# Temporal Characteristics of Japanese Verbs from the Contrastive Perspective

#### Abstract

In this study we investigate an alternative way to look into the aspectual properties of Polish and Japanese verbs from the contrastive perspective. The analysis is based on a formationally motivated classification of Polish aspect forms put forward in Młynarczyk (2004). Polish verbs are divided into five classes exhibiting a high degree of correspondence with the Vendlerian verb categories, being also compatible with the main stream accounts of Japanese aspectual meanings. In the core part of the paper, verbal forms of Polish and Japanese are tentatively contrasted within the grid of 15 Aktionsarten yielded by the above verb classes.

**Keywords:** linguistics, Japanese, Japanese-Polish contrastive analysis

#### Introduction

This paper outlines a new approach to the contrastive analysis of verbal aspect and Aktionsart in Polish and Japanese. The main theoretical problem in the comparative studies juxtaposing the temporal properties of Polish and Japanese verbs is the incompatibility of the conceptual frameworks applied to the two languages. This study utilizes a recent analysis proposed by Młynarczyk (2004) to establish as much correspondence as possible between aspectual forms of Polish verbs and their Japanese counterparts. The paper is divided into three parts. First, a few remarks on the relation between aspect and Aktionsart will be presented along with a brief discussion of the most prominent studies on aspect in both languages. In the second part, some cross-linguistic studies on Polish verbal aspect will be discussed to demonstrate the main theoretical issues typical for such analyses.

Finally, in section three, a possible framework will be presented for a comprehensive contrastive analysis of Polish and Japanese verbal aspect.

## 1. Aspect and Aktionsart

The distinction between aspect and Aktionsart initially arose in the field of Slavic and German linguistics, being rather foreign to the Japanese linguistic tradition. Agrell (1908) defined Aktionsart as the semantic functions of verb forms that express the way in which an action is accomplished in a more precise manner than the perfective-imperfective aspectual opposition, based solely on the criterion of completion of a given action or process. In this study, aimed at bringing together the two languages traditionally analyzed in different frameworks, aspect and Aktionsart will be seen, along with tense, as parts of the temporal characteristics of verbs. The following subsection outlines the relation between aspect and Aktionsart observed in Polish verbs.

#### 1.1. Aspect and Aktionsart in Polish

Apart from some exceptions, such as modal verbs, Polish verbs obligatorily form aspectual pairs consisting of a perfective and imperfective member (Polish *tryb dokonany* – *tryb niedokonany*), as can be seen in the following examples:

- (i) Janek uczył się, ale się nie nauczył.

  lit. 'Johnny studied, but has not studied enough (to the extent of being prepared for the test)'
- (ii) Pracuję już cały dzień, popracuję jeszcze trochę i pójdę do domu. 'I have worked all day already, let me work a bit more and go home'.

Imperfective verbs can occur in present, past, and future forms, while the perfective ones can have past or future tense. Prefixation, suffixation and morphonological changes are the morphological mechanisms that lead to aspectual forms. The nature of these formational processes has been subject of some controversy, voiced by Czochralski (1975) among others, that was extensively discussed in Młynarczyk (2004).

Imperfective Perfective	
zielenieć 'to become green'	zzielenieć 'to have become green'
czytać 'to read'	przeczytać, poczytać 'to have read'
klikać 'to click'	zaklikać, kliknąć, poklikać 'to have clicked'

As can be seen from the above table, there is not always a one-to-one correspondence between the imperfective and perfective forms, which makes it more appropriate to speak about aspectual tuples or series rather than pairs in the case of majority of Polish verbs. In the current analysis, Aktionsart will be seen as a more fine-grained semantic distinction within the aspectual opposition, such as between the three forms  $zaklika\acute{c}$ ,  $klikn\acute{q}\acute{c}$  and  $poklika\acute{c}$ , all being perfective but expressing different distributions of the event of clicking on the time axis.

Due to the introductory character of this paper, some important theoretical problems are left out here for the sake of brevity, such as the difference between affixation and suffixation and their role in the formation of aspectual forms. For example, the verb <code>jeść</code> 'to eat' can yield a variety of forms, such as <code>zjeść</code> 'to have eaten', <code>podjeść</code> 'to eat a bit', <code>przejeść</code> 'to fritter away', <code>nadjeść</code> 'to take a bite out of sth', <code>wyjeść</code> 'to eat sth out of sth/eat up everything' etc. Distinguishing between the aspectual forms and separate lexical entries can be carried out by means of diagnostic tools such as secondary imperfectivisation.

The list of Aktionsarten occurring in the accounts of Polish most typically encompasses the following classes: inchoative, ingressive, terminative, effective, resultative, iterative, momentanous, durative, intensive semelfactive, among others, but there is no list of semantic properties that would be unanimously accepted. Further examples of the Aktionsarten of Polish will be presented in section 2.

#### 1.2. Aspect in Japanese

In his classical account of the Japanese aspectual system Kindaichi (1950, 1976) classified Japanese verbs into the following categories: stative verbs (*zyootai doosi*), continuative verbs (*keizoku doosi*), instantaneous verbs (*syunkan doosi*), and 'type four' (*dai yonsyu no doosi*) verbs. The first three classes correspond to the Vendlerian (1957) categories of States, Activities and Achievements, whilst the fourth one is based on the criterion of co-occurrence of a verbal gerund with the *te-iru* construction. Below are some examples of verbs belonging to the above categories (cited after Tsujimura 1996).

Stative aru 'be', dekiru 'can do', hanaseru 'can speak', mieru 'be visible',

yoo-suru 'require'

Continuative yomu 'read', kaku 'write', warau 'laugh', utau 'sing', aruku 'walk',

miru 'look', nomu 'drink', osu 'push', hataraku 'work'

Instantaneous sinu 'die', kieru 'turn off', sawaru 'touch', kimaru 'decide', sameru

'wake', hazimaru 'begin', tootyaku-suru 'arrive'

Type 4 sobieru 'tower', sugureru 'be outstanding', zubanukeru 'be outstanding',

arihureru 'be common'

The analysis based on the criterion of co-occurrence with the *te-iru* form has been further developed by a number of researchers, including Ogihara (1998). More recently,

an analysis proposed by Kiyota (2008) in his comparative account with Salish brought a more detailed division within the class of states.

- 1. Homogeneous states: iru 'be/exist', aru 'be/exist', dekiru 'be able to'
- 2. Inchoative states: tukareru 'get tired', okoru 'get mad'
- 3. Activities: aruku 'walk', hataraku 'work', benkyoosuru 'study'
- 4. Accomplishments: naosu 'repair s.t.', tateru 'build s.t.'
- 5. Achievements: tuku 'arrive', todoku 'reach', mitukaru 'get found'

Other important accounts dealing with aspectual properties of Japanese predicates include Fujii (1978), Jacobsen (1984), Kudo (1995), and Nishiyama (2006).

## 2. Cross-linguistic studies on Polish aspect

The existing contrastive accounts on Polish aspect can be divided into three categories: (i) in the comparative studies with other Slavic languages (e.g. Schuyt 1990), Polish exhibits a very high degree of morphological and semantic parallelism with differences due to different paths of historical development of Slavic languages; (ii) comparative studies analyzing Polish against the background of other Indo-European languages, e.g. Czochralski (1975) on German; (iii) least frequently, the Polish aspectual system is also compared with non-Indo-European languages, e.g. Majewicz (1985) on Japanese. In the following part of the section, the two latter studies will be briefly presented.

### 2.1. Polish-German contrastive study by Czochralski (1975)

This study, being a contrastive analysis treating Polish and German, is one of the most robust accounts of Polish aspect that have been proposed to date. The empirical material used for supporting the analysis consists of a corpus of about 9000 Polish verbs. The Aktionsarten of Polish are divided into two groups: perfective and imperfective ones:

#### 1. Perfective Aktionsarten:

- (a) resultative czytać 'lesen' przeczytać 'durchlesen'; robić 'machen' zrobić 'fertigmachen'
  - 'Reperowałeś rower, ale go nie zreperowałeś'.
  - 'Du warst eine Zeitlang mit dem Reparieren des Fahrrads beschäftigt, bist aber damit nicht fertig geworden'.
- (b) ingressive: lecieć 'fliegen polecieć 'losfliegen'; strajkować 'streiken' zastrajkować 'in den Ausstand treten'
- (c) delimitative: czytać 'lesen' poczytać 'eine Zeitlang lesen'; grzeszyć 'sündigen' pogrzeszyć 'ein paar Sünden begehen'
- (d) distributive: gubić 'verlieren' pogubić '(alles) nacheinander verlieren'

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- (e) evolutive: tańczyć 'tanzen' roztańczyć się 'sich eintanzen'
- (f) partially resultative: leczyć 'kurieren' podleczyć 'teilweise auskurieren'

#### 2. Imperfective Aktionsarten:

- (a) **iterative**: *być* 'sein' *bywać* 'zu sein pflegen', *pisać* 'schreiben' *pisywać* 'ab und zu mal schreiben'
- (b) comitative: grać 'spielen' przygrywać 'zu etwas spielen'
- (c) extended iterative: stękać 'ächzen' postękiwać 'öfters ein bisschen ächzen'

Czochralski presents the following functional characteristics of aspect in Polish based on three semantic distinctions.

Perfective		
instantaneous, non-durative		
semelfactive, non-iterative		
resultative, non-preresultative		

Imperfective durative, non-instantaneous iterative, non-semelfactive preresultative, non-resultative

In this analysis, Aktionsarten of Polish differ from aspects with respect to the distribution of the above properties. In the case of an aspectual opposition, the verbs are ascribed different sets of properties, while in the case of Aktionsarten the differences are based on single features.

#### 2.2. Polish-Japanese analysis by Majewicz (1985)

This comparative study summarizes the views on Japanese and Polish aspect, discussing the temporal properties of verbal forms occurring in the two languages. The aspectual categories of Japanese and their morphological markers as well as the aspectual semantic classes of Polish are summarized below.

#### Japanese

Aspectual category	Markers
Progressive	-te iru, -te oru, -te iru tokoro-da, -te iku, -te kuru, tsuzukeru,
	-tsuzuku, -tsutsu aru
Resultative	-te aru, (-te iru), -te oku, -ta{tokoro/bakari}da, -ta koto-ga aru,
	-tate (da)
Intermittent	-taritari suru
Perfective	-te shimau, -kiru, -ōseru, -tsukusu, -ageru, -tōsu, -hateru
Prospective	-ō to suru, -u{tokoro/bakari}-da, -kakaru
Habitual	-tsukeru, -nareru, -narawasu, koto-ni shite iru, koto-ga aru
Iterative	-kaesu
Ingressive	-hajimeru, -dasu, -kakeru, -someru, -te kuru
Terminative	-owaru, -yamu, -yameru, -sasu

*Polish*: aspectually unmarked forms, imperfective, durative, iterative, perfective, ingressive, future perfective and future ingressive.

As can be seen from the two accounts presented above, there are several theoretical problems that need to be addressed in a comprehensive and adequate contrastive analysis of Polish and Japanese verbal aspect. Firstly, the question arises of how many Aktionsarten actually exist in Polish, since the analyses proposed by different authors vary with respect to their theoretical assumptions. Also, what would be particularly desired is a method of capturing the correspondence between the morphological form of verbs (affixation, morphological changes) and their aspectual and Aktionsart-related properties that does not require relying on semantic intuitions. In addition, in the case of Polish, the issue of polysemy of some aspectual morphs (eg. *po*-) needs to be addressed. In the following section, we demonstrate the view that the analysis proposed by Młynarczyk (2004) can indeed serve as a theoretical framework for a contrastive analysis of the temporal properties of Polish and Japanese verbs in a way that quite reasonably addresses the issues mentioned above.

## 3. Contrastive analysis based on Młynarczyk (2004)

In this section, we first outline the account that will serve a theoretical base and subsequently attempt a preliminary contrastive analysis that would consist in actual confronting of the corresponding verbal forms of the two analyzed languages.

#### 3.1. The classification of Polish verbs

In her 2004 thesis, Młynarczyk provides a very thorough overview of the existing accounts of verbal aspect, looking in particular into the studies that deal with Polish. The biggest contribution of the analysis by Młynarczyk is that it systematizes the seemingly unpredictable and complex system of Polish verbal aspect in a way that is based on the morphological (formational) criteria, but at the same time induces a semantic classification corresponding to the theories proposed by Vendler and Dowty (1972). This fact makes the classification compatible with the studies on the Japanese aspect, which paves the way to a more adequate contrastive analysis of the two languages.

As the table below shows, Polish verbs are divided into five classes, based on the way the members of the aspectual pairs are formed. The morphological processes involved in the formation are prefixation by empty prefixes (ep), prefixation by the delimitative prefix po-, stem alternation -nq-, and morphonological change (mpc), such as vowel insertion, vowel change, suffix insertion and suffix change. Empty prefixes are morphs that convey solely the aspectual meaning without contributing any other semantic components to the overall meaning of the verb they are attached to. This group typically contains such morphs as prze-, u-, na-, and z-, among others.

	Example	ep	ро-	-nq-	mpc
Class 1	wierzyć 'believe'	uwierzyć			
Class 2	grać 'play'		pograć		
Class 3	gotować 'cook'	ugotować	pogotować		
Class 4	stukać 'knock'	zastukać	postukać	stuknąć	
Class 5	zamknąć 'close'				zamykać

As we stated above, this formationally-driven classification actually induces semantic distinctions that are not imposed *a priori*, but can be related in a straightforward manner to the morphological properties of the verbal forms. The five semantic classes are summarized in the following table.

	ep	po-	-ną-	mpc
Class 1. States/gradual transitions	yes			
Class 2. Processes		yes		
Class 3. Culminating processes	yes	yes		
Class 4. Unitisable processes	yes	yes	yes	
Class 5. Culminations				yes

The final preparatory step in creating the framework for Polish-Japanese analysis consists in deriving all the possible Aktionsarten occurring in the above five classes. As can be seen, the total number of all such aspectual subclasses amounts to 15. This grid of Aktionsarten will serve a basis for the subsequent contrastive analysis.

#### 3.2. Outline of Polish-Japanese contrastive analysis

This section contains a tentative attempt of a contrastive analysis carried out within the grid of the 15 Aktionsarten obtained from the analysis by Młynarczyk. The Aktionsarten of Polish yielded by the above classification will be marked as  $A_1 - A_{15}$ .

#### Class<sub>1</sub> – States

**A<sub>1</sub>:** stative, Imperfective *nienawidzić* 

Taro nienawidzi Hanako.
 Taroo wa Hanako o nikumu / nikundeiru.

'Taro hates Hanako'.

## A<sub>2</sub>: Perfective

ep znienawidzić

(1') Taro znienawidził Hanako.

Taroo wa Hanako o nikunda / nikumihazimeta / <sup>?</sup>nikumidasita / <sup>?</sup>

## **Class<sub>1</sub> - Gradual transitions**

# A<sub>3</sub>: Imperfective

mądrzeć

(1a) Taro mądrzeje (każdego dnia).

Taroo wa (mainiti) kasikoku natteiru/naru/naritutu aru.

'Taro gets smarter (every day)'.

# A<sub>4</sub>: Perfective

ep zmądrzeć

(1a') Taro zmadrzał.

Taro owa kasikoku natta/nattekita.

'Taro has become smart'.

#### Class<sub>2</sub> - Processes

## A<sub>5</sub>: Imperfective

pracować

(2) Taro pracuje.

Taroo wa hataraiteiru/hataraku.

'Taro works/is working'.

### **A<sub>6</sub>:** Perfective

po- popracować

(2') Taro popracował (godzinę) (i poszedł na spacer).

Taroo wa (itizikan) hataraita (ato sanpo ni itta).

'Taro worked (for an hour) (and went for a walk).'

# **Class<sub>3</sub> – Culminating processes**

#### A<sub>7</sub>: Imperfective

czytać

(3) Hanako czyta gazetę. / Hanako czyta gazety.

Hanako wa sinbun o yondeiru / Hanako wa sinbun o yomu/yondeiru.

'Hanako reads a newspaper' / 'Hanako reads newspapers'.

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## **A<sub>8</sub>:** Perfective

ep przeczytać

Hanako przeczytała gazetę.

Hanako wa sinbun o yonda/yondesimatta/yomiowatta/yomikitta/yomitukusita/ yomiageta/yomito'osita/yomihateta.

'Hanako has read a newspaper'.

# $A_9$ : perfective<sub>2</sub>

po- poczytać

(3") Hanako poczytała gazetę (i zabrała się do pracy).

Hanako wa sinbun o (sibaraku/sukosi) yonda (ato sigoto ni torikatakkta).

'Hanako read a newspaper (for a while) (and started working)'.

## Class<sub>4</sub> – Unitisable processes

## **A**<sub>10</sub>: Imperfective

kwakać

(4) Kaczka kwacze.

Ahiru ga gaa-gaa naku/naiteiru.

'The duck quacks / is quacking'.

## **A**<sub>11</sub>: Perfective

ep zakwakać

(4') Kaczka zakwakała.

Ahiru ga gaa-gaa naita/nakidasita/nakihazimeta/#naitekita/#nakikaketa.

'The duck quacked'.

# A<sub>12</sub>: po- pokwakać

(4") Kaczka pokwakała.

Ahiru ga (sukosi/sibaraku) gaa-gaa naita/?naiteita.

'The duck quacked a bit / for a while'.

# A<sub>13</sub>: mpc kwaknąć

(4"") Kaczka kwaknęła.

<sup>?</sup>Ahiru wa ikkai gaa-gaa naita.

Ahiru wa gaa(t)to naita. (cf. *koro-koro korogatta* vs. *korori-to / koron-to korogatta*) 'The duck quacked once'.

### Class<sub>5</sub> – Culminations

#### A<sub>14</sub>: Perfective

dostać

(5a) Hanako dostała książkę.Hanako wa hon o moratta.

'Hanako got a book'.

#### wrócić

(5b) Hanako wróciła do domu.

Hanako wa ie ni kaetta.

'Hanako came back home / has come back home'.

## A<sub>15</sub>: Imperfective

mpc dostawać

(5a') \*Hanako dostawała książkę.

\*Hanako wa (issatu no) hon o moratteita/moraitutuatta/moraituduketa.

"Hanako was getting a book".

#### wracać

(5b') Hanako wracała do domu.

Hanako wa ie ni #kaetteita/kaeritutuatta. (cf. kaeru totyuu datta)

'Hanako was going back home'.

In view of the above examples, the following correspondence between  $Class_1 - Class_5$  and the the aspectual classes of Japanese verbs can be established.

Polish	Japanese
States/gradual transitions	States
Processes	Activities
Culminations	Achievements
Unitisable processes	Semelfactive verb phrases (onomat./ikkai)
Culminating processes	Accomplishments

The only class that is normally not differentiated in the accounts that deal with Japanese are the semelfactive verbs referred to as 'unitisable processes' by Młynarczyk, who looks at them from the 'opposite' side than is usually the case, i.e. departing from the imperfective verbs that can potentially yield semelfactive forms. These meanings cannot be encoded in Japanese by means of verbal morphology and need to be obtained from adverbial expressions as in the examples above.

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Despite its many advantages, the analysis has also some weak points. Firstly, it is unidirectional, and therefore does not show the whole picture. Some aspectual categories are not marked in the Polish verbal morphology (e.g. progressive), therefore, for a class of cases, no Japanese-Polish formational correspondence can be established. Secondly, some verbs are not covered by class<sub>1</sub> – class<sub>5</sub> (e.g. iterative/habitual, suppletive pairs such as  $bra\acute{c} - wziq\acute{c}$  'to take – to have taken', modal verbs  $m\acute{o}c$ ,  $musie\acute{c}$ ), the analysis needs thus to be supplemented. Finally, an important theoretical issue is the mismatch between the word- and phrase/sentence-level aspect. Much more can be said about the temporal characteristics of bare verb forms in Polish than in Japanese where analysis of the whole phrase/sentence is necessary.

#### Summary

In spite of the tradeoff between the simplicity and regularity on one hand, and range of coverage on the other, the formationally-driven classification proposed by Młynarczyk (2004) seems to be successfully applicable in a contrastive analysis of Polish and Japanese verbal aspect. In order to account for all possible Aktionsarten of Polish, the 15 eventualities yielded by the classification should be analyzed and the analysis should be complemented by the verb classes that are not covered. A classification based solely on the morphological properties of the verbal forms is fragmentary by its nature, and any comprehensive account covering the event structure of verbs will have to rely on semantic intuitions as well. Finally, it goes without saying that the general idea presented in this paper requires further development, based on substantial empirical material from both languages.

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