Russian Aspectual Types: Croft's Typology Revised

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Abstract: Feldstein 2007 presents a typology of the formal markings of Russian aspectual morphology. Croft 2012 proposes a typology for the semantics of aspect and a means of diagramming aspectual contours. In this article I confront Croft's typology with the aspectual types found in Russian, focusing on what benefits such a typology can bring to our understanding of Russian aspect. I offer some revisions to Croft's typology, which makes at least one distinction that is irrelevant to Russian, but more crucially fails to make several distinctions that are essential to Russian aspect. It is Croft's aim to arrive at a universal typology applicable cross-linguistically. It is probably impossible for us to determine whether any typology of aspect is indeed universal, given our ignorance regarding the aspectual systems of many if not most languages of the world, and given the human capacity to impose creative construals of situations. Thus in terms of details, it is probably always possible to find some language-specific facts that a given typology fails to account for, and in this case there are a number of Russian aspectual facts that fall beyond those specified in Croft's system. However, it is possible to take this system and expand it, creating an open-ended means of visualizing aspectual types, which is what I attempt here. The result gives us insights into aspectual ambiguities and into the relationships among groups of verbs that show different behaviors in terms of their aspectual partnerships in Russian. This open-ended version of Croft's model could potentially be expanded to many more languages.

1. Introduction: Croft's (2012) Model¹

Croft describes his typology of aspectual types using a geometric model of aspectual contours with two dimensions: t = time (along the horizontal axis), and q = qualitative states (along the vertical axis, where distance indicates difference between

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¹ In this article I make reference to both "aspectual types" and various kinds of verbs. Aspectual types (diagrammed as contours) are meanings, and when these are given labels, they appear in small capitals, as in ACHIEVEMENT. These meanings are expressed by verbs. Thus the meanings (aspectual types) and forms (verbs) can be distinguished, though they are obviously related. When presenting Croft's proposed aspectual types, I also present his English examples with Russian translations separated by a slash, as in *the door opened / dver' otkrylas'*. However, other Russian examples appear with their English glosses in single quotes.

states). The *q* dimension takes its inspiration from work by previous scholars, including Binnick (1991) and Timberlake (1985), but Croft (2012: Chapter 2) fleshes these ideas out in terms of concrete diagrams. This model makes use of profiling (Langacker 2008: 66–70), symbolizing the portion of a contour that is in focus using a solid line, as opposed to any portion that is not in focus symbolized by a dotted line. Figure 1 (opposite) gives the aspectual contour of an ACHIEVEMENT such as *the door opened / dver' otkrylas'*. There is an initial STATE (when the door is not open, represented as a horizontal dotted line), a transition (when the door opens, represented as a vertical solid line since this is the portion profiled in the predicate), and a final STATE (when the door is open, represented as a horizontal dotted line).

Croft (2012: 33) claims that his set of aspectual types, along with their two-dimensional geometric representations, "provides a general framework that covers all the attested aspectual types." While I will argue that this is strictly speaking not true because some types that need to be distinguished in Russian are missing, the framework itself can be modified in ways that allow us to make room for the peculiarities of Russian and also spot important generalizations that might otherwise go unnoticed.

As the use of the term achievement suggests, Croft's model takes Vendler's (1957) classification as the point of departure, recognizing STATES, ACTIVITIES, ACCOMPLISHMENTS, and ACHIEVEMENTS, plus modifications of all these types. The following two sections focus first on the imperfective types (section 2) and then on the perfective types (section 3), in each case presenting Croft's types and suggesting modifications to fit the Russian system. Each section also addresses ambiguities among aspectual types. Section 4 examines the aspectual relationships among verbs facilitated by Russian morphology, which makes it possible to convert a verb from one aspect to the other. This section takes inspiration from Feldstein 2007 and covers perfectivization patterns, imperfectivization patterns, plus some special patterns. The aim is to discover which imperfective types are related to which perfective types in the system. Section 5 presents conclusions.

2. Imperfective Aspectual Contours

The aspectual types relevant for Russian imperfectives can be classed among STATES and ACTIVITIES, and Croft (2012) distinguishes various kinds for both. STATES can be either PERMANENT OF TRANSITORY; PERMANENT STATES can be either INHERENT OF ACQUIRED; and Croft also identifies "POINT STATES." This yields four types of STATES diagrammed by Croft as in Figure 2 (opposite). STATES are most typically expressed by the verb *be | byt'*. A POINT STATE is expressed in a phrase like *it was 5 o'clock | bylo pjat' časov*, representing initial and final STATES where it is not 5 o'clock, a transition to that moment in time, a momentary STATE, and a transition away from it. Only the very short STATE is profiled. A PERMANENT STATE is, according to Croft (2012:

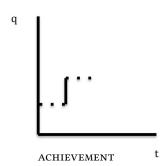


Figure 1. Croft's ACHIEVEMENT

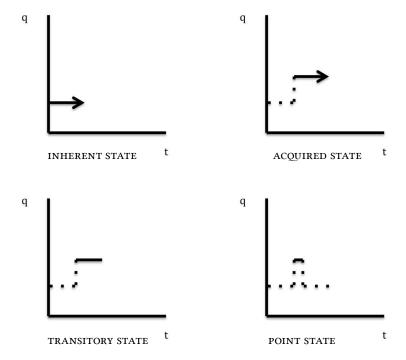


Figure 2. Croft's STATES

42), be Polish / byt' poljakom as opposed to the transitory state be ill / bolet', but one could argue that even permanent states are potentially acquired and lost at some time. Furthermore, the difference between a state and a point state is really only one of duration (Croft himself [2012: 44] admits that point states are a type of transitions state), and these are not distinguished aspectually in Russian. Also, the transitions are handled in another part of the Russian system (perfective verbs; see section 3). Given the fact that unboundedness is the most relevant feature for

Russian, it would make more sense to diagram all STATES in just one way, leaving unprofiled indeterminate portions of the contour on either side, as in Figure 3, below. Distinguishing among types of STATES does not yield any advantages in a description of Russian.

Croft (2012: 39) adds a further type, which he calls inactive actions for verbs like *stand / stojat'*, *sleep / spat'*, *be friends / družit'*. His aim in distinguishing this type is to provide an account for the English progressive, but he does not offer a diagram for this type. However, the important point is that some situations are ambiguous between STATES and ACTIVITIES, and we will come back to this when we take up the ambiguities in section 2.1 below.

Croft recognizes two types of ACTIVITIES: the first he calls DIRECTED ACTIVI-TIES for verbs like *cool / stynut*′, and the second he calls UNDIRECTED ACTIVITIES for verbs like chant / vykrikivat', skandirovat'. Croft's diagrams for these are in Figure 4 (opposite). DIRECTED ACTIVITIES involve incremental progress along a scale, and it makes a lot of sense to distinguish this type in Russian for three reasons. One is that there are Russian morphological types that are relevant here, namely inchoative imperfectives with the "disappearing" -nu suffix such as soxnut' 'dry', bleknut' 'fade', and the verbs meaning 'become X' ending in -et', as in bogatet' 'get rich' and belet' in the meaning 'turn white'. A second reason is that the determinate verbs of motion (idti 'walk', exat' 'ride', etc.), which are an important aspectual type in Russian, fit this description well. The third reason is that these verbs have a particular behavior with respect to aspectual conversion because they resist the formation of atelic (delimitative, perdurative, semelfactive, ingressive, etc.) perfectives, a topic we return to in section 4. When verbs expressing directed activities are perfectivized, they prefer to form telic perfectives, either preserving the lexical meaning of the base as in pobleknut' 'fade', or modifying it as in prosoxnut' 'get dry throughout' (see section 3).

Croft (2012: 61) describes UNDIRECTED ACTIVITIES as "typically construed as a succession of cyclic (undirected) achievements." While Croft's choice of English

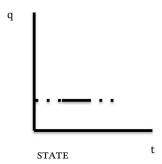


Figure 3. Janda's STATE

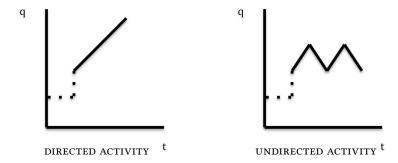


Figure 4. Croft's ACTIVITIES

chant to illustrate this type is not particularly felicitous for Russian, it is easy to find many other verbs that fit this description, such as <code>prygat'</code> 'jump', <code>čixat'</code> 'sneeze'. The use of indeterminate verbs of motion to describe repeated round trips, as in <code>xodit'</code> <code>v</code> <code>školu</code> 'attend/walk back and forth to school', <code>ezdit'</code> <code>na</code> <code>rabotu</code> <code>na</code> <code>avtobuse</code> 'commute to work by bus', is relevant here. These verbs also have a particular behavior with respect to aspectual conversion, since they are excellent candidates for forming <code>SEMELFACTIVES</code> such as <code>prygnut'</code> 'jump once', <code>čixnut'</code> 'sneeze once', <code>sxodit'</code> 'walk someplace and come back once', <code>s'ezdit'</code> 'ride someplace and come back once'. It is also easy to form other kinds of atelic perfectives from such verbs, as in <code>po-prygat'</code> 'jump for a while', <code>začixat'</code> 'start sneezing'.

However, for Russian at least, we need a third type of ACTIVITY, namely one that is undirected but heterogeneous rather than cyclic. Good examples of relevant verbs are rabotat' 'work', igrat' 'play', which can involve many different subactivities and without necessarily going in a single direction, given that one can just work or play for a while and then quit. Russian has the -ničat' suffix, as in koketničať 'act like a coquette', plotničať 'do carpentry' that productively produces imperfectives that express this aspectual type. There are also many other Russian verbs that can be interpreted in this way, though most of them are ambiguous (see section 2.1). However, note that indeterminate motion verbs can describe this kind of activity, as in xodit' po parku 'walk around the park' and ezdit' po gorodu 'ride around the town'. Like the CYCLIC UNDIRECTED ACTIVITIES described above, Russian verbs of this sort can form many kinds of atelic perfectives, as in porabotat' 'work for a while', zarabotat' 'start working', pokoketničat' 'act like a coquette for a while', zaxodit' 'start walking'. These verbs are relatively resistant to the formation of semelfactives, though they are not entirely ruled out; rabotnut' 'do a lick of work' is a marginal occasionalism, and one can also find attestations of skoketničat' 'do one coquettish thing'.

For these three types of ACTIVITIES, I propose the first three diagrams in Figure 5 on page 6. Here I preserve the diagonal line symbolizing incremental progress

for a directed activity, and the zig-zag symbolizing cyclic repetitions for a cyclic activity, and I add a curvy line to symbolize a heterogeneous activity. As with the states, I place unprofiled/dotted lines on either side for each to represent unboundedness, since any of the activities may continue in either direction, and the transitions are not relevant for imperfective verbs.

In addition to these activities, we need to add one more imperfective type in order to account for annulled activities in Russian such as *My ezdili v Moskvu* 'We went to Moscow [and came back]', *Kto ložilsja v moju postel'*? 'Who lay down in my bed [but is now gone, as in the case of "Goldilocks and the Three Bears"]?' These are actions that involve some kind of movement from point A to point B that is then reversed to point A again. Note that the use of the accusative case in these phrases indicates that these activities are directed (albeit annulled). Despite the fact that a new state was reached (we were in Moscow, Goldilocks was in the bed), it holds no longer and the imperfective is used. I offer the fourth diagram in Figure 5 to represent this type which I term annulled activity. It has two transitions, one to a new state and one back to the original one, like a single cycle from the cyclic activity type. The annulled activity type is related in some ways to Croft's reversible achievement (see section 3), however the relevant characteristic for

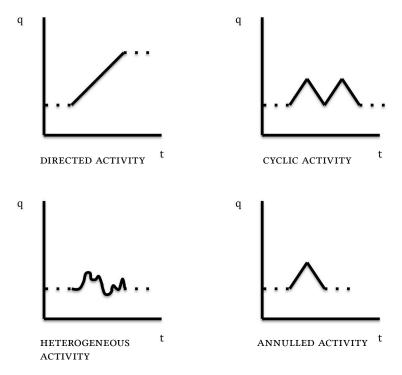


Figure 5. Janda's ACTIVITIES

Russian is that the change in position is not just reversible but actually reversed. Also, progress from point A to point B and back again is necessarily incremental, thus following the diagonal (rather than a sudden Achievement which Croft symbolizes as a vertical line).

2.1. Imperfective Ambiguities

I have already alluded to ambiguities among types. Dahl (1985: 26-27) noted that a given predicate can be construed in multiple ways, and Croft makes a feature of pointing out that ambiguities can exist, but does not take them up in a systematic fashion. While I consider the acknowledgement of ambiguities to be a strong point of Croft's model, I think it should be taken further. It should be pointed out that ambiguity is a scalar phenomenon, rather than just a union of sets. In other words, there can be stronger or weaker tendencies and preferences. Because Croft uses English examples as his basis, many of his ambiguities are between verbs that are normally crisply separated by Russian morphology, such as see and know (Croft 2012: 57), which have both a STATE reading and an ACHIEVEMENT reading in English but are disambiguated by Russian videt'vs. uvidet'see' and znat'vs. uznat' 'know'. Russian does of course have biaspectual verbs, but these are generally never ambiguous in context. Still, it is possible to understand the biaspectual verbs as representing ambiguity across the aspectual divide in Russian. See more about videt' vs. uvidet' and znat' vs. uznat' in section 3. At any rate, there are many other ambiguities that are relevant for Russian.

Figure 6 (on the following page) summarizes the ambiguities among Russian imperfective types, with the continua between adjacent types symbolized as lines. This is a semantic map (Haspelmath 1997a–b and 2003, Janda 2009a) constructed according to the pattern of shared forms among types. Only types that are connected by lines can share forms, and sharing is along contiguous parts of the map. For example, it is not possible (at least not in Russian) to have a single form that expresses both STATE and DIRECTED ACTIVITY but does not also express either HETEROGENEOUS or CYCLIC ACTIVITY as well.

One important ambiguity is between the directed and undirected, i.e., heterogeneous and cyclic activities. This ambiguity is relevant to many verbs in Russian such as *pisat'* 'write', *čitat'* 'read', *šit'* 'sew', *pet'* 'sing' and indeed the majority of imperfective verbs that can have a perfective partner verb with the same lexical meaning (a.k.a. "Natural Perfective"; see section 3). These verbs can be construed as representing progress toward a goal (writing/reading a book, sewing a garment, singing a song), in which case they express directed activities, or as undirected activities, in which case they can express either heterogeneous activities (practicing/doing some writing/reading/sewing, singing) or cyclic activities (forming individual letters/making keystrokes, reading individual words,

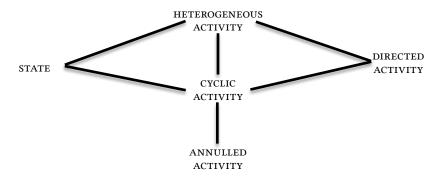


Figure 6. Imperfective Ambiguities

making stitches, singing notes). Of course the ambiguity between directed and undirected activities also subsumes the ambiguity between heterogeneous and cyclic activities just described.

There is a continuum between STATES and UNDIRECTED ACTIVITIES (again both HETEROGENEOUS and CYCLIC) since a person who engages in an UNDIRECTED ACTIVI-Ty can also be seen as someone who is of a certain nature. Thus a person who works regularly is also a worker, making the expressions on rabotaet 'he works' (HETERO-GENEOUS ACTIVITY) and on rabočij 'he is a worker' near synonyms. Similarly, on kurit 'he smokes' can describe a person who smokes one cigarette after another (a CYCLIC ACTIVITY) or a person who is a smoker, thus roughly synonymous with the STATE on kurjaščij 'he is a smoker'. As argued by Nesset (2009: 73), this relationship is supported by the metonymic connection between iterative activities and habitual states. This continuum can extend to include directed activities as well, as we see in sestra est miaso 'sister eats meat' which can be a DIRECTED ACTIVITY in case we are describing an ongoing process in which she is devouring a given piece of meat, or it can be a CYCLIC ACTIVITY if we mean that she regularly eats meat, and the latter interpretation can be stretched in the direction of a STATE if we mean to say that she is not a vegetarian. The relationship between CYCLIC ACTIVITIES and ANNULLED ACTIVITIES was described above as that of a series of cycles vs. a single cycle. Note that the indeterminate motion verbs cover all of the ambiguities except those involving directed activities. Another way of stating this is to say that the connections between STATES, HETEROGENEOUS ACTIVITIES, CYCLIC ACTIVITIES, and ANNULLED ACTIVITIES capture the variety of uses for indeterminate motion verbs, with STATES (naš syn uže xodit 'our son is walking/knows how to walk already'), HETEROGENEOUS ACTIVITY (on xodit po parku 'he walks around the park'), CYCLIC ACTIVITY (on xodit v školu 'he goes to school'), and ANNULLED ACTIVITY (on xodil v kino 'he went to the cinema').

3. Perfective Aspectual Contours

Croft recognizes one type of ACCOMPLISHMENT and four types of ACHIEVEMENTS, diagrammed in Figure 7 (on p. page 10). All of these are realized as perfective verbs in Russian.

Before we turn to the Russian examples, it is perhaps best to review the four major kinds of Russian perfective verbs I have identified previously (Janda 2007). These are:

- "Natural Perfectives" like napisat´ write', svarit´ cook', for which the
 lexical meaning of the perfective and its corresponding imperfective is the
 same;
- "Specialized Perfectives" like podpisat' 'sign', vyvarit' 'extract, boil down', for which the meaning of the perfective involves a lexical modification of the meaning of the imperfective;
- "Complex Act Perfectives" like *počitat'* 'read for a while', *začixat'* 'begin to sneeze', where the perfective involves some duration or phasal bounding of the situations named by the corresponding imperfective—this normally includes delimitatives in *po*-, perduratives in *pro*-, ingressives in *za*-, and terminatives in *ot*-; and
- "Single Act Perfectives" like čixnut' 'sneeze once', sxodit' 'walk someplace and come back once'.

It is possible to say that Natural and Specialized Perfectives are telic, whereas Single Act Perfectives and the delimitative and perdurative Complex Act Perfectives are atelic. Ingressives and terminatives can be termed phasal. All perfectives in Russian are bounded (with the caveat that ingressives and terminatives are bounded on one side only).

Croft's accomplishment is illustrated by *I* ate a pancake / Ja s''el blin, where the action begins with the first bite and then continues to its "natural endpoint" (Croft 2012: 62) when the pancake is completely consumed. Among both Natural Perfectives and Specialized Perfectives we find verbs that can serve this function. Given that we have used the dotted line extensions to symbolize unboundedness for the imperfective types, it is most expedient to simply remove those and use a terminus point instead to symbolize boundedness for the perfective types. Thus we can represent the Russian perfective telic types as in Figure 8, (on p.page 11). Note that the journey between the initial point and the final point of an Accomplishment need not be a straight line as would be appropriate for *eat a pancake* / s''est' blin, which is based on a directed activity. It might instead be a curved line if it is based on a heterogeneous activity, as in *vyrabotat' novyj plan* 'work out a

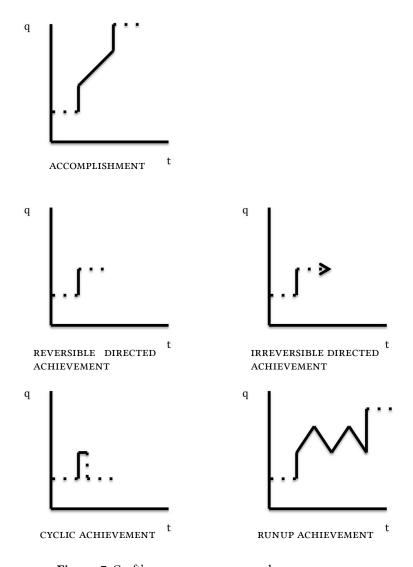


Figure 7. Croft's ACCOMPLISHMENT and ACHIEVEMENTS

new plan', or a zig-zag line if based on a CYCLIC ACTIVITY, as in *vbit' gvozd' v stenu* 'hammer a nail into the wall', where each of a repeated cycle of hits drives the nail a bit deeper.

An achievement is a transition between one state and another. Croft (2012: 60) distinguishes between reversible achievements as in *the door opened / dver' otkry-las'* and irreversible achievements as in *the window shattered / okno razbilos'*. As argued above, reversibility is supportable as a distinction for imperfective instead

of perfective verbs in Russian, so I recognize only one kind here, diagrammed as ACHIEVEMENT in Figure 8. Both Natural and Specialized Perfectives are found here, and in addition we find in verbs of the perfectiva tantum sort, like *očnut'sja* 'regain consciousness', *ruxnut'* 'collapse', as well as verbs that are primary perfectives like *dat'* 'give', *sest'* 'sit down'. This fact, as well as different aspectual type preferences concerning secondary imperfectives from ACCOMPLISHMENT type perfectives as

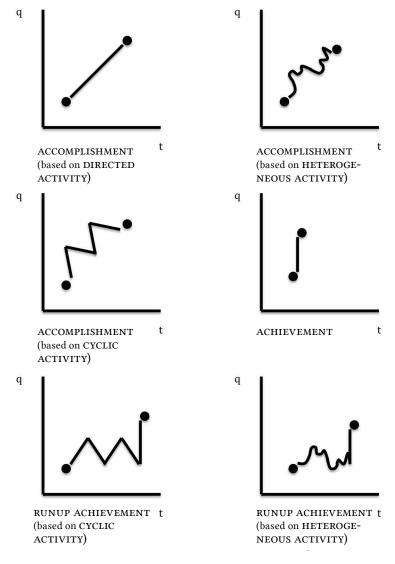


Figure 8. Janda's Telic ACCOMPLISHMENTS and ACHIEVEMENTS

opposed to Achievement type perfectives (see section 4.2), justifies distinguishing among the two types in Russian.

Croft (2012: 63) offers the RUNUP ACHIEVEMENT (also termed "NONINCREMENTAL ACCOMPLISHMENT") as a sort of transitional type between ACCOMPLISHMENT and ACHIEVEMENT since it is not incremental (thus like an ACHIEVEMENT) and also not punctual (thus like an ACCOMPLISHMENT), illustrated as *he repaired the computer / on počinil komp' juter*. The assumption here is that the repairman tries one strategy which fails, and then another and another until he hits upon the one that works, at which point he achieves success. I have a parallel diagram; however, **note** that the path need not be a zig-zag, but it could also be a curvy line, since a RUNUP ACHIEVEMENT can be based on either a CYCLIC ACTIVITY or a HETEROGENEOUS ACTIVITY.

What makes the Russian aspectual system really special even among Slavic languages is the plethora of atelic perfective types; I diagram the major ones in Figure 9, opposite. **Note** that all of these types entail a situation that returns to the same state it began in. **Note**<<**Used 3 times close together; consider revising>>** that I suggest some rearranging here, in essence using the diagram Croft suggests for his so-called CYCLIC ACHIEVEMENTS instead for the PUNCTUAL PERCEPTS (see below under phasal types).

I offer a new diagram for what Croft terms CYCLIC ACHIEVEMENTS, for which I use the term semelfactive instead. Croft connects his cyclic achievements to what he calls "POINT STATES" (see section 2), but at least for Russian the relevant relationship is instead between CYCLIC ACTIVITIES and SEMELFACTIVES. An example of a semelfactive (cyclic achievement according to Croft [2012: 44], who also uses the word "semelfactive" in parentheses with reference to this type) is the light blinked / ogon' blesnul (Croft 2012: 52). I have amended the name of this type because by calling them CYCLIC ACHIEVEMENTS, Croft gives the false impression that SEMELFACTIVES are a type of ACHIEVEMENT. This is not true since they do not normally yield any change to a new state, but instead usually signal a return to the original state. Russian is very productive in creating Single Act Perfectives using the (non-disappearing) -(a)nu suffix as in čixnut' 'sneeze once', and the prefix s-, as in sglupit' 'do one stupid thing'. My diagram shows a single cycle, as if from the repeated cycles in the CYCLIC ACTIVITY, that is bounded on both sides (and thus distinct also from the Annulled Activity). The SEMELFACTIVE and CYCLIC ACTIVITY types are related via aspectual conversions in Russian (see section 4.1).

The Russian delimitative/perdurative, expressed by Complex Act Perfectives, is diagrammed as a bounded line segment that can be straight or curvy or zig-zag. The straight line refers to perfectives formed from verbs expressing states as in *pobyt* 'be (someplace) for a while', *požit* 'live for a while'. The curvy line corresponds to perfective verbs formed from verbs expressing heterogeneous activities like *porabotat* 'work for a while', *prorabotat* '(mnogo let) 'work (many years)',

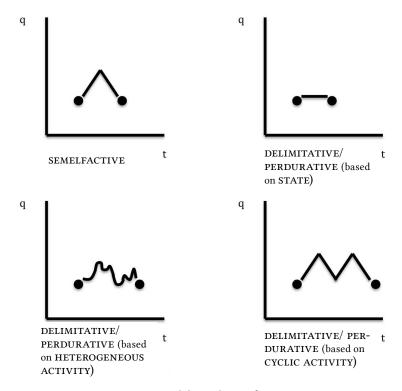


Figure 9. Janda's Atelic Perfective Types

whereas the zig-zag line is for perfectives from verbs expressing CYCLIC ACTIVITIES as in *počixat'* 'sneeze for a while', *prokričat'* (*vsju noč'*) 'yell (all through the night)'.

The last group of perfectives are the phasal perfectives, which include INGRESSIVE and TERMINATIVE types, expressed by Complex Act Perfectives, plus the PUNCTUAL PERCEPT type, diagrammed in Figure 10 (on p.page 14). The phasal perfectives focus on the transitions at either end of a situation. In Russian we have INGRESSIVES such as <code>zaigrat'</code> 'start to play' and <code>TERMINATIVES</code> such as <code>otsidet'</code> (<code>srok v tjur'me</code>) 'complete (a term in jail) [lit. finish sitting]'. These are hybrid aspectual types, combining features found in both imperfective and perfective types, and this is reflected in their aspectual contours. The <code>INGRESSIVE</code> contour begins with a bounded point, then has a transition, and then an unbounded continuation, which might be a state or an activity (usually an undirected activity). The <code>TERMINATIVE</code> has the same composition, but in the opposite order.

The Russian Punctual Percepts (sometimes called "punctual atelics") are a peculiar group of verbs best represented by *uvidet* 'see, catch sight of', *uslyšat* 'hear'. These involve a bounded onset transition at the moment when something comes into view or earshot, and then a state (diagrammed as short, but might be longer)

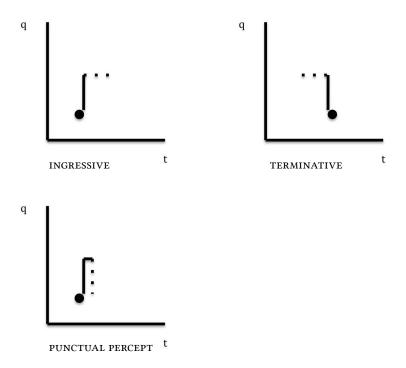


Figure 10. Janda's phasal perfective types: INGRESSIVE, TERMINATIVE, PUNCTUAL PERCEPT

when the seeing or hearing takes place, followed by an unprofiled return to the original state.

3.1. Perfective Ambiguities

Figure 11, opposite, details the ambiguities that we find among the perfective types in Russian. Note that the lines in this semantic map can refer to the possibility of shared form either in terms of entire verbs or perfectivizing morphology (prefixes, -nu suffix). The overall orientation of this map matches **that** of the imperfective types in **that** types **that<Used 3 times in one sentence; consider revising>> are** more directed or telic are to the right. Perhaps the most important ambiguity is not mentioned by Croft, namely the ambiguity between ACCOMPLISHMENTS and ACHIEVEMENTS. As Dahl (2013: 70–71) points out, any ACHIEVEMENT can potentially be broken down into a more complex structure with phases that show incremental progress. This ambiguity is made explicit in the Russian aspectual system by the fact that many Natural Perfectives and Specialized Perfectives routinely express both ACCOMPLISHMENTS and ACHIEVEMENTS. The relationship between them can be thought of as a scale. However, there are relevant tendencies that apply when form-

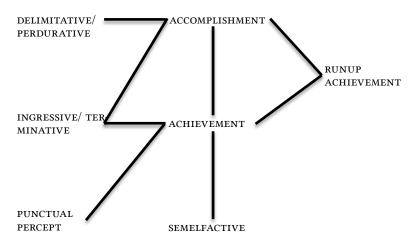


Figure 11. Perfective Ambiguities

ing secondary imperfectives from these perfectives (see section 4.2). The Runup Achievement (also termed "incremental accomplishment"; Croft 2012: 62) is an example of a transition between an achievement and an accomplishment. The Russian sentences in examples $(1-2)^2$ illustrate this part of the semantic map. The verb ugovorit 'convince' is most likely interpreted as an achievement in example (1), but in example (2) the adverb s trudom 'with difficulty' suggests that multiple attempts were made. This could be interpreted either as an accomplishment or as a runup achievement.

- (1) Snova prixodil Semenov. Ugovoril menja vyjti vo dvor. Predložil zakurit', no ja otkazalsja. [Andrej Gelasimov, Nežnyj vozrast (2001)] 'Semenov came again. He convinced me to come outside. He offered me a cigarette, but I refused.'
- (2) S trudom ugovoril ego pojti k nam, pomog podnjat'sja po lestnice.

 [Viktor Astaf'ev, Zatesi (1999) // Novyj mir, 2000]

'It took some doing to convince him to come to visit us, and I helped him up the stairs.'

One can find a relationship between ACHIEVEMENTS and SEMELFACTIVES in that there are some verbs that can have both SEMELFACTIVE and RESULTATIVE (ACHIEVEMENT) readings in Russian. *Prygnut* 'jump once' can have a result if one lands in a

 $^{^{2}\,}$ These and all other examples are from the Russian National Corpus.

different place than where one started, as we see in example (3). Similarly *kriknut* 'shout once' can have a resultative interpretation if the shouting produces content, as in example (4).

- (3) On prygnul čerez podokonnik i pobežal v sad.
 - [Jurij Družkov (Postnikov), Volšebnaja škola (1984)]

'He jumped over the windowsill and ran into the garden.'

(4) Admiral kriknul svoe privetstvie gromko...

[K. M. Stanjukovič, "Bereg" i more (1902)]

'The admiral shouted out his greeting loudly...'

The three alternatives for the Delimitative/Perdurative aspectual contour are parallel to the alternatives for the accomplishment type, and these types are related in that the only difference is whether the situation involves progress toward a result or not. The Russian prefix po-straddles these two types, since when combined with imperfective stems that have an undirected activity reading, po-yields verbs with perdurative meaning like porabotat' 'work for a while', počitat' 'read for a while', but when combined with imperfective stems that require a directed activity reading, po-yields Natural Perfectives, an accomplishment meaning like pobelet' 'turn white', pobleknut' 'turn pale'. Note that there is a similar pattern for pro-, which forms perduratives from verbs expressing undirected activities as in proplakat' (vsju noč') 'cry (all through the night)', but Natural Perfectives (expressing accomplishments) from verbs expressing directed activities, as in projasnet' 'clear up'. And note that pro- also forms many Natural Perfectives from imperfective verbs denoting the production of sound and speech, as in prokričat' 'shout'.

The prefix *po*- in addition can have an ingressive reading, particularly when used with determinate motion verb stems, as in *on pobežal v tu storonu* 'he set off running in that direction', as opposed to the use of the same verb in example (3), where it can express an ACCOMPLISHMENT (assuming that the garden is not far from the window). The ingressive, terminative, and punctual percept types are related to achievements in that they contain an achievement component, and they can also share various prefixes.

4. Aspectual Conversions

An important hallmark of the Russian aspectual system is the facility for converting stems from one aspect to the other, as described in Feldstein 2007. However, Feldstein shows that these conversions are anything but random or unrestricted. If a model is to be useful, it should give us insights into the patterns of aspectual con-

version. This section first examines the perfectivization of imperfectives, then the imperfectivization of perfectives, and then takes up some special patterns. I focus on the most typical relationships among aspectual types here; this does not exclude other more marginal types (some of which are mentioned above).

4.1. Perfectivization Patterns

Table 1 presents the most common perfectivization patterns in Russian. In this table the ACCOMPLISHMENT, ACHIEVEMENT, and RUNUP ACHIEVEMENT types are treated together (ACCOMP/ACHIEVEMENT) since they are not distinct from each other from the perspective of perfectivization patterns. The first column in the table lists the imperfective aspectual types, and the second column lists the perfective types that are most commonly derived from each imperfective type. The third column gives an illustrative example of a perfectivized verb. Of course we must keep in mind that the imperfective types refer to situations, but the verbs that express those situations in Russian are often ambiguous (see section 2.1). Therefore the flexibility for actual verbs is somewhat greater.

Table 1. Perfectivization Patterns in Russian

Imperfective type	Perfective type	Example of derived perfective verb
STATE	DELIMITATIVE/PERDURATIVE	probyt' 'spend some time '
	INGRESSIVE/TERMINATIVE	otsidet' 'sit out to end'
	PUNCTUAL PERCEPT	uvidet´ 'see'
HETEROGENEOUS ACTIVITY	ACCOMP/ACHIEVEMENT (Specialized Perfectives)	vyrabotat´ 'work out'
	DELIMITATIVE/PERDURATIVE	porabotat' 'work for a while'
	INGRESSIVE/TERMINATIVE	zaigrat´ 'begin to play'
CYCLIC ACTIVITY	SEMELFACTIVE	maxnut' 'wave once'
	DELIMITATIVE/PERDURATIVE	poprygat' 'jump for a while'
	INGRESSIVE/TERMINATIVE	začixat´ 'start sneezing'
ANNULLED ACTIVITY	SEMELFACTIVE	sxodit´ 'walk someplace and come back once'
DIRECTED ACTIVITY	ACCOMP/ACHIEVEMENT	pobleknut' 'fade'
	(Natural Perfectives and	
	Specialized Perfectives)	

We can glean many generalizations from this table. Imperfective verbs expressing states, cyclic activities, and annulled activities do not typically form telic perfectives. These are formed from verbs expressing heterogeneous activities and directed activities. Verbs expressing both heterogeneous activities and directed activities can form Specialized Perfectives. However, only verbs expressing directed activities form Natural Perfectives; heterogeneous activities need to be "directed" by a prefix in order to form a telic perfective. Heterogeneous activities are the only imperfective type that routinely yields both telic and atelic perfectives. Only cyclic activities and annulled activities are associated with semeleactives.

4.2. Imperfectivization Patterns

The imperfectivization of perfectives presents a relatively simpler system since only verbs that express achievements and accomplishments are normally eligible to be imperfectivized in Russian, and these yield only three imperfective types: directed activity as in *perepisyvat' stat' ju'* rewrite the article (be in the process of rewriting), cyclic activity as in *podpisyvat' dokumenty* 'sign documents (one after another)', or annulled activity as in *Kto otkryval okno*? 'Who opened the window (though it is now closed)?'.

Telic perfective verbs that tend to be construed as ACCOMPLISHMENTS (like *perepisat*' which generally takes some time) tend to create directed activities when imperfectivized, whereas perfective verbs that are usually construed as ACHIEVEMENTS (like *podpisat*' which is very short in duration and is done repetitively) tend to yield CYCLIC ACTIVITIES. However, in principle, any given secondary imperfective can have both interpretations, as we see in examples (5–6). Here the secondary imperfective *nadevat*' 'put on' is interpreted as a directed activity in example (5), but as a CYCLIC ACTIVITY in example (6).

- (5) Medlenno nadevala teatral'nyj kostjum, zagljadyvala v tetradku s rol'ju. [Aleksej Ščeglov, *Faina Ranevskaja: Vsja žizn*' (2003)]
 - 'She was slowly putting on her theater costume and peeking into the booklet with the script.'
- (6) Pomnju, v detstve, prodolžala princessa, na maskarady mat' často nadevala mužskoj kostjum.

[Èdvard Radzinskij, Knjažna Tarakanova (1999)]

"I remember that in my childhood," continued the princess, "mother often put on a man's suit for masquerades."

When a secondary imperfective has a CYCLIC ACTIVITY interpretation, the contour of the cycles may vary since they could be understood as an unbounded iteration of any kind of perfective type (ACCOMPLISHMENT, ACHIEVEMENT, SEMELFACTIVE, etc.).

4.3. Some Special Kinds of Verbs

Russian aspectual morphology is quite flexible, allowing considerable creativity in the combination of derivational morphemes. However, I argue that these special kinds of verbs do not present us with any further types since they can be understood in terms of the aspectual contours described above.

Sometimes it is possible to combine the semelfactive << small caps? >> -nu suffix with a prefix that gives an added lexical meaning to a stem as in *vyprygnut* 'jump out once', *vskriknut* 'cry out once'. Such verbs can be called Specialized Single Act Perfectives (Makarova and Janda 2009). These verbs are usually construed as achievements, and indeed regularly form secondary imperfectives (with cyclic activity interpretations) such as *vyprygivat*, *vskrikivat*; however, they can be construed as semelfactives. In a sense they are thus similar to the Single Act Perfectives like *prygnut* (see example (3) in section 3.1) which are also ambiguous between semelfactive and (resultative) achievement readings, with the proviso that the Specialized Single Act Perfectives tend to prefer the achievement reading, while the Single Act Perfectives tend to prefer the semelfactive reading (and tend to avoid the formation of secondary imperfectives).

Sometimes it is possible to add more than one prefix to a verbal stem, resulting in "stacked prefixes" as in *pereugovorit* 'persuade again', *popodpisyvat* 'sign documents for a while'. While prefix stacking has attracted a lot of attention from linguists (Svenonius 2004, Ramchand 2004, Tatevosov 2008, Reynolds 2013), it does not give us any new aspectual contours since these verbs can be understood in terms of the types presented above. For example, *pereugovorit* 'persuade again' behaves like a Specialized Perfective, with similar Achievement/Accomplishment ambiguities as we find for *ugovorit* '(see section 3.1, examples (1–2)), and *popodpisyvat* 'sign documents for a while' is a Complex Act Perfective with the Delimitative aspectual contour.

Russian shows some limited productivity in the formation of habitual verbs with the *-yva/-iva* suffix, as in *siživat*' 'sit repeatedly, be in the habit of sitting', *xaživat*' 'go repeatedly, be in the habit of going someplace'. The habitual verbs are ambiguous between STATES and CYCLIC ACTIVITIES, similar to many other imperfective verbs (see section 2.1).

5. Conclusion

With some modifications, Croft's model of aspectual contours is a useful means for visualizing the Russian aspectual system. It highlights many important relationships between different types that are reflected in the use of morphological markers. This model can help us to organize questions surrounding aspectual conversions, such as: What kinds of imperfective verbs form what kinds of perfective verbs, and what kinds of perfective verbs form what kinds of secondary imperfectives? This revised model is flexible enough to account even for creative and marginal uses of Russian aspectual morphology. The relationships between the verbs and the aspectual contours they can express are necessarily complex, primarily due to various ambiguities. Further usage-based investigations (using corpus and/ or experimental data) are needed to tease out the details of these relationships.

One insight that emerges clearly in this model is the foundational role that the spatial paths of motion expressed by the indeterminate and determinate motion verbs play in the Russian aspectual system, a point I have argued for previously (Janda 2009b). These spatial paths are essential building-blocks for the aspectual contours representing this system, since all activities, accomplishments, and semelfactives are definable in terms of metaphorical extensions from those paths, ad these paths are also relevant to the Delimitative, Ingressive, and Terminative types.

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