formation is assumed to belong to derivational morphology. While aspect has to do with the internal temporal constituency of events, aktionsart is the modification of verb meaning by morphological means. An aktionsart may, but need not affect aspect. Morphology adds one or two semantic features to the meaning of the base verb (e.g. ingressivity, terminativity, iterativity, etc.). Correspondingly, the complex verbs thus obtained can be paraphrased as 'start V-ing'

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‘finish V-ing’, ‘repeatedly V-ing’, etc. Aktionsart-affixes and particles are semantically ‘functors’, normally – qua aktionsart-introducing elements – they do not have any transparent meaning. Since verbal prefixes and verbal particles behave alike with respect to aktionsart-formation, we will refer to them by the term ‘preverb’. Though aktionsarten can also be formed by means of derivational suffixes, in the present paper our main concern will be the examination of aktionsarten derived by means of preverbs. The reason for this delimitation is the following: in the languages to be considered preverbs may be borrowed or existing preverbs may be reinterpreted semantically under the influence of another language, but aktionsart-suffixes are neither borrowed nor are existing suffixes reinterpreted as aktionsart-suffixes. In other words, with respect to aktionsart-derivation language contact may affect preverbs but not suffixes. It will be claimed that aktionsarten are a Sprachbund-phenomenon whose central area is represented by the Slavic languages. The linguistic area comprises, among others, German, Yiddish, Hungarian and Romani, excluded are e.g. Romance, Finnic but also English. It will be shown that aktionsart-systems may come about by language contact. The most known example is Yiddish, where the Middle High German preverb system has semantically been reinterpreted under the influence of Slavic and has thus developed a full range of aktionsart-meanings. It will also be shown that the development of aktionsarten can be observed in *statu nascendi* in the case of some Romani dialects.

2. Aktionsart-formation

It is taken for granted that aktionsart-formation belongs to morphology and can be accounted for by word formation rules. For example, in Hungarian the ingressive aktionsart can be formed productively from verbs denoting sound emission by humans or animals. The particle used to this end is *el* and the verb must be accompanied by the reflexive *magát* ‘oneself’, which is marked by the accusative suffix.¹ Cf. (1).

- (1) $V \Leftrightarrow el^{\wedge}V \text{ magát}$
 Condition: V is durative and denotes sound emission by humans or animals.
 Example: *el-neveti magát* ‘burst out laughing’.

1. Both prefixed verbs and verbs with separable particles are ‘morphological objects’, the latter, however, are constructional idioms in the sense of Booij (2002: 202–216). The reflexive, too, is part of the constructional idiom. The double arrow means that there is a systematic correspondence between the given verb type and the derived aktionsart. The sign \wedge indicates that we have to do with a constructional idiom.

An aktionsart-formation is aspectually relevant in so far as it affects temporal structure: *losreden* ‘begin to talk’ (ingressive aktionsart) is aspectually different from *reden* ‘talk’, since the former verb is perfective and the latter imperfective. On the other hand, *anfeuchten* ‘make a little bit wet’ (deminutive aktionsart) is aspectually identical to *feuchten* ‘make wet’, both being perfective.

An aktionsart has always compositional meaning and its derivation follows a general pattern (it is rule-governed). Consequently, verbs such as *ver-jagen* ‘expel’ (from *jagen* ‘chase’), *be-reden* ‘discuss’ (from *reden* ‘talk’), *ver-schlafen* ‘miss by sleeping’ (from *schlafen* ‘sleep’), whose meaning is noncompositional, do not express any aktionsart. These verbs express new lexical meanings, the preverbs serve lexical enrichment. On the other hand, not all particle and/or prefix verbs with compositional meaning can be used to express aktionsarten. Verbs of motion with a preverb expressing the direction of motion are compositional yet they do not express any aktionsart. Preverbs, which are used to form aktionsarten, have almost completely lost their adverbial meaning and their contribution to the compositional meaning of complex verbs is derivable from the aktionsart-formation rule only.

In some languages there is a formal criterion that can be used to distinguish between preverbs that introduce an aktionsart from preverbs that do not. In Slavic it is impossible to form so-called secondary imperfectives from complex verbs denoting an aktionsart, as shown by the Russian example in (2a,b).

- (2) a. *pisat* ‘write’ – *na-pisat* ‘write, perfective and resultative aspect, resultative aktionsart’ – **na-pis-yvat* ‘write, secondary imperfective’;
 b. *pisat* ‘write’ – *pere-pisat* ‘write over, perfective’ – *pere-pis-yvat* ‘write over, secondary imperfective’

Though Hungarian has no morphologically secondary imperfectives, there is an imperfective construction (called the progressive), which can be constructed out of particle verbs except if the particle verb expresses an aktionsart. In progressive constructions the particle is postverbal and stressed:

- (3) a. *‘El-ment.* perfective
 “He/she left.”
 b. *‘Ment ‘el.* progressive
 “He/she was leaving.”

The particle *el* ‘away’ carries directional meaning and it does not introduce any aktionsart. As shown by (3b) the progressive is possible. Consider now the verb *el-olvas-gat* ‘read for a while’: *olvas* stands for ‘read’, the suffix *-gat* introduces the deminutive aktionsart and the particle *el-* the delimitative aktionsart (‘do something

for a while’). (4b) shows that the sentence containing a complex verb with aktionsart-meaning cannot occur in the progressive.

- (4) a. Béla el-olvas-gat-ott a szobájában.
 “Béla was reading a little bit in his room.”
 b. *Béla olvas-gat-ott el a szobájában.

Historically preverbs have been developed from adverbs or adpositions. In some languages adverbs and adpositions have been turned into particles, as in Hungarian, in other languages morphologization produced verbal prefixes, as in Slavic, but in both cases – if used to derive an aktionsart – preverbs have lost their original adverbial/adpositional meaning.

Not every language has aktionsarten in the sense used in the present paper. They are typical of Slavic, Yiddish and Hungarian (these languages have developed at least a dozen aktionsarten), to a lesser degree of German, Dutch, and they are nonexistent in English and Romance.

3. Conspicuous similarities in the aktionsart-systems in the Sprachbund

As already mentioned, we will take the aktionsart-system of Russian as the Slavic language of reference. The Russian system is rather complex and the terminology is not always clear, therefore – for the sake of exposition – we will restrict ourselves to the following aktionsarten derived by prefixation.²

- (5) a. ingressive, prefix *za*, *za-govorit* ‘start speaking’
 b. evolutive, prefix *raz/ras*, *raz-begat*³-*sja* ‘run faster and faster’
 c. delimitative, prefix *po*, *po-rabotat* ‘work for a while’
 d. resultative, various prefixes, *po-činit* ‘repair, mend’
 e. terminative, prefix *pro*, *pro-pet* ‘finish singing’
 f. finitive, prefix *ot*, *ot-užinat* ‘finish the dinner’³
 g. exhaustive, prefix *u* and the reflexive suffix *-sja*, *u-begat*³-*sja* ‘run until full exhaustion’
 h. totality, prefix *iz/is*, *is-chodit* ‘walk all over’

2. Based on Isačenko (1962: 385–418). There are some further minor classes, which we will leave out of consideration in the present paper. The semelfactive and the diminutive are expressed by suffixation.

3. Though derived by two different prefixes the semantic difference between the two aktionsarten is not completely clear. This may explain why contact languages do not necessarily distinguish between the two meanings. For example, it would seem that in Yiddish both are expressed by the preverb *op*: *op-esn* ‘eat up’ – *op-zingen* ‘finish singing’.

- i. saturative, prefix *na* and the reflexive *-sja*, *na-begat'-sja* 'run till full satisfaction'
- j. iterative-deminutive, prefix *po* and the iterative form of the verb ending in *yva/iva*, *po-čit'-yvat'* 'read a little from time to time'

In other words, Russian can express at least ten different aktionsarten by means of prefixation. In what follows we are going to show that most of these aktionsarten, if not all, can be found in Yiddish and in Hungarian. Before discussing the aktionsart-systems of these languages, we will point out some formal and semantic similarities between some aktionsarten in the Sprachbund.

3.1 Formal similarities in the make-up of certain complex verbs

The saturative aktionsart (meaning 'the action is brought to full satisfaction') is formed in Russian by means of the prefix *vy* and the reflexive clitic *sja*, e.g. *vyspat'sja* (from *spat'* 'sleep' lit. 'out-sleep oneself') 'sleep one's fill'. The corresponding prefix and the reflexive can be found in other Slavic languages (cf. Polish *wy-spać się*), in Lithuanian (*iš-si-miegoti*, lit. 'out-oneself-sleep'), in Hungarian (*ki-alussza magát* lit. 'out-sleep oneself-acc'), in the Romani dialect Lovari (*avri-suta(h) pe* lit. 'out-sleep oneself'), in German (*sich aus-schlafen* lit. 'oneself out-sleep'), in Yiddish (*oys-shlofn zikh* lit. 'out-sleep oneself').

The origin of this form is supposedly Latin *edormire (vinum)* 'sleep off one's wine'. According to Grimm's historical dictionary the earliest attested complex verb of this form in German is *sich aus-ruhen* (lit. 'oneself out-rest') 'refresh oneself' (16th century), the form *sich aus-schlafen* 'sleep one's fill' is possibly an analogical formation.⁴ The corresponding Hungarian forms are loan translations from German. The Slavic equivalents seem to be rather late forms, which would suggest German influence. The historical path of the saturative aktionsart in question could thus assumed to be (6).

- (6) Latin → German → Slavic, Hungarian

Formal similarities can also be found in the case of the exhaustive aktionsart, which is formed in Russian by means of the prefix *u* and the reflexive clitic *sja*, e.g. *u-begat'sja* 'run to death'. The German equivalent is *sich tot-laufen* (*tot* means 'dead'). In some cases also the preverb *über* 'over' can be used to derive the same aktionsart as in the case of *sich tot-arbeiten* or *sich über-arbeiten* 'overwork oneself' (note the identical English structure). The Hungarian form is *agyon-dolgozza magát* (*agyon* means 'dead'), which is analogous to the German form with the

4. Grimm 1854–1960, vol. 1, columns 950–956.

preverb *tot*.⁵ Yiddish has only *iber-arbetn zikh*, which corresponds to the German verb with the preverb *über*. This form may also have been reinforced by language contact, cf. Polish *prze-pracowywać się* and Russian *pere-rabatyvat'-sja*, where the prefixes are semantically related to 'over'. It may be worth noting that the aktionsart has a similar make up in Lithuanian: *nu-si-dirbti* lit. 'over-oneself-work'.

In other cases a given preverb may be used to derive an aktionsart meaning in Russian and Yiddish but not in German in spite of the fact that the corresponding preverb also exists in German. German *zer* and Yiddish *tse* are related to Russian *ras*. In Russian this preverb may be used to express the ingressive aktionsart, e.g. *ras-plakat'-sja* 'burst out crying'. Yiddish, but not German, can form the ingressive in the same way: *tse-veynen zikh* (German **sich zer-weinen*). Similarly, *tse-lachn zikh* (German **sich zer-lachen* in the ingressive sense, the verb exists in the sense 'die of laughing') 'begin laughing', *tse-shrajn zikh* (German **sich zer-schreien*) 'begin shouting', etc. This shows clearly the Slavic influence on Yiddish, which was facilitated by formal as well as semantic similarities.

3.2 Some differences in the aktionsart-systems of the Sprachbund

Most of the Slavic aktionsart-meanings derived by preverbs can also be found in Yiddish, the only one which seems to be missing is the resultative expressing totality. Notice that totality is one of the aktionsarten in Hungarian and German. Compare (7a–c).

- (7) a. Russian *is-chodit'* 'roam over a territory', as in *is-chodit' ves' les* 'wander/walk all over the woods'
 b. Hungarian *be-jár*, as in *be-járja az egész erdőt* lit. 'in-goes the whole woods-acc'
 c. German *aus-tanzen*, as in *den Tanzsaal ganz austanzen* 'dance all over the ball-room'

Yiddish and Hungarian can also express aktionsarten by means of preverbs which are nonexistent in Slavic. Consider (8a,b) for Yiddish and (9) for Hungarian.

- (8) a. 'do something superficially': *tsu-kern* 'sweep superficially', *tsu-kemen* 'comb one's hair superficially'
 b. 'do sg carefully': *far-kern* 'sweep carefully', *far-kemen* 'comb one's hair carefully'

5. Originally, the preverb *agy-on* meant 'on the head' and when used with a verb of hitting the action may have implied death: *agyon-üt* (German *tot-schlagen*) 'strike dead'. It has become a real preverb with the exhaustive meaning at the beginning of the 20th century only. The preverb underwent a grammaticalization process, which may have been facilitated by loan-translations from German. Cf. Ladányi (2007: 183–200).

- (9) 'be immersed in sg': *be-sír* 'be immersed in tears', *be-táncol* 'be immersed in a dance', *be-szomorkodik* 'be immersed in melancholy'

This means that there is no one-to-one correspondence between the otherwise very similar aktionsarten. Each language has developed an independent system of aktionsart-meanings. Note furthermore that there are also differences with respect to the productivity of an aktionsart. In German, for example, the ingressive aktionsart can be expressed by means of the preverb *los*, as in *los-schreien* 'begin shouting', but it is much less productive than the corresponding Russian prefix *za*. Compare the Russian verbs *za-igrat* 'begin playing', *za-pet* 'begin singing', *za-svistet* 'begin whistling', etc. where no established German equivalents with the preverb *los* exist.

Lithuanian has twelve preverbs and most Slavic aktionsarten can also be found in Lithuanian. Note, however, that there is a difference in morphological structure between Slavic and Lithuanian: the reflexive is placed between the preverb and the base verb. However, if the reflexive is part of the complex verb in Slavic, it also appears in Lithuanian. For example, the Lithuanian equivalent of the Russian exhaustive *u-begat'sja* 'run until full exhaustion' is *nu-si-lakstyti*, the Lithuanian equivalent of the Russian saturative *na-begat'-sja* 'run until full satisfaction' is *iš-si-miegoti*, where *si* is the reflexive. The semelfactive is expressed by the prefix *su* as in *su-dainuati* 'cook once' (Russian *s-varit'*), *su-šokti* 'do sg once' (Russian *s-delat'*). It is unclear, however, to what extent this form is productive in Lithuanian. (Note that the productive semelfactive in Russian is formed by suffixation.) The iterative-deminutive is missing in Lithuanian for obvious reasons: the language does not have imperfective forms in *-yva*. Recall the Russian deminutive *čit-yvat'* from which the iterative-deminutive can be formed: *po-čit-yvat'* 'read for a while, read a little'. The close correspondence of the Lithuanian and the Slavic aktionsarten may be due to parallel development facilitated by close contact with Slavic.⁶ In spite of this contact, however, Lithuanian does not express the perfective-imperfective opposition in a systematic way.

From what was said we may conclude that (i) parallel development and borrowing of aktionsarten can be attested; (ii) very similar aktionsart-systems exist in Slavic, Yiddish, Lithuanian and Hungarian; and (iii) each language has an independent system with differences both in the number of aktionsarten and their meaning.

6. It is worth noting that Latvian and Estonian were more exposed to German and Finnic than to Slavic influence. Wälchli (2001: 419) points out that the main difference between Estonian, Livonian, Latvian and Lithuanian is that Estonian has no verbal prefixes and Lithuanian has no adverbial-like preverbs. The other two languages are somewhere in between.

4. Aktionsarten in Yiddish, Hungarian and Romani

In what follows we will have a closer look at Yiddish, which has borrowed most aktionsarten from Slavic while keeping almost intact the Middle High German (henceforth: MHG) preverb system.⁷

4.1 Aktionsarten in Yiddish

The language developed its initial form beginning around 800 in the Old High German speaking Rhineland and then around 1200 started extending progressively into Slavic-speaking territories. Under Slavic influence (mainly Polish, Ukrainian, White Russian, and Russian) the Yiddish semantic system made a number of accommodations, many of them can be observed in the preverb system. The changes had the following effects: (i) existing MHG aktionsarten have become more productive; (ii) existing MHG preverbs have acquired a Slavic-type aktionsart meaning absent in MHG. For example, the German prefix *er* appears in a small number of verbs with ingressive meaning as in *er-blicken* 'catch sight of', *er-fahren* 'come to know, learn', but the meaning of these verbs is not compositional: the verb *blicken* means 'glance at' but the prefixed verb *er-blicken* does not mean 'begin to glance at'; as for *er-fahren*, *fahren* does not have any meaning related to 'learn, know', the meaning of the verb is completely lexicalized. On the other hand, the use of the corresponding Yiddish prefix *der* has been extended to a larger number of verbs producing complex verbs nonexistent in German. Furthermore, though the German preverbs *über* and *an* cannot be used to derive aktionsarten, the corresponding Yiddish preverbs occur in complex verbs expressing the resultative aktionsart. The examples in (10a,b) illustrate these two points.

- (10) a. *der-zen* (German *er-blicken*) 'catch sight of', *zikh der-visn* (German *er-fahren*, here from *wissen* 'know') 'get to know', *der-hern* (German **er-hören*, from *hören* 'hear') 'come to know', *der-filn* (German **erfühlen*, from *fühlen* 'feel') 'become sensible of'
- b. *iber-leyen* 'read through to the end' (Russian *pro-čitat*', but German **über-lesen*), *on-shraybn* 'write in full' (Russian *na-pisat*', but German **an-schreiben*⁸)

7. The influence of Slavic on the semantics of the MHG preverb system has been noted by several authors. Cf. Weinreich (1953). Weinreich (1980). For a rather detailed account of aktionsarten in Yiddish cf. Schächter (1951).

8. In German **über-lesen* and **an-schreiben* are impossible forms in the intended sense.

The situation is different with Slavic aktionsarten derived by suffixation. Though suffixation lies outside the scope of the present paper it may be worth noting that an aktionsart-meaning derived by suffixation, too, may be borrowed. For example, the Slavic semelfactive is expressed by suffixation, cf. Russian *kolot* 'stab' – *kol'nut* 'stab once', *lisat* 'lick' – *lisnut* 'lick once', *migat* 'blink' – *mignut* 'blink once', etc. The derivation is fully productive and the aktionsart-meaning is rather salient. Since in MHG no verbal suffix could be used to this end, the semelfactive meaning was expressed by other means. In Yiddish the constructions *gebn a N* 'give a N' or *a N ton* 'do a N' are used to indicate a single momentary event: *gebn a shmek* 'take a sniff', *gebn a kum-arayn* 'enter' (the verb *arayn-kumn* 'come in' is durative), *a geshray ton* 'cry out'.

It is interesting to note that (i) MHG particle verbs have never been changed into prefix verbs, i.e. the morphological status of complex verbs was not affected by the semantic change; (ii) Slavic prefixes were not borrowed, borrowing was restricted to the semantic space. As we saw, there is no one-to-one correspondence between the Slavic and the Yiddish aktionsarten. Yiddish has its own authentic system, whose development, however, is largely due to language contact. This development was facilitated by the following factors:

- i. the existence of a preverb system in MHG;
- ii. the existence of some aktionsart meanings in MHG,
- iii. some formal similarities between MHG and the Slavic preverbs,
- iv. massive bilingualism.

The Yiddish equivalents of the Russian aktionsarten are listed in (11).

- (11) a. ingressive, prefix *der*, *der-zen* 'catch sight of'; or prefix *tse* and the reflexive, *zikh*, *tse-lachn* 'start laughing'
- b. evolutive, -----
- c. delimitative, prefix *avek*, *avek-arbetn* 'spend a certain time with work'
- d. resultative, prefix *on*, *on-shraibn* 'write perfective'
- e. terminative, prefix *op*, *op-tantsn* 'finish dancing'
- f. finitive, prefix *op*, *op-rejnikn* 'clean perfective'
- g. exhaustive, prefix *tse* and the reflexive, *tse-laufn zikh* 'nearly kill oneself by running'
- h. totality, -----
- i. saturative, prefix *on* and the reflexive, *on-lakhn zikh* 'laugh one's fill'
- j. iterative-deminutive, prefix *tsu*, *tsu-shmejchlen* 'smile a little bit'; or prefix *unter*, *unter-shmejchlen*

Consequently, Yiddish has the possibility to express eight out of ten Slavic aktionsarten by means of prefixation. No data could be found for the evolutive and the

aktionsart denoting totality. As pointed out in the preceding section Yiddish did not copy the Slavic system, however. Yiddish can express aktionsarten which are non-existent in Slavic. In addition, since Yiddish has more preverbs than Slavic (some thirty-six as opposed to something like twenty-two), Slavic polysemous senses of a prefix can be expressed by separate preverbs in Yiddish. For example, Russian *vy* can express spatial 'out' as well as resultativity: *vy-bežat* 'run out' and *vy-pit* 'drink to completion'. Yiddish separates these two senses by using *aroyts* (German *heraus*) for the spatial sense and *oys* (German *aus*) for the aktionsart meaning.⁹ We may thus conclude that in spite of massive borrowing, Yiddish has developed its own aktionsart system with a number of features not shared with Slavic.¹⁰

On the basis of the Yiddish example one might be inclined to conjecture that the borrowing of a semantic system is only possible if the borrower language has similar facilitating factors, among which the most important being the existence of preverbs. The Hungarian example, to which we will turn next, shows that this need not be the case.

4.2 Hungarian aktionsarten

There was a considerable Slavic substratum during the early history of Hungarian in the Carpathian Basin, consequently speakers of Hungarian were exposed to Slavic very early. In addition, a considerable Slavic population continued to live in the Northern, Eastern and Southern parts of historical Hungary. Contact with Slavic was unavoidable, which can also be attested in the vocabulary (there are about 500 Slavic loanwords in the basic vocabulary of Hungarian).

The question which may be asked is whether Slavic had any influence on the development of the Hungarian preverb system, in particular on its aspectual and aktionsart functions. We know that in Slavic no separable verbal particles can be attested, in the oldest linguistic records only prefixed verbs can be found.¹¹ Although a considerable number of early Slavic loanwords in Hungarian contain a verbal prefix it is not recognized as such, i.e. complex verbs are taken as the base form. For example, the loanword *parancsol* 'command' contains the Slavic prefix

9. Cf. Talmy (1982: 243–244) where some further examples are discussed.

10. An overview of Yiddish aktionsarten can be found in Schächter (1951). For a more theoretical discussion see Talmy (1982).

11. In Ancient Greek and Classical Latin prefixes were like adverbs and could be moved. Thus, for example, the Latin verb form *interrumpo* first appeared as *inter ... rumpo* and got morphologized to *interrumpo* in later times. No such development can be observed in Slavic.

po hence it should not admit any other preverb, yet we find various preverbs with that verb, among others, the perfectivizing preverb *meg*, as in *meg-parancsol*. Note that the original verb, too, was aspectually perfective.¹² This means that Slavic prefixes could not have any direct influence on the development of Hungarian preverbs. It is still possible, however, that the Slavic verbal system conveyed the idea to express perfectivity and aktionsart by means of a verbal form. Loan-translations from Slavic are missing in Hungarian presumably because Slavic prefixes had no transparent meaning. The situation is quite different with German. In the late 18th and in the first half of the 19th century a considerable number of loan-translations from German entered the language. The German particle *hin* 'away' was translated by the Hungarian particle *el*, German *nieder* 'down' by the Hungarian particle *le*, German *auf* 'up' by the Hungarian particle *fel*, etc. The saturative aktionsart (and possibly also the exhaustive aktionsart) may have appeared in Hungarian during that time.¹³

The emergence of particle verbs with aspectual and aktionsart meanings was a very slow process. The first particles attested were *meg* (12th century) and *el* (14th century); the first one was used to express ingressivity and resultativity, the second one to derive the delimitative aktionsart. At the same time they turned the imperfective base verb into a perfective verb. More particles can be found in texts from the 15th century. It is important to note, however, that the development of new aktionsarten is still going on. The exhaustive aktionsart became widely used around the end of the 19th and the beginning of the 20th century only, and the submersive aktionsart is a recent innovation.¹⁴

In Old Hungarian aspectual differences were expressed by tense, as in Old Indoeuropean. However, the old Hungarian tense system started to break down very early and its aspectual functions were taken over by particle verbs.¹⁵ While

12. Cf. Hadrovics (1976: 89).

13. Cf. the discussion above on the saturative and exhaustive aktionsart.

14. See further below.

15. Cf. Kiss (2005) for an instructive discussion of this development. In Carlota Smith's framework she claimed that in the course of the changes in the Hungarian tense system and the development of particle verbs 'viewpoint aspect' has gradually been replaced by 'situation aspect'. To my knowledge there is no explanation why (certain) languages seem to prefer adverbials (preverbs) to tense systems. There was an elaborate tense system in Old Slavic, too, and their aspectual function was taken over by verbal prefixes (Meillet 1934). Similar things seem to have happened in some Romani dialects as well, in this case, however, we may assume that the simplification of the tense system was brought about by language contact.

the old system had several past tense forms, contemporary Hungarian has only one. Consider

(12) *The old tense system*

		aspectual value
<i>mond</i> 'say'	Simple Present	
<i>mond-ott</i>	Present Perfect	perfective/imperfective
<i>mond-a</i>	Simple Past	perfective
<i>mond vala</i>	Past Imperfective	imperfective
<i>mond-ott vala</i>	Past Perfective	

The Present Perfect described a past event seen from the present viewpoint. The speaker focuses on the resultant state of a past event, which is still in effect at the time of the utterance. The Simple Past was used as the tense of story-telling and the Past Imperfective was used in cases of ongoing or not completed events.

(13) *The present system*

<i>mond</i> 'say'	Present	
<i>mond-ott</i>	Past	no aspectual value

While tense was a perfect means to express aspectual differences it could not be used to express aktionsarten. Verbal particles developed from adverbs and postpositions in early Hungarian. Adverbs were originally marked by a lative suffix, e.g. *meg-é* 'behind', *fel-é* 'toward', which made the directional meaning apparent, thereby making these forms suitable for expressing the delimitative function, hence perfectivity. The development of aktionsarten seems to be a more complex process. When delimiting adverbials replaced tense in the marking of aspect, they did not lose their lexical meaning. One of the preconditions for the coming into existence of aktionsarten, however, is the partial loss of the original adverbial meaning and the development of a more abstract meaning. The first particle which completely lost its original meaning was *meg*. It has become the marker of perfectivity par excellence. Some of the aktionsarten can easily be deduced from the meaning element 'perfective' and the meaning of the base verb. Let us look at some examples.

The semelfactive aktionsart is limited to verbs whose imperfective sense involved a sequence of 'unit' actions, like *wag*, *stroke*. Note that single actions, on the other hand, are always expressed by a perfective verb. How can we make a single action from repetitive actions? One way of doing this is to perfectivize: 'wag once' and 'stroke once' are perfective ('punctual') actions. The corresponding Hungarian verbs are *meg-csóvál* 'wag once' and *meg-simogat* 'stroke once'. In fact,

with repetitive verbs this seems to be the only way to get a perfective verb without adding any lexical meaning.¹⁶

Some verbs have a resultative (sometimes called telic) component in one of their uses such as *write*, *build*, *paint*, others lack such a component: *watch*, *look*, *walk*. If a verb with a telic component gets perfectivized it becomes a resultative verb. Once again, the particle *meg* can be used to do the job: *meg-ír* ‘write in full’, *meg-épít* ‘build resultative’, *meg-fest* ‘paint resultative’. This means, that the accomplishment meaning can be deduced from the telic base verb and the perfectivizing prefix *meg*.

Similar things can be said about the perfectivizing particle *el*, which developed from an adverbial with the meaning ‘away’. If used with certain types of (nontelic) activity verbs it can be used to delimit the duration of the activity. Consider the verb *néz* ‘look’ from which the diminutive *néz-eget* ‘look a little bit’ can be formed by suffixation. The perfectivizing particle *el*, if prefixed to this verb, delimits the duration of the activity and we get the delimitative aktionsart with the meaning ‘look a little bit for a while’.

The above examples exemplify but one, though typical, way of getting an aktionsart. By attaching a perfectivizing particle to various types of verbs we are able to derive the aktionsart meaning on the basis of the perfective meaning of the particle and the meaning of the verb.

A second source of an aktionsart meaning is grammaticalization based on metonymic extension. An example in point are the particles *agyon* and *tönkre*, both used to express the exhaustive aktionsart. The original meaning of *agyon* is ‘on the head’, which was used with verbs of hitting, as in *agyon-üt*, literally ‘strike on the head’. The consequence of such an action was often death. This was integrated into the meaning of the verb by metonymical extension and the verb got the meaning ‘strike dead’.¹⁷ The meaning of *agyon* could then be used with verbs denoting other actions leading to death such as *agyon-lő* ‘shoot dead’. A further step was to use verbs with the particle *agyon* to express actions which, metaphorically speaking, may almost kill someone, such as *agyon-fáraszt* ‘weary to death’. If used with the reflexive *magát*, the verb expresses the exhaustive aktionsart.¹⁸

16. Theoretically, of course, the beginning or the end of a repetitive action could also be a single action and perfective. We do not know of any morphology which could express these meanings.

17. It is also possible to explain this meaning by the conventionalization of a generalized conversational implicature.

18. Cf. for a more detailed account Ladányi (2007: 185–190) and Ladányi (2000).

Finally, an aktionsart meaning may enter a language via loan-translations. This seems to have been the case with the saturative aktionsart. The form *ki-alussza magát* 'to sleep one's fill' comes from German *sich ausschlafen*, *ki-piheni magát* 'have a rest' comes from German *sich ausruhen*. In Hungarian, however, the formation of the saturative aktionsart has become much more productive. Compare *ki-biciklizi magát* 'to bicycle to one's fill', *ki-autózza magát* 'ride a car to one's fill', *ki-csónakázza magát* 'row to one's fill', etc.

In sum, then, there are three sources for the development of aktionsarten:

- (14) a. perfectivizing preverb + verb meaning
- b. metonymy and grammaticalization
- c. loan-translations

As for the number of aktionsarten in Hungarian derivable by means of preverbs from among the Slavic aktionsarten the only one which is missing is the evolutive aktionsart. On the other hand, there is one aktionsart not found in Slavic, which is sometimes dubbed 'submersive aktionsart'. Examples are *be-sír* 'be immersed in tears', *be-szomorkodik* 'be immersed in melancholy', *be-táncol* 'be immersed in a dance'. The submersive aktionsart is a newcomer but it is getting more and more productive.

The aktionsarten are tied to the development of verbal particles. This development cannot be attributed to direct Slavic influence and German influence before the 18th century is out of the question. However, we can refer to the disappearance of the aspectually relevant tense system as a decisive factor in the development of verbal particles. This means that in Hungarian we have to do with a case of parallel development rather than with contact-induced change.

Though the Ugric languages Ostyak and Vogul do have perfectivizing preverbs no data could be found with respect to aktionsart meanings. Some aktionsarten such as the iterative, the semelfactive, the ingressive and the deminutive are expressed by suffixation. This means that the Ugric languages do not belong to the Sprachbund in question.¹⁹

4.3 Romani preverbs

Romani is an Indo-Aryan language spoken by upwards of 3.5 millions Rom ('Gypsies') in Europe. The Rom left their homeland in India between the 6th and 9th century, they reached the Byzantine Empire in the 11th century and they remained in the Greek speaking part of Europe for at least two centuries. From the

19. Cf. Kiefer & Honti (2003: 142–144).

14th century onwards they can be found in all parts of Europe (their presence in Scandinavia is attested since the 16th century).²⁰

Romani shows strong influences of the Balkan languages, especially Greek. Traditionally an oral language, Romani has since the 1990s become a written medium of periodicals and internet sites. In the absence of a unified standard, codification is centered around regional dialects. Lovari is a Romani dialect spoken in Hungary, Slovakia, Poland, the Ukraine and Austria.

In the 19th century Lovari had still a rich tense system but no preverbs with aspectual function. Aspect was expressed mainly by tense. The old tense system broke down during the first half of the 20th century (it was reduced to Past – Nonpast), at the same time preverbs emerged that assumed an aspectual function and were used to derive aktionsarten.

In what follows we will briefly summarize the changes which occurred in Lovari due to contact with Hungarian, Slavic and German.²¹

4.3.1 Hungarian contact

Particles have been developed from adverbs, which occurred first in postverbal, later also in preverbal position. E.g. *žal āndre* > *āndre žal* 'go in', similarly *žal āvri* > *āvri žal* 'go out'. The same happened with nondirectional particles, very often the Hungarian particle was simply translated into Lovari: H. *ki-mond* 'lit. out tell; speak out' – L. *phenel āvri* 'lit. say out'; H. *vissza-csinál* 'back do; render undone' – L. *kerel palpāle* 'lit. do back'; H. *le-zár* 'lit. down close; close' – L. *zārij tēle* 'lit. close down'. The resultative aktionsart appears in the following example: H. *el-mosogat* 'lit. perf.-particle wash up' – L. *xalal tēle* 'lit. wash up down'. Semantically nontransparent particles are borrowed: the perfectivizing Hungarian particle *meg* appears in Lovari as *mek*, as in *mek si* 'it is finished, it is done'. Most often this particle occupies the preverbal position. A more recent nontransparent Hungarian particle is *tönkre*, which is used for lexical enrichment and for deriving the exhaustive aktionsart. A corresponding Lovari example is *tankre žal* 'particle go; get ruined', the corresponding Hungarian verb is *tönkre-megy*. Since in neutral sentences Hungarian word order is always Preverb+Verb, Rom speakers may perceive the preverb as a nonseparable part of the word.

Lovari has completely reinterpreted the old tense system under the influence of Hungarian, the present system shows the Hungarian pattern.

20. For an overview of language and history cf. Matras (2006).

21. Some contact phenomena are discussed for Hungarian in Hutterer & Mészáros (1967), for Slavic in Pobožniak (1964) and for German in Halwachs & Wogt (2002).

- (15) The old Romani system
 Present
 Future
 Past Imperfective
 Present Perfect
 Past Perfective

Romani did not have any Conditional, Hungarian has a Present Conditional and a Past Conditional. Due to contact with Hungarian the Lovari Future and Past imperfective merged into the Present Conditional, and the Past perfective was reinterpreted as Past conditional. It would seem that in that case, too, the two processes, the changes in the tense system and the emergence of particle verbs are not independent of each other.

The following generalizations seem to hold. Under the influence of Hungarian Lovari has developed verbal particles from adverbs. If the Hungarian particle is semantically nontransparent, Lovari borrows the particle. Though the position of verbal particles in Lovari is normally not fixed, borrowed particles are typically preverbal. The first aktionsart to develop is the resultative. E.g. *meg-rode* H. *meg-keres* ‘perf.particle – look for, resultative’; *xalal avri* lit. ‘wash out’, H. *ki-mos*. But we also find examples for other aktionsarten. Totality is expressed by means of the particle *opră* ‘up’, *opră phirel* means ‘go about (a territory)’; the saturative *avri suta(h) pe* ‘sleep one’s fill’ H. ‘ki-alusza magát’ lit. ‘out sleep oneself’.

These generalizations are further corroborated by Lovari dialects in Slavic and in German environment.

4.3.2 *Slavic contact*

The fact that the Slavic aspectual prefixes do not have any transparent meaning has the consequence that Lovari does not use adverbs to develop its preverb system, Slavic prefixes are simply borrowed. The Russian verb *raz-rušat* ‘demolish’ contains the prefix *raz*, which also appears in the corresponding Lovari verb *ros-maral*; the Russian verb *po-zabyt* ‘forget’ contains the prefix *po*, which we also find in the corresponding Lovari verb *po-bisteral*.

4.3.3 *German contact*

As expected, Burgenland-Lovari shows a mixed picture. The language has developed its own particles if the German particle has a transparent meaning, nontransparent verbal prefixes are borrowed. L. *are-cidal* ‘lit. out-put, undress’, G. *aus-ziehen*; L. *orde-aval* ‘lit. here come, come here’, G. *her-kommen*; but *aun-asal* ‘lit. at smile, smile at’, G. *an-lachen*; L. *co-dšal* ‘dissolve’, G. *zer-gehen*.

5. Outside of the Sprachbund

Aktionsart meanings can be expressed in many ways but we have reserved the term for morphologically expressed aktionsarten. We were particularly interested in Slavic-like aktionsarten, i.e. in rule-governed expressions of meanings such as ingressivity, terminativity, resultativity and so forth. Our main claim is that the languages which have preverbs to express aktionsarten form a Sprachbund. The central language family of the Sprachbund is Slavic for which we used Russian as the language of reference. We have shown that a Slavic-like aktionsart-system can be found in Yiddish, Lithuanian and Hungarian. German, too, belongs to the Sprachbund though with fewer aktionsarten. Finally, the Romani dialect Lovari is developing an aktionsart-system in three different linguistic environments: Slavic, Hungarian and German.

Estonian and Finnish lie outside of the Sprachbund because they do not use preverbs to express aktionsarten. Some aktionsarten (such as ingressivity, iterativity, punctuality, etc.) are derived by suffixation (Sulkala 1996). In this sense Finnish and Estonian are similar to Ostyak and Vogul and some other Uralic languages (Zyrian, Samoyed, Mordvin).

English does not belong to the Sprachbund either. The prefixes *re*, *un*, *out* are possible candidates for aktionsart introducing prefixes but it is easy to show that they cannot be used to derive aktionsarten. The prefix *re* as in *re-build*, *re-use*, *re-cycle*, *re-evaluate* does express iterativity, but in a different way. The sentence *They did not rebuild the bridge* means that the bridge had already been built earlier, and it has not been built again. Iterativity lies in the scope of negation. Moreover, *rebuild* does not necessarily mean that an earlier activity is strictly repeated. On the other hand, in the case of the iterative aktionsart negation normally affects the whole activity not just the repetition of the activity. For example, in Hungarian the iterative aktionsart is derived by means of the suffix *-gat/-get*, e.g. *nyit-ogat* 'open repeatedly'. In the sentence *Péter nem nyitogatja az ajtót* 'Peter does not open repeatedly the door' negation affects the whole predicate. Similar things can be said about the other candidates.

What was said about English is also true of Romance.

6. Conclusion

We have shown that morphologically expressed aktionsarten is a Sprachbund phenomenon whose central area is Slavic. It comprises, among other languages, Hungarian, Lithuanian, Yiddish, German and Lovari and excludes Romance,

English, Finnic. The major Slavic aktionsarten can all be found in Hungarian, Lithuanian and Yiddish, some, but not all, in German and they are *in statu nascendi* in Lovari.

In spite of this similarity the range of base verbs may be different in different languages and the aktionsarten may also differ with respect to productivity. Differences may also be observed with respect to the distribution of preverbs in case several preverbs are used to express an aktionsart.

The full Slavic system is never borrowed or developed under contact. Moreover, as soon as a language disposes of appropriate morphological means to express aktionsarten, it may develop aktionsarten which are nonexistent in Slavic. This has happened in Yiddish and it is still happening in Hungarian.

It would seem that language contact does not change the morphological status of preverbs. In other words, separable preverbs (particles) remain separable, and nonseparable preverbs (prefixes) remain prefixes.

It is a morphological fact about the languages of the Sprachbund that aktionsart suffixes are never borrowed.²² If a salient (productive and frequent) Slavic aktionsart is expressed by suffixation the contact language develops other means to express it. This is the case with the Slavic semelfactive, Hungarian uses particles, Yiddish phrasal expressions.

Language contact may induce the development of particles from adverbs and/or adpositions in case the preverbs in the contact language are semantically transparent. Nontransparent preverbs are often borrowed.

In the linguistic area considered the loss of an aspectually relevant tense system seems to further the development of preverbs with aspectual and aktionsart-functions. The breaking down of the aspectually relevant tense system and the emergence of particle verbs can be documented for Hungarian and Lovari.

The development of preverbs may be a rather complex process, as Hungarian demonstrates. Early Slavic contact with the idea of expressing aspect morphologically, late German contact with massive loan translations of complex verbs, as well as the breaking down of the aspectually relevant tense system all seem to have played a decisive role in this development.

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22. This is particularly interesting in the Yiddish case since the language did borrow some Slavic suffixes. Cf. Weinreich (1980: 531).

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