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Introduction

The following grammatical sketch of Polish, designed for use on the Internet, attempts to cover many of the important points of Polish sounds and spelling and morphology, plus selected points in the areas of syntax and usage. It is neither complete nor designed for a sophisticated linguistic audience. Rather than use IPA (International Phonetic Association) or scholarly symbols, standard Polish orthography has been used wherever possible in discussions of the sound system. Nevertheless, I have tried to make all statements accurate, while deviating, in some respects, from traditional school grammars. For example, the morphological discussion of cases according to Roman Jakobson's morphological studies: nominative, accusative, genitive, locative, dative, instrumental--in preference to the older ordering of nominative, genitive, dative, accusative, instrumental, locative. Jakobson's ideas have also influenced the presentation of the Polish verb, which is based on the notion that the entire verbal paradigm can be derived from a single stem. Although these Jakobsonian ideas are already found in many scholarly treatments of Polish and other Slavic languages, they are still somewhat rare in presentations designed for general audiences. Thus, this grammatical sketch tries to occupy a middle ground, not attempting to be comprehensive, but aiming at accuracy in its descriptions. While not a substitute for a textbook, it might provide a useful review of the sound system and Polish inflection.

Let us now briefly touch on some of the facts about the Polish language of today. Polish, of course, is the official state language of the Polish Republic (*Rzeczpospolita Polska*), which, according to the 1994 census, had a population of slightly under 40 million. The vast majority of the population is ethnically Polish (98.7%). Ukrainians constitute slightly more than half of one percent, while other ethnic groups make up the rest. Many Poles (referred to as *Polonia*) also reside outside the borders of Poland. Significant numbers can be found in the United States, Canada, and Australia, as well as in the neighboring countries of Lithuania, Ukraine, and Belarus.

The Polish language belongs to the West Slavic branch of the Slavic language family. Other West Slavic languages are Czech, Slovak, and Upper and Lower Sorbian. The earliest written records of the Polish language date back to the end of the 13th century A.D. Earlier Polish writing exists, but only in the form of individual Polish words within Latin texts. The very important cultural and religious connection to Latin is related to the fact that Poland, though geographically in Central Europe, is Roman Catholic. While the Orthodox Slavs (Russians, Ukrainians, Serbs, Bulgarians, and Macedonians) use the Cyrillic alphabet of the older Church Slavonic texts, the Roman Catholic Slavs chose the Latin alphabet. The 16th century marks the period of the ascendancy of the Polish language as a written language in its own right. Polish uses the Latin alphabet to this day, but since it has many sounds which were lacking in Latin, many special symbols and combinations of symbols have had to be devised to render them. In the realm of grammar, Polish is marked by a complex inflectional morphology: a large inventory of grammatical forms and a significant number of stem alternations, conditioned by a wide variety of grammatical endings. While Polish is perhaps the most complex Slavic language in terms of its consonant and vowel alternations, its accentual system is one of the simplest, with a regular stress on the next-to-last syllable of the word and no distinction between long and short vowels.

Poland has had a turbulent history, several times losing and then regaining its national autonomy. The Partitions of 1772, 1793, and 1795 divided Poland among Prussia, Austria, and Russia. Obviously,

the Polish language played a key role in keeping the idea of a Polish nation alive during these periods. In 1918, after World War I, Poland was reconstituted as an independent nation, only to lose it and fall under both German and Soviet occupation during World War II. After a brief period of true independence following World War II, Poland entered the Cold War period of domination by the Soviet Union, during which it languished under Soviet style communism for more than 40 years. The era of Soviet domination ended at the beginning of 1990, when Poland changed its official name from the Polish People's Republic to the Polish Republic. In 1999, Poland joined the NATO alliance, an act which would have been unthinkable during its long years of membership in the Soviet-ruled Warsaw Pact.

Chapter 1. Polish Sounds and Spelling

I. The Polish Alphabet and Sounds

Polish uses the Latin alphabet, as does English. However, certain letters have a different sound value in Polish, and certain groups of letters are used in ways unknown to English. In addition, a series of diacritical marks are used in Polish spelling. This is connected with the fact that Polish has many more consonants than English and many of the other languages which use the very same Latin alphabet. The additional symbols allow Polish to continue to use the same basic alphabet as English and many other languages of the world. Polish symbols (including single letters and combinations of two letters, known as digraphs) can be divided into those which represent sounds more or less similar to General American English counterparts, and those which cannot be easily compared to American English sounds. It should be noted that when “English” sounds are referred to without further qualification, General American English will be understood as the regional variety.

A. Polish letters which represent sounds roughly comparable to those of English.

Polish Letter	Polish Example	English Example
<i>a</i>	<i>g<u>a</u>zeta</i>	<i>p<u>o</u>t</i>
<i>b</i>	<i>b<u>o</u>k</i>	<i>b<u>i</u>g</i>
<i>c</i>	<i>c<u>e</u>l</i>	<i>it<u>s</u></i>
<i>d</i>	<i>d<u>a</u>j</i>	<i>d<u>i</u>e</i>
<i>e</i>	<i>s<u>e</u>n</i>	<i>s<u>e</u>t</i>
<i>f</i>	<i>f<u>a</u>jka</i>	<i>f<u>i</u>ne</i>
<i>g</i>	<i>g<u>a</u>zeta</i>	<i>g<u>o</u>t</i>
<i>i</i>	<i>m<u>i</u>ła</i>	<i>m<u>e</u></i>
<i>j</i>	<i>j<u>e</u>st</i>	<i>y<u>e</u>s</i>
<i>k</i>	<i>k<u>a</u>wa</i>	<i>sk<u>i</u>n</i>
<i>ł</i>	<i>ś<u>l</u>aba</i>	<i>sw<u>a</u>b</i>
<i>m</i>	<i>m<u>a</u>ła</i>	<i>m<u>o</u>p</i>
<i>n</i>	<i>o<u>n</u>a</i>	<i>n<u>a</u>p</i>
<i>o</i>	<i>b<u>o</u>k</i>	<i>l<u>o</u>re</i>
<i>ó</i>	<i>g<u>ó</u>ra</i>	<i>t<u>oo</u></i>
<i>p</i>	<i>p<u>a</u>n</i>	<i>sp<u>a</u>n</i>
<i>s</i>	<i>st<u>u</u>dent</i>	<i>st<u>e</u>p</i>
<i>t</i>	<i>t<u>e</u>n</i>	<i>st<u>e</u>m</i>
<i>u</i>	<i>t<u>u</u></i>	<i>t<u>oo</u></i>
(The Polish letters <i>ó</i> and <i>u</i> represent the same sound.)		
<i>w</i>	<i>w<u>a</u>ta</i>	<i>v<u>a</u>n</i>
<i>y</i>	<i>syn</i>	<i>s<u>i</u>n</i>
<i>z</i>	<i>z<u>a</u></i>	<i>z<u>oo</u></i>
<i>dz</i>	<i>nod<u>z</u>e</i>	<i>n<u>od</u>s</i>

When learning the pronounce the above Polish sounds, the English speaker must take special care not to pronounce Polish initial *p/t/k* with the aspiration (puff of air) that automatically occurs after these sounds in English, at the beginning of a word. In order to approximate the Polish sound, the English *p/t/k* after *s* can be used as a better model than initial *p/t/k*. In other words, the *p/t/k* of English *spot/stem/skin* are closer to Polish than the same sounds in English *pot/Tom/kin*. Therefore, if an English speaking person pronounces such words as *pot/Tom* in front of a lit match, the flame should be blown out, as a result of the aspiration. This should not happen with the initial *p/t/k/c* of Polish (e.g. *pot/ten/kawa/cała*) or the initial consonants of English *spot/stem/skin*.

B. Polish consonant sounds that are different from English.

The second group of Polish symbols (single letters or digraphs) contains sounds which have no close English counterparts. Therefore, they require more effort and practice on the part of the English-speaking learner. Descriptions of the sounds, together with examples for practice, have been listed in the following sections.

1. The dental/alveolar/palatal series of Polish.

One of the most important consonantal features of Polish sounds and spelling is the fact that the four familiar consonants *t, d, s, z*, each occurs within a series of four consonants. The four series are as follows:

	Dental	Alveolar	Palatal	Palatal Before Vowel
1. <i>t</i> -series	<i>t/c</i>	<i>cz</i>	<i>ć</i>	<i>ci</i>
2. <i>d</i> -series	<i>d/dz</i>	<i>dź</i>	<i>dż</i>	<i>dzi</i>
3. <i>s</i> -series	<i>s</i>	<i>sz</i>	<i>ś</i>	<i>si</i>
4. <i>z</i> -series	<i>z</i>	<i>ż</i>	<i>ź</i>	<i>zi</i>

In numbers one and two, the symbols *t/d* are stops; all others represent affricate sounds, in the dental, alveolar, and palatal places of articulation. An affricate is a sound that is perceived as a single unit by speakers, but consists of two separate consonants, much as English *ch* can be treated as *t* plus *sh*. Row number one is voiceless and number two is voiced (based on presence or absence of vocal cord vibrations). Rows three and four represent voiceless and voiced fricatives, respectively. Similarly, row three is voiceless and row four is voiced. As one can see, the method of spelling the dental, alveolar, and palatal types in each of the series is a bit different. For example, series two uses two letters for the affricate *dż*, but series one uses the single letter *c* for the voiceless variety of that affricate (even though it is phonetically equivalent to *ts*). Likewise, alveolars and palatals can be symbolized either by digraphs (sequences of two letters), by a diacritic over the letter, or a combination of both.

One particularly acute problem for English speakers is caused by the fact that the difference between alveolars and palatals is not used contrastively in different English words, while it is in Polish. In fact, this distinction occurs in all of the four above illustrated series of Polish, so it is very common and important for learning the language properly. Let us take the first series as our first example. Polish *c* alone represents the dental sounds [ts] and is an affricate. Polish *cz*, as in *czasopismo* ‘magazine’, represents a Polish sound reminiscent of the English digraph *ch*, as in *chair*. However, another Polish sound, represented by the letter *ć*, also strikes the English-speaking hearer as a *ch*-sound and similar to the first sound of English *chair*! The difference between these sounds is insignificant for English, but important for Polish. In terms of phonetics, the two sounds differ on the basis of different types of contact of the tongue and the palate. In the case of Polish *cz*, the tip of the tongue contacts the alveolar ridge, located right behind the upper teeth. Therefore, *cz* is referred to as an **alveolar** sound. On the other hand, Polish *ć* displays a long strip of contact between the middle part of the tongue and the palate (located behind the alveolar ridge). Unfortunately, the English *ch* sound can sound similar to either Polish *cz* or *ć*, since there simply is no such distinction in English.

The very same situation of having two different Polish sounds that cannot be distinguished in English applies not only to the Polish consonant pair *cz/ć*, but to *dź/dż*, *sz/ś*, and *ź/ż* as well. The English speaker will often consider that both *dź* and *dż* recall the *g* of *gem*, that both *sz* and *ś* sound like English *ship*, and that both *ź* and *ż* sound like the spelled *z* of English *azure*.

In order to show the difference between the Polish sounds, the following articulatory diagrams¹ first show the tongue position for the continuants (*sz*, *ź*) and for the first component of non-continuants (*cz*, *dż*) of the alveolar series. Then, the palatal continuants (*ś*, *ż*) and first component of non-continuants (*ć*, *dź*) are shown. Only the first components are shown for non-continuants, since they are affricates, rather than stops, and thus consist of a first component stop, and a second component fricative, which appears as the illustrated continuant for the same place of articulation. In other words, a depiction of affricate articulation requires at least two diagrams.

¹ The four articulatory diagrams are adapted from Wierzchowska (1967:95, 147).

Alveolar Series:

Continuants *s*, *z*:



First (stop) component of non-continuants *cz*, *dʒ*:



Palatal Series:

Continuants ś, ź:



First (stop) component of non-continuants *ć*, *dź*:



As noted above, the distinction between the alveolar and palatal sounds of Polish is an extremely important one for the learner to master, since there are many such pairs of sounds that are opposed by this feature. Polish has one of the largest inventories of sounds of this type, with a total of eight. Besides *cz* and *ć*, there are the above illustrated pairs *dź/dż*, *sz/ś*, and *ź/ż*.

1. The Polish digraph *dź* representing an alveolar sound, as in the word *dżem* 'jam', has an initial sound like that of Polish *czas*, except for the fact that it is voiced. But, there is also a similar sounding Polish palatal *dż*, as in *dziki* 'wild', which has a tongue position exactly like that of *ć*, but it is voiced, which means that the vibrations of the vocal cords can be heard during its pronunciation.
2. Voiceless alveolar fricative *sz* occurs in *szary* 'gray'. Palatal *ś*, as in *oś*, differs from *sz* on the basis of palatal/alveolar as well.
3. Voiced alveolar fricative *ż* occurs in *żart* 'joke'. Polish voiced palatal fricative *ź* has the same tongue position as the other palatals *ć/dź/ś*. The word *źle* 'badly' is an example of its use. Notice that the digraph *rz* has the same value as *ź* and that the words spelled *morze* 'sea' and *może* 'he/she can' sound exactly alike. The reason for the difference lies in the histories of the

words with the two kinds of spelling. The diacritic mark (called *kreska* in Polish) shared by *ś/ź/ć* is a symbol which signifies that the place of articulation is palatal.

A very important spelling rule applies to the palatal sounds *ć/dź/ś/ź*. They are written this way, with the diacritic *kreska*, only when no vowel immediately follows them. Otherwise, i.e. when a vowel follows, these palatal sounds are written with no diacritic and the following vowel *i* instead of the mark *_*. Thus, *ć/dź/ś/ź* are always written before consonants and at the end of a word, while *ci/dzi/si/zi* must be written before vowel sounds. In other words, the following spellings are used when palatals are followed by the vowels *a/e/o/u*:

cia	dzia	sia	zia
cie	dzie	sie	zie
cio	dzio	sio	zio
ciu	dziu	siu	ziu

The phonetic value of the above spellings is [ća dźa śa źa], etc., but these phonetic spellings are never used as such in Polish. When a Polish word contains a palatal consonant which is followed by the vowel *i* itself, the *i*-symbol does double duty. It both signals that the consonant is a palatal and also represents its own vowel sound of [i]. Thus, *ci/dzi/si/zi* with no other vowel following are spelled instead of **ći, *dźi, *śi, *źi*, which do not occur in spelling. (Note that the symbol *** is used to show that a combination is incorrect and does not occur.) For example, *ziarno/siano/ciastko* represent the sounds [ź ś ć] before the vowel [a]. The words *zima/siwy/cicho* represent the very same palatal consonants followed by the vowel [i]. Polish spellings *ci/dzi/si/zi* should never be confused with the letters for dental sounds *c/dz/s/z*, since the latter sounds can never be followed by the vowel letter *i* in Polish; similarly, *c/dz/s/z* can be followed by the vowel letter *y*, but the sounds [ć/dź/ś/ź] can never precede *y*, e.g. *ci* 'those' (phonetically [ći], but *cyna* 'tin' (phonetically [tsyna]).

Examples.

A. [cz] vs. [ć]

czapka 'cap'	vs.	ciało 'body'
czas 'time'		ciasto 'dough'
czemu 'what, dative'		ciemno 'dark'
miecz 'sword'		mieć 'to have'
czelo 'cello'		cielak 'calf'
czek 'check'		ciekł (colloquially with silent <i>ł</i>) 'it leaked, masc.'
Czech 'Czech'		ciecz 'liquid'

B. [dź] vs. [dż]

dżem 'jam'	vs.	dzień 'day'
radża 'rajah'		radzić 'to advise'
dżet 'jet'		dzieci 'children'
dżuma 'plague'		dziura 'hole'

C. [sz] vs. [ś]

szara 'gray, fem.'	vs.	siara 'colostrum'
szron 'frost'		środa 'Wednesday'
kasza 'cereal'		Kasia 'Katy'
szach 'Shah'		siak 'that way'
szok 'shock'		sioło 'hamlet'
kosz 'basket'		koś 'mow, impv.'
wiesz 'you know'		wieś 'village'
proszę 'please'		prosię 'suckling pig'

D. [ź]/[rz] vs. [ż]

żarna 'handmill'	vs.	ziarna 'grains'
rzemień 'strap'		ziemia 'land'
żaba 'frog'		ziać 'pant'
żel 'gel'		zielony 'green'
Rzym 'Rome'		zimno 'cold'

2. Other Polish consonant letters which require additional explanation are as follows:

A. Polish symbols *ch* and *h*.

These symbols, as in Polish *chcemy* 'we want', *hasło* 'slogan', represent the *ch* sound often heard in the correct (German) pronunciation of the composer Bach's name. Phonetically, it is a voiceless velar fricative, a sound that might be heard if an English *k* is stretched out in time, so it lasts longer than usual. Polish *ch* and *h* represent the same sound, but the letter *h* is frequently used for words that were not originally Polish, but borrowed from another language. Some examples of these letters are as follows:

chata 'hut'	suchy 'dry'
chłodny 'cool'	ucho 'ear'
hak 'hook'	chudak 'poor wretch'
huk 'roar'	hałas 'din'

B. *l*, as in *nauczyciel*, which requires the usual Polish alveolar pronunciation, i.e. an *u*-shaped tongue tip along the contours of the alveolar ridge, similar to *cz*, except that it is an *l*-sound, known as a **lateral**. It is much closer to the *l* of an English word such as *lean*, rather than the final *l* found in the English word *wall*, which would be quite incorrect for rendering Polish *l*. Remember that the Polish barred *ł* is pronounced like English *w* by most Polish speakers.

Examples of [l] vs. [ł]:

lak 'sealing wax'	vs.	ława 'judicial bench'
lasy 'forest'		łasy 'greedy (for)'
klasa 'class'		kłamać 'to lie'
talk 'talc'		tłusty 'fat'
ból 'pain'		bałwan 'idol'
dali 'they gave (virile)'		dały 'they gave (non-virile)'
chleba 'bread (gen.)'		chłopa 'peasant (gen.)'

C. Polish *ń*, as in *koń*, is a palatal *n*-sound, with a tongue position similar to that of *ć/dź/ś/ź*. It sounds the palatal *n* spelled *ni* in the English word *onion*. In Polish, the use of *i* after *n* performs exactly the same function as after the letters *c/dz/s/z* before vowels, as described above. In other words, *ni/nie/ni/nio/niu* are written instead of **ńi, *ńe, *ńi, *ńo, *ńu*, which do not occur in spelling. The letter *ń* is spelled as such only when palatal [ń] has no vowel immediately following, at the end of a word or before a consonant.

Examples of [n] vs. [ń]:

dnem 'bottom (inst.)'	vs.	dniem 'day (inst.)'
nosa 'nose, genitive'		niosła 'she carried'
stan 'state'		wstań 'get up (impv.)'
wstanę [wstane] 'I'll get up'		wstanie 'he/she will get up'

D. The letter *r*, as in *rysunek*, is of the trilled variety, totally unlike the *r* of American English. The tip of the tongue vibrates against the alveolar ridge when Polish *r* is pronounced.

E. The Polish digraph *rz*, which sometimes alternates with *r* in Polish grammatical forms, is equivalent in sound to Polish alveolar *ż*, as in *żart*. The spelling of *rz* and *ż* must be carefully noted, in view of their identical value.

Examples of [r] vs. [rz]:

ruta 'route'	vs.	rzut 'throw'
rekord 'record'		rzepa 'turnip'
rada 'advice'		rzadko 'seldom'
wrona 'crow'		wrzos 'heather'

Examples of similar sounds with *rz* and *ż* spellings:

porze 'season (loc.)'	pożar 'fire'
rzepy 'turnips'	żeby 'in order to'
rzadko 'rarely'	żaba 'frog'

C. Polish vowels that are different from English: nasals.

The chart at the beginning of this section indicates that six of the Polish vowel sounds (and letters) are comparable to those of English: *i/y/u/e/o/a*. However, two of the Polish vowel letters, *q* and *ę*, require special explanation. Their basic value is that of nasal vowels. In spite of its appearance, the letter *q* represents a nasalized *o*-sound, and not a nasalized *a*-sound! The letter *ę* represents a nasalized *e*-sound, as one might expect. The most important fact about the phonetic value of *q* and *ę* is that their actual pronunciation depends on the sound that follows them. The following sections address the major positional variants of nasal vowels and consonants.

1. Pre-fricative and word-final position.

The nasal vowel letters are pronounced as nasal vowels only before fricative consonants (i.e. *f/w/s/z/sz/ż/ś/ź/ch*, e.g. *wąsy*, *język*, *książka*) and in final position (e.g. *bija*, *wezma*). However, word-final *ę* can be pronounced as a nasal in the formal speech style, but is usually oral [e] in conversational speech; i.e. written *bije/wezme* are pronounced as if they were [bije], [wezme]. Nasal vowels that occur before fricatives are sometimes inaccurately portrayed as synchronic, meaning that the identical nasal vowel sound occupies the entire vowel. However, research has shown that the nasal vowels of standard Polish are really **asynchronic** (Dukiewicz 1967:68), i.e. they are really diphthongs, with a difference of pronunciation in the first and second parts of the vowel.² The usual asynchronic pronunciation contains a non-nasal vowel in the first part of the sound, followed by the nasalized glide [ɨ̃] in the second (e.g. *język* 'language', pronounced as [jeɨ̃zyk]; *maż* 'husband', pronounced as [moɨ̃sz]). In cases where the nasal vowel *ę* is followed by a palatal fricative ([ś] or [ź]), the nasal glide can optionally appear as [j], e.g. *gęś* 'goose', pronounced as [geɨ̃ś].³

Examples: nasal vowel letters preceding fricatives and of final *-q*. The phonetic value is either [oɨ̃], [eɨ̃], or [eɨ̃], as indicated:

[oɨ̃]:

wąchać 'to smell'
 wąsy 'mustache'
 chcą 'they want'
 robią 'they do'
 tą 'this (fem. inst.)'
 książka 'book'
 siąść 'to sit down'
 dążyć 'to reach on time'
 krążyć 'to wander'
 wąwóz 'canyon'

[eɨ̃]:

mięso 'meat'
 węszyć 'sniff around'
 często 'often'
 język 'language'
 rzęchy 'ragged clothing'
 węch 'sense of smell'
 mięso 'meat'

² Conservative prescriptive Polish sources condemn any diphthongal nasality (i.e. both [ɨ̃] and [jɨ̃]) as incorrect (Karaś and Madejowa 1977:XXVIII), insisting on the uniform, monophthongal nasals [ɔ] and [ɛ].

³ There is quite a bit of variation in prescriptive statements about Polish nasals. Schenker (1973: 347) specifies only [eɨ̃] as the phonetic value of the nasal vowel in *gęś* and *więzienie*, while Biedrzycki (1963:37) gives it as [jɨ̃].

[ẽ] occurs in the case of *ę* before palatals:

gęś 'goose'
 więzienie 'prison'
 mięsie 'meat (loc. sg.)'

2. Before non-continuants (pre-stop and pre-affricate).

Before stop consonants (*p/b/t/d/k/g*) and affricates (*c/dz/cz/dź/ć/dź*), nasal vowels represent a sequence of two sounds. The first is simply the vowel [e] (in the case of *ę*) or [o] (in the case of *ą*); the second portion of the nasal articulation matches the consonant in point of articulation. Therefore, labial [m] occurs before labials ([om]/[em] in the combination *ąp/ęp*); dental [n] before dentals ([on/en] in *ąt/ęt*); alveolar [ɲ] before alveolars ([oɲ/eɲ] in *ącz/ęcz*); palatal [ɲ] before palatals ([oń/eń] in *ąć/ęć*); and velar [ŋ] before velars ([oŋ/eŋ] in *ąk/ęk*). For example:

Nasal consonant pronunciation before stops and affricates (non-continuants).

Spelling

Pronunciation

(Pre-labial stop)

kąpać 'to bathe' [kompać]

Also: ząb 'tooth', zęby 'teeth', trąba 'trumpet', bęben 'drum', dęby 'oaks', sęp 'vulture'

(Pre-dental stop/affricate)

kąt 'corner' [kont]

Also: sąd 'court', ład 'land', trąd 'leprosy', ręce 'hands', nędza 'need'

(Pre-alveolar affricate)

rażka 'handle' [rończka]

Also: pączek 'doughnut', łączka 'meadow', gorączka 'fever', jęczka 'complainer (fem.)'

(Pre-palatal affricate)

pięć 'five' [p'eńć]

Also: giąć 'bend', będzie 'he/she will be'

(Pre-velar stop)

ręka 'arm, hand' [reŋka]

Also: bąk 'spinning top', łąka 'meadow', mąka 'flour', ciągle 'continually', tęgi 'stout'

3. Loss of nasal value of ϵ , q .

As noted above, final ϵ (but not q) also loses its nasality in colloquial speech. When either of the nasal vowels precedes l or t , the nasality is also lost and only the vowel sound remains (e.g. *giął* 'he bent' [g'ow], *gięli* 'they bent' [g'e'l'i]; i.e. the q sounds like o , and the ϵ sounds like e .⁴

Examples: oral vowel pronunciation ([e], [o]) in place of final $-\epsilon$ and of nasals before l , t .

wzmę 'I'll take'	zaczął 'he began'
niosę 'I'm carrying'	wzięła 'she took'
piszę 'I write'	wzięli 'they took, virile'
wziął 'he took'	zaczęli 'they began'

4. Nasal consonant letters before fricatives.

A corollary to the value of nasal vowel letters specifies that when the nasal **consonant** n occurs before fricatives, it is pronounced as the nasal glide [ɥ̃] (e.g. *koncha* 'conch' is pronounced as [koɥ̃cha]).⁵ In the case of consonant m , this only happens before labiodental fricatives f/v . The palatal nasal consonant \acute{n} is realized as the front nasal glide [j̃] before fricatives.

[ɥ̃]:

konferencja 'conference'
tramwaj 'trolley car'
konsul 'consul'
rynsztok 'gutter'

[j̃]:

pański 'your'
koński 'horse (adj.)'
tańszy 'cheaper'

Note that m before other non-labial fricatives retains its value of [m]: *giemza* 'chamois', *omszeć* 'get mossy', *czerecha* 'bird cherry tree'.

D. Consonant palatalization.

We have already mentioned the use of i to signal the presence of the sounds [ć, dź, ś, ź, ń], when spelled after the letters $c/dz/s/z/n$. Another important use of the vowel i (besides its regular use as a vowel sound) occurs after the labials ($p/b/f/w/m$) and velars ($k/g/ch$), where there is a more or less simultaneous pronunciation of j with the labial or velar, known as **palatalization**. When such a labial or velar is followed by i plus another vowel, the i only functions as a signal of palatalization and not a vowel sound; for example, in the words *wiara*, *polskie*, we have palatalized w and k , which will be symbolized by using the apostrophe, i.e. [w'] and [k']. Therefore, the phonetic transcription of these words is [w'ara] and

⁴ In formal speech, a reduced degree of nasality before laterals l and t can also occur (Karaś and Madejowa 1977:XXVIII).

⁵ In other words, nasal vowels and /n/ contrast phonemically only in word-final position. Otherwise, nasal vowels generally occur before fricatives and nasal consonants occur before stops and affricates, regardless of the written letter that is used.

[polsk'e].⁶ The distinction between plain and palatalized labials and velars can be phonemic; i.e. it can be the only phonetic difference between different words, for example:

Nonpalatalized

wada 'defect'
wozy 'carts'
mała 'small (fem.)'
Polskę [polske] 'Poland (acc.)'
bała się [bała še] 'she was afraid'
pasek 'belt'

Palatalized

wiadro [w'adro] 'bucket'
wiozły [w'ozła] 'they brought by vehicle (fem.)'
miała [m'ała] 'she had'
polskie [polsk'e] 'Polish (neut.)'
biała [b'ała] 'white (fem.)'
piasek [p'asek] 'sand'

When labials and velars occur before the vowel [i], they are always palatalized. However, plain labials and a few instances of the velar [ch] can also occur before a high unrounded vowel, in which case the vowel is automatically central, rather than front, i.e. it is y [y]. Phonemically, this is explained by stating that each such consonant oppose both plain and palatalized phonemes, and that the high unrounded /i/ has two allophonic variants (front and central), depending on whether it is preceded by a palatalized or plain consonant phoneme. Here are some examples of palatalized labials and the velar [ch] followed by [i], and the corresponding plain labials and velars followed by [y]:

Examples of labials and velars followed by the letter *i*:

Palatalized labial/velar plus [i]

biła [b'iła] 'she beat'
Chiny [ch'iny] 'China'
pił [p'iła] 'he drank'
miła [m'iła] 'dear (fem.)'
Wisła [w'isła] 'Vistula (River)'

Plain labial/velar plus [y]

była 'she was'
chyba 'perhaps'
pył 'dust'
myła 'she washed'
wyła 'she howled'

Note that palatalized *k/g* can be followed by [i], but the combination of plain *k/g*, followed by *y* does not occur.

kij [k'ij] 'stick'
polski [polsk'i] 'Polish (masc.)'
gips [g'ips] 'plaster'
drogi [drog'i] 'expensive (masc.)'

⁶ Corresponding to palatalized labials preceding vowels other than *i*, there is an alternative standard pronunciation which inserts *j* after palatalized labials. Thus, *wiara*, *miara*, *piętno*, for example, can be pronounced either as [v'ara, m'ara, p'entno] or [v'jara, m'jara, p'jentno] (Wierzchowska 1967:136-7, 148,155). This insertion of *jot* greatly decreases the phonemic use of palatalized consonants.

II. Accent

With very few exceptions, words are stressed on the next to last syllable (shown as underlined).

For example, *tablica/student/czasopismo*. The word *nie* is counted as part of the following verb form that it negates, for the purposes of placing the accent. Therefore, the combination *nie jest* is pronounced as if it were a single two-syllable word with the accent on the first syllable, phonetically [ńejest]. Similarly, prepositions are accentually joined to the following word; e.g. *za nim* is pronounced as [zańim].

III. Word-final devoicing

Many of the Polish consonants occur in pairs, one **voiced** and the other **voiceless**, depending on whether or not the vocal cords vibrate during pronunciation. When paired voiced consonant letters are written at the end of Polish words, they are pronounced like their voiceless partners instead. For example, the words written *zab/prąd/róg* are pronounced as if they ended in the letters *-p/-t/-k*, respectively. Here is a list of the Polish paired voiced and voiceless consonants:

Voiced:	b	d	g	w	z	ź/rz	ż	dz	dź	dź
Voiceless:	p	t	k	f	s	sz	ś	c	cz	ć

When a sequence of more than one paired consonant appears finally (e.g. *zjazd* ‘congress’), note that the entire final group is devoiced, i.e. [zjast].

Examples of word-final devoicing:

ząb [zomp] ‘tooth’	śniedź [śńeć] ‘verdigris’
dąb [domp] ‘oak’	śnieg [śńek] ‘snow’
lew [lef] ‘lion’	widz [w'ic] ‘spectator’
rów [ruf] ‘ditch’	rydz [ryc] ‘type of mushroom’
zlew [zlef] ‘sink’	lekarz [lekasz] ‘doctor’
sad [sat] ‘orchard’	aż [asz] ‘as many as’
trud [trut] ‘difficulty’	też [tesz] ‘also’
lód [lut] ‘ice’	mig [mik] ‘instant’
śledź [śleć] ‘herring’	Bóg [buk] ‘God’
wóz [vus] ‘cart’	brydź [brycz] ‘bridge (game)’

IV. Voicing assimilation

Another rule connected to voicing and devoicing states that a group of consonants is either voiced or voiceless as a whole, usually depending on the voicing of the last consonant in the group. For example, the word *torebka* presents the spelled group *bk*, but the group is pronounced as *pk*, since *k* is

voiceless and the preceding consonant must agree. The opposite situation is found in the word *także*, where the spelled group *kż* must be pronounced as *gż*, since voiced *ż* determines the voicing of the preceding *k*.

Examples of voicing assimilation:

babka [bapka] ‘grandmother’	rozkaz [roskas] ‘order’
obcy [opcy] ‘foreign’	walizce [walisce] ‘suitcase (loc.)’
wódka [wutka] ‘vodka’	jedźcie [jećće] ‘ride (impv.)’
młodszy [młotszy] ‘younger’	prośba [proźba] ‘request’
wpadać [fpadać] ‘fall into’	liczba [lidźba] ‘number’
wpisać [fpisać] ‘inscribe’	jakże [jagże] ‘how’

The above type of voicing assimilation causes the first consonant to take on the qualities of the following ones, which is known as **regressive assimilation**. However, in the cases of Polish spelled *w* and *rz*, these consonants take on the voicing quality of the **preceding** consonants; this is known as **progressive assimilation**. In other words, *w* and *rz* are replaced by the sounds *f* and *sz* when they are preceded by voiceless consonants; e.g. *twoja* is pronounced [tfoja], and *przy* is pronounced as [pszy].

Examples of progressive voicing assimilation:

kwas [kfas] ‘sour’	Szwed [szfet] ‘Swede’
bitwa [b'itfa] ‘battle’	krzak [kszak] ‘bush’
łatwy [łatfy] ‘easy’	krzesło [kszesło] ‘armchair’
Łotwa [łotfa] ‘Latvia’	czwarty [czfarty] ‘fourth’
twarz [tfasz] ‘face’	chrzan [chszan] ‘horseradish’
krzywy [kszywy] ‘crooked’	przez [pszes] ‘through’

V. Consonant “softness” and “hardness”

Polish grammars often refer to the “softness” and “hardness” of consonants. Generally speaking, the term **soft** refers to a more palatal pronunciation of a consonant, with the tongue raised and pressed to the hard palate. **Hard** consonants, by contrast, have an empty space below the hard palate. Therefore, the palatal consonants, plus the palatalized labials and velars, constitute the category of soft consonants in modern Polish. The alveolar *l*, which takes on a palatalized pronunciation before the vowel *i*, is also included in this group. Excluding the palatalized labials and velars, this includes the following:

Palatal fricatives	ś	ź
Palatal affricates	ć	dź
Palatal nasal		ń
Alveolar lateral		l
Palatal glide		j

In an earlier period of Polish, the consonants now known as alveolar also had a soft or palatal pronunciation, as did the dental affricates. Therefore, these consonants constitute the so-called

historically soft consonants of Polish, which sometimes behave as a separate class in grammatical inflection. Although they are phonetically hard in all positions in modern Polish, it is useful to be aware of this group, called **historical softs**, as follows:

Alveolar fricative	sz	ż (rz)
Alveolar affricate	cz	dź
Dental affricate	c	dz

Consonants which are hard in both modern and historical terms, are the following labials, dentals, and velars:

Labials	p	b	m
	f	w	
Dentals	t	d	n r
	s	z	
Velars	k	g	
	ch		
Glide			ɨ

VI. Articulatory tables.

The following table summarizes the articulation of the Polish consonants. Symbols that do not occur as letters have been placed in parentheses. Phonetic values are given in terms of the Polish alphabet wherever possible, rather than using more traditional phonetic symbols (e.g. *w*, *ch* instead of *v*, *x*).

	Labial	Dental	Alveolar	Palatal	Velar
Obstruent:					
Stop					
Voiceless	p/(p')	t			k/(k')
Voiced	b/b'	d			g/g'
Fricative					
Voiceless	f/(f')	s	sz	ś	ch, h/(ch')
Voiced	w/(w')	z	ź/rz	ź	
Affricate					
Voiceless		c	cz	ć	
Voiced		dz	dź	dź	
Sonorant:					
Nasal	m/(m')	n		ń	
Trill		r			
Lateral			l		
Glide	ɫ			j	

Vowels can be presented as follows:

Oral:	Front	Mid	Back
High	i	y	u
Mid	e		o
Low		a	
Nasal:			
Mid	ɛ		ɔ

Chapter 2. Major Types of Morphophonemic Alternations

Alternations of morphemes which are predictable not on the basis of the phonological environment alone, but on a combination of both phonological **and** morphological factors, are appropriately termed morphophonemic. The Polish morphophonemic changes are conditioned neither by grammatical meaning alone, nor by phonological features alone, but, rather, by both: a combination of a specific grammatical morpheme which is defined phonologically. For example, a locative or dative ending in *-e* will cause predictable changes in the preceding consonant (e.g. *łąka* 'meadow', *łące* 'meadow (loc.-dat.)'). It is not the **locative** or **dative** alone that causes this, since a dative or locative in *-u* does not (e.g. *rogu* 'corner (loc.)'); nor is it the *-e* ending alone, since the neuter adjectival *-e* ending does not cause the *k > c* change either (e.g. *cieńkie* 'thin (neut.)'). This chapter will summarize and classify the most important such alternations, as applied to the various parts-of-speech. Then, when a particular inflectional pattern is described later, in chapters devoted to nouns, verbs, and adjectives, reference will be made to the types of morphophonemic alternation, so that details and examples can be reviewed. Since each given morphophonemic alternation is conditioned by both phonological and morphological factors, the labels to be applied will refer to both grammatical and phonological information, e.g. the above described **locative/dative in -e**.

Consonant alternations

Let us start by indicating the basic consonants and how many ways they can change in particular grammatical environments. The Polish sounds can be divided into two categories, based on whether each basic sound admits a single morphophonemic change or whether it admits two. The consonants which have only a single such alternant are the **labials** and **sonorants** (group I). However, the **dental** and **velar obstruents** can have two possible morphophonemic alternants (group II). While the student must always remember which particular grammatical endings condition changes in the base consonant, when a given base consonant can have two different mutations, the additional information about which sound is selected is also necessary.

Summary of Morphophonemic Alternants for Two Major Consonant Groups

I. Sonorant/labial category: one morphophonemic alternant.

Base Consonant	Morphophonemic Alternant	Examples
A. Sonorants:		
r	Alveopalatal <i>rʑ</i>	pora 'season'~porze (loc.-dat.)
ł	Alveopalatal <i>l</i>	siła 'force'~sile (loc.-dat.)
n	Palatal <i>ń</i>	żona 'wife'~żonie (loc.-dat.)

B. Labials:

Palatalized Consonants		
p/b	p'/b'	Kuba 'Jake'~Kubie (loc.-dat.)
f/w	f'/w'	kawa 'coffee'~kawie (loc.-dat.)
m	m'	ruchomy 'mobile'~ruchomi (vir. nom. pl.)

(Note: *m* fits the definition of both sonorant and labial, but its behavior fits the category of labial, since it

becomes palatalized, rather than alveopalatal or palatal. Note also that Polish palatalized labials can be alternatively pronounced as sequences of palatalized labial plus *j*, when followed by vowels other than [i]; i.e. [b'e~b'je]. For simplicity, only the palatalized units are shown, and it is to be understood that the [p'j] type sequence can appear in free variation.)

The second group is more complicated, in that it contains base consonants which have two possible morphophonemic alternants.

II. Dental/velar obstruent category: two morphophonemic alternants.

A. Dental Obstruents

Base Value	Alternant 1:	Alternant 2:	Examples
Stops: t/d	Affricate c/dz	Palatal ć/dź	1. strata 'loss'~stracę 'lose (1sg.)' 2. strata~straci 'lose (3sg.)'

Note: In the rare instance of *-a*-suffix verbs which are preceded by *-t* (e.g. *szeptać* 'whisper'), the base *t* can mutate either to the expected *c* (e.g. *szeptać* (3sg.)), or to *cz* (*szeptać*), which is systematically anomalous, but even more widely considered as the standard in these verbs than is *c*. The latter is considered to be archaic by some current handbooks, while it is felt to be equivalent to *cz* by others. No instance of *d* occurs before the *-a*-suffix in this verb type.

Fricatives: s/z	Alveopalatal sz/ż	Palatal ś/ź	1. wynos 'carrying out'~wynoszę 'I carry out (1sg.)' 2. wynos~wynosi [ś] (3sg.)
Fricative+stop: st/zd	szcz/żdż	ść/źdź	1. prosty 'simple'~uprości [ść] 'simplify (3sg.)' 2. prosty~uproszczę (3sg.)

B. Velar Obstruents

Stops: k/g	Affricate c/dz	Alveopalatal cz/ź	1. łąka 'meadow'~łące (loc.-dat.) 2. piekę 'bake (1sg.)~piecze (3sg.)
Fricative: ch	Palatal ś	Alveopalatal sz	1. Czech 'Czech'~Czesi (vir. nom. pl.) 2. mucha 'fly'~musze (loc.-dat.)

Having summarized the consonant alternations, we can now review the grammatical environments which experience them. In the case of type two, with two alternants each (the dental/velar group),

particular attention must be directed at the choice of alternant one or two in each specified grammatical position. The names of the five major grammatical environments with alternations will be maintained in the separate chapters concerning inflection, and reference will be made to the various types whenever the appropriate stems are being introduced.

The grammatical environments are as follows (with examples) and it should be noted that all of these alternations apply to the stem-final consonant or consonant group, conditioned by the grammatical ending which follows:

1. **Locative-Dative** alternation. Nouns have this have it before an *-e* ending of the locative or dative. Since most masculine and all neuter nouns lack a dative *-e* ending, this alternation usually applies to all genders in the locative, but mostly feminines in the dative. Sonorants, labials, dental, and velars participate. Sonorants and labials have only one option; dentals and velars use one of their alternants, the palatal and affricate option, respectively, except for *ch*, which stands alone in using the alveopalatal *sz*.

A. Sonorants:

		Examples
r	Alveopalatal <i>rʐ</i>	pora 'season'~porze (loc.-dat.)
ł	Alveopalatal <i>l</i>	siła 'force'~sile (loc.-dat.)
n	Palatal <i>ń</i>	żona 'wife'~żonie (loc.-dat.)

B. Labials:

	Palatalized Consonants	
p/b	p'/b'	zupa 'soup'~zupie (loc.-dat.) Kuba~Kubie (loc.-dat.)
f/w	f'/w'	szafa 'closet'~szafie (dat.-loc.) kawa~kawie (loc.-dat.)
m	m'	mama 'Mom'~mamie (loc.-dat.)

C. Dental Obstruents

Stops: t/d	Palatal ć/dź	strata 'loss'~stracie [ć] (dat.-loc.) szuflada 'drawer'/szufladzie [dź] (dat.-loc.)
Fricatives: s/z	Palatal ś/ź	wynos 'carrying out'~wynosie (loc.) koza 'goat'~kozie [ź] (dat.-loc.)
Fricative+stop: st/zd	ść/źdź	most 'bridge'~moście [ść] (dat.-loc.) bruzda 'furrow'~bruździe [źdź] (dat.-loc.)

D. Velar Obstruents

Stops: k/g	Affricate c/dz	łąka 'meadow'~łące (loc.-dat.) Praga 'Prague'~Pradze (dat.-loc.)
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Fricative: ch	Palatal ś	mucha 'fly'~musze (loc.-dat.)
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2. **Virile** alternation. This applies to virile nouns (which are all masculine) and their inflected modifiers before the *-i/-y* ending, in the nominative plural, plus past tense forms of verbs. Virile forms of the past tense display the alternation only of *t~l*. All classes of consonants are subject to this alternation, except for palatals. Among the dentals and velars, number one alternants are selected. Note that when masculine affricate or alveopalatal stem nouns take the *-e* or *-owie* ending, this alternation does not apply, since it only occurs before the high vowel *-i/-y* ending. It may be further observed that the verbal past tense suffix *-t* undergoes this change when used before the virile *-i* ending (e.g. *pisat* 'write past tense 3P sg.', but *pisali* 3P pl. virile).

A. Sonorants:

r	Alveopalatal rz	Examples dobry 'good'~dobrzy (vir. nom. pl.)
ł	Alveopalatal l	czytał 'read (3 p. past masc. sg.)~czytali (vir.)
n	Palatal ŋ	czarny 'black'~czarni (vir. nom. pl.)

B. Labials:

	Palatalized Consonants	
p/b	p'/b'	biskup 'bishop'~biskupi (vir. nom. pl.) słaby 'weak'~słabi (vir. nom. pl.)
f/w	f'/w'	geograf 'geographer'/geografi (vir. nom. pl.) zdrowy 'healthy'/zdrowi (vir. nom. pl.)
m	m'	znajomy 'acquainted'/znajomi (vir. nom. pl.)

C. Dental Obstruents

Stops: t/d	Palatal ć/dź	Szkot 'Scot'/Szkoci [ć] (vir. nom. pl.) Szwed 'Swede'/Szwedzi [dź] (vir. nom. pl.)
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Fricatives: s/z	Palatal ś/ź	bosy 'barefoot'/bosi [ś] (vir. nom. pl.) Francuz 'Frenchman'/Francuzi [ź] (vir. nom. pl.)
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Fricative+stop:
st/(zd) ść/(źdź) turysta 'tourist'/turyści [ść] (vir. nom. pl.)

(Apparently, there are no examples of the virile mutation for stem-final *zd-*.)

D. Velar Obstruents

Stops: k/g **Affricate**
c/dz Polak 'Pole'/Polacy (vir. nom. pl.)
Norweg 'Norwegian'/Norwedzy (vir. nom. pl.)

Fricative: ch **Palatal**
ś Czech 'Czech'/Czesi (vir. nom. pl.)

In the case of the virile alternation, we have to add the alveopalatal base consonants *sz/ż*, which mutate to palatal *ś/ź* before the adjectival or nominal virile *-i* ending. They behave exactly as do the basic dental fricatives *s/z* in this regard, but no basic dentals can be identified in cases such as the following:

E. Alveopalatals

Fricatives *sz/ż* **Palatal**
ś/ź nasza 'our'/nasi [ś] (vir. nom. pl.)
duży 'large'/duzi [ź] (vir. nom. pl.)

3. **Vocative pre-e** alternation. Since the vocative *-e* ending mainly is used for masculine nouns with stems ending in labials and dentals, and only rarely in velars (e.g. *bóg* 'God' ~*boże* (voc.)), this alternation is usual for all the consonant categories except velars. In rare instances (e.g. *chłopiec* 'fellow'~*chłopcze* (voc.)), basic *c* behaves like velar *k* and takes an exceptional *-e* ending in the vocative, instead of expected *-u*. Of course, the use of this *-e* triggers the vocative alternation, which does not occur when the regular *-u* is used (e.g. Polaku 'Pole (voc.)). The noun *Kozak* 'Cossack' can take both the *-e* and *-u* vocative endings: *Kozacze*, but *Kozaku*.

A. Sonorants:

		Examples
r	Alveopalatal <i>rʒ</i>	doktor 'doctor'/doktorze (voc.)
ł	Alveopalatal <i>l</i>	Michał 'Michael'/Michale (voc.)
n	Palatal <i>ń</i>	pan 'sir'/panie (voc.)

B. Labials:

	Palatalized Consonants	
p/b	p'/b'	biskup 'bishop'/biskupie (voc.)
f/w	f'/w'	geograf 'geographer'/geografie (voc.)

A. Sonorants:

r	Alveopalatal <i>rz</i>	Examples
n	Palatal <i>ń</i>	t/r- 'rub': trze (3sg.), trzyj (impv.) bieg-n- 'run (determ.): biegnie (3sg.), biegnij (impv.)

B. Labials:

	Palatalized Consonants	
w	w'	rwa- 'tear': rwie (3sg.), rwij (impv.)
m	m'	(wy-)j/m- 'take out': wyjmie (3sg.), wyjmij (impv.)

C. Dental Obstruents

Stops: t/d	Palatal ć/dź	gniot- 'crush': gniecie (3sg.), gnieć (impv.) kład- 'put': kładzie (3sg.), kładź (impv.)
Fricatives: s/z	Palatal ś/ź	nios- 'carry (determ.): niesie (3sg.), nieś (impv.) gryz- 'gnaw': gryzie (3sg.), gryź (impv.).

D. Velar Obstruents

Stops: k/g	Alveopalatal cz/ż	piek- 'bake': piecze (3sg.), piecz (impv.) (po-)mog- 'help': pomoże (3sg.), pomóż (impv.)
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4. **Verbal *a*-suffix** alternation. Found before all present tense and imperative endings that are used with syllabic *-a*-suffixed verbs. Note that the *-a* suffix is deleted in these forms and it could be said that this deletion conditions the consonant alternation. Consonants subject to it include sonorants, labials, dentals, and velars; both dentals and velars use alveopalatal alternants. The imperative does not manifest the mutated value in the case of final labials, since they automatically are non-palatalized in final position, but non-labials do display their mutated value in word-final imperative position, e.g. *kąp* 'bathe(impv.)', with automatic hardening of final labial consonant, but non-labial *karz* 'punish (impv.)'.

A. Sonorants:

r	Alveopalatal <i>rz</i>	Examples kara- 'punish': karzę (1sg.), karze (3sg.), karz (impv.)
ʃ	Alveopalatal <i>ʃ</i>	sła- 'send': ślę (1sg.), śle (3sg.), ślij (impv.)

B. Labials:

	Palatalized Consonants	
p/b	p'/b'	kapa- 'bathe': kąpię (1sg.), kąpie (3sg.), rąba- 'chop': rąbię (1sg.), rąbie (3sg.)
m	m'	kłama- 'lie': kłamie (1sg.), kłamię (3sg.)

C. Dental Obstruents

Stop: t	Affricate~Alveopalatal Variants c~cz	szept- 'whisper': szepcę~szepczę (1sg.), szepce~szepcze (3sg.), szepc~szepcz (impv.)
Fricatives: s/z	Alveopalatal sz/ż	pisa- 'write': piszę (1sg.), pisze (3sg.), pisz (impv.) liza- 'lick': liżę (1sg.), liże (3sg.), liż (impv.)
Fricative+stop: st/zd	szcz/żdż	chlusta- 'splash': chluszcę (1sg.), chluszcze (3sg.), chluszcz (impv.) gwizda- 'whistle': gwizdę (1sg.), gwizdze (3sg.), gwizdź (impv.)

D. Velar Obstruents

Stops: k/g	Alveopalatal cz/ż	płaka- 'cry': płacę (1sg.), płacze (3sg.), płacz (impv.) łga- 'lie': łzę (1sg.), łże (3sg.), łzyj (impv.)
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5. **Conjugation II** dental alternation. Basic dental consonants appear in verbal roots, but not within the conjugation itself, since Conjugation II verbs are formed with one of the front vowel word-formation suffixes *-i-* or *-e-*, which condition a change in the basic root consonants. Therefore, the Conjugation II

alternation can best be seen in three stages of consonantal values: (1) the basic consonant that appears in the root and quite often, also the noun form; (2) a palatal consonant that appears before the infinitival *-i-* or *-e-* suffix and the oral vowel endings of the 2/3 sg. and 1/2 pl.; and (3) an affricate or alveopalatal that appears before the nasal vowels *-ę* and *-ą* of the 1sg. and 3pl. For example:

1. The root *płat* 'pay', ending in [t], as in *opłata* 'charge'.

2. When the root *płat* is used with the suffix *-i*, which forms the verb *placić*, the basic [t] becomes [ć] in the infinitive stem. The same palatal consonant also appears before the present tense endings in *-i*, e.g. *placisz* (2sg.), *placi* (3sg.).

3. In the pre-nasal forms of the 1sg. and 3pl., and before the *-on-* ending of the past passive participle, the consonant [c] occurs: *placę/placą/placony*.

1. Noun With Basic Dental

2. Infinitive (Root+i or +e)/3sg.

3. 1sg./3pl.

A. t/d

Palatal: ć/dź

Affricate: c/dz

rzut 'throw'

rzucić 'to throw'/rzuci (3sg.)

rzucę (1sg.)/rzucą (3pl.)

chód 'move'

chodzić 'to go (on foot, indet.)'/
chodzi (3sg.)

chodzę (1sg.)/chodzą (3pl.)

B. s/z

Palatal: ś/ź

Alveopalatal: sz/ż

kosa 'scythe'

kosić 'mow'/kosi (3sg.)

koszę (1sg.)/koszą (3pl.)

woz 'cart'

wozić 'take (by vehicle)'/
wozi (3sg.)

wożę (1sg.)/wożą (3pl.)

C. st/zd

Palatal: ść/źdź

Alveopalatal: szcz/źdź

most 'bridge'

mościć 'pave'/mości (3sg.)

moszczę (1sg.)/moszczą (3pl.)

jazda 'riding'

jeździć 'go (by vehicle)'/
jeździ (3sg.)

jeżdżę (1sg.)/jeżdżą (3pl.)

Brief Note on Alternation in Word-formation

In nominal and adjectival word-formation, similar consonant alternations are also found before both front-vowel and consonantal suffixes. When a stem-final velar changes to an alveopalatal before such a front-vowel suffix (e.g. *-ist*), the vowel then backs to [y], e.g. *m/ch+ist+y* > *mszysty* 'mossy', cf. *mech*

‘moss’. Dentals mutate to palatals (e.g. *wąwóz* 'canyon'/*wąwozisty* 'canyonlike', while velars mutate to alveopalatals, as in the pre-front verbal type.

In the formation of imperfectives from *-i* suffixed verbs, this type is the same as the pre-nasal verbal type (e.g. *przyjeżdżaj-* ‘arrive by vehicle, impf.’).

Vowel Alternations

Vowel alternations can be divided into two types, depending on whether the conditioning factor is the specific type of consonant which immediately follows the vowel, or the open or closed nature of the syllable which contains the vowel. However, it should be noted that many of these alternations are often sporadic and traditional, rather than obligatory hard and fast rules that always apply. For example, due to the action of recent developments, the *a~e* and *o~e* alternations have become differentiated grammatically. The former no longer occurs in adjectival declension (*biały/biali* instead of *biały/*bieli*), while the *o~e* type has almost disappeared from nominal declension, with the exception of *anioł* (cited above) and a few other such words.

The vocalic alternation types can be summarized as follows, with representative examples:

1. Conditioning factor is the consonant which follows the vowel in question.

The two alternations are *a~e* and *o~e*. In each case, the back vowel [a] or [o] appears before a dental consonant [t/d, s/z, r, ł, n]. When a consonantal alternation (such as those detailed above) causes the dental consonant to change (usually to a palatal), the preceding vowel then mutates from [a] or [o] to the new value of [e]. As to whether the [a]/[o] forms or those with [e] should be considered as basic, it is important to note that the choice of [a] or [o] cannot be phonologically predicted, so it is best to consider the [a]/[o] as basic, and the [e] as the secondary, mutated value. Generally, when the consonant preceding an [a] or [o] is historically or synchronically soft, one can then assume that the [a] or [o] is likely to mutate to [e] if the following consonant is anything other than a dental. Like all morphophonemic changes, this one is not phonologically obligatory, so many exceptions do occur. In reality, the student must learn the occurrence of these alternations.

Examples with grammatical environment indicated:

	Before Dental	Before Non-Dental
1. <i>a~e</i>		
	las 'forest'	Before locative case ending: w lesie 'in the forest'
	kwiat 'flower'	w kwiecie 'in the flower'
	widział 'see (3 sg. masc. past)'	Before virile past tense ending: widzieli (3pl. masc. past)
	biały 'white'	Before <i>i/e</i> word-formational suffix: bielić 'bleach', bieleć 'turn white'

2. o~e

anioł 'angel'	Before locative case ending: o aniele 'about the angel'
niosę 'carry (1sg.), niosą (3pl.) wiozę 'take by vehicle (1sg.), wiozą (3pl.)	Before <i>-e</i> endings of Conjugation I: niesie (3sg.) wiezie (3sg.)
	Before imperative ending: nieś wieź
	Before virile N pl. ending after <i>-on</i> suffix of past passive participle:
niesiony wieziony	niesieni wiezieny

2. **Conditioning factor is the open or closed syllable which follows the vowel in question.**

Closed position refers to a syllable which ends in a consonant. Conversely, an open syllable is one which ends in a vowel. In the two Polish alternations based on this factor, two vowels are commonly found in open position ([o, ɛ]), due to a vocalic ending. However, when a zero ending is used instead, their syllable becomes closed and there is commonly encountered alternation to [u, a], respectively. It should be noted that when [o] alternates with [u], Polish orthography writes the [u] as *ó*, rather than *u*. Typically, these alternations occur in the masculine nominative singular only before voiced final consonants (other than nasals), but in the feminine/neuter genitive plural they have generalized to all positions.

Examples with grammatical environment indicated:

	Open Syllable/Non-Zero Ending	Closed Syllable/Zero Ending
1. o~u	Non-zero ending: wozu 'cart (gen. sg.) rogu 'horn (gen. sg.) twoja 'your (nom. fem. sg.) miodu 'honey (gen. sg.) utworu 'composition (gen. sg.) soli 'salt (gen. sg.)	Nominative sing. before voiced: wóz ród twój miód utwór sól
	Other past forms: niosła 'carry (3sg. fem.), niosłem (1sg. masc.)	3sg. masc. past tense: niósł

	wiozła 'transport by vehicle (3sg. fem.), wiozłem (1sg. masc.)	wiózł
	Non-zero ending:	Genitive plur. before all consonants:
	osa 'wasp'	ós
	cnota 'virtue'	cnót
	obora 'cow barn'	obór
2. $\epsilon \sim \text{ą}$	Non-zero ending:	Nominative sing. before voiced:
	dębu 'oak (gen. sg.)	dąb
	męża 'husband (gen. sg.)	mąż
	zęby 'tooth (nom. pl.)	ząb
	Non-zero endings with -ęć suffixed nouns:	Genitive plur. of -ęć nouns:
	cielęta 'calf (nom. pl.)	cieląt
	Vocalic verbal endings after a root with ϵ :	Verbal infinitive and masc. sing. past with closed syllables:
	zaczęła 'begin (3sg. fem. past)'	zacząć (infin.), zaczął (3sg. masc. past), but zacząłem (1sg. masc. past)

Note: the forms *niosłem/wiozłem*, but *zacząłem* illustrate that the very same past tense personal endings have a different effect on the alternations $o \sim u$ as compared to $\epsilon \sim \text{ą}$. They act as creators of open syllables in the case of $o \sim u$, but as if they do not create an open syllable in the case of $\epsilon \sim \text{ą}$. This variable situation can be better understood if we assume that these endings are separable and can optionally either create an open syllable or not. In any case, they have been generalized in two opposite ways by the two major vocalic alternations which are conditioned by open and closed syllables.

Vowel~Zero Alternations

As in other Slavic languages, many Polish morphemes have two shapes, one with a vowel [e] and the other lacking it. (There are also a few rare and exceptional alternations of zero and the vowel [o], all before the labialized consonant [ɸ] and likely conditioned by it: e.g. *osi/oł* 'donkey (nom. sg.)'~*os/ła* (gen. sg.), *kozi/oł* 'male goat (nom. sg.)'~*koz/ła* (gen. sg.), *kocioł* 'cauldron (nom. sg.)'~*kot/ła* 'gen. sg.). Since the occurrence of this alternation is often unpredictable, morphophonemic transcriptions often note it with a device such as a slash (/), which will be the method used in this description. Once the slash appears and its location is known, it is usually possible to predict whether the slash position will be realized by the vowel alternant /e/ or the zero alternant (simply / between consonants). In the case of more than one slash, one starts the process of calculating vowels and zeroes at the end of the word. A vowel is usually

predicted either by a zero slash in the next syllable or a non-vocalic grammatical ending. The zero position often generalizes the hard (usually labial or dental) value of the preceding consonant, while the very same consonant can be either hard or soft (palatalized or palatal) in the pre-vocalic position. Thus, the C/C positions share hard dental [d] in *d/nia* 'day (masc. gen. sg.)' and *d/no* 'bottom (neut. nom. sg.)', but have a hard-soft opposition in the C/e/C sequences: *dzień* 'day(nom. sg.)', but *den* 'bottom (gen. pl.)'. If one were to only remember the nominative singular forms as vocabulary items (i.e. *dzień* and *dno*), the second word would not definitively give information about whether [d] or [dź] will appear as the vowel alternant. Therefore, it is advisable to remember a word not only with the notion of a slash (or slashes) in its transcription (i.e. *dzi/e/ń* and *d/no*), but with the information about whether the consonant is hard or soft in its vowel alternant.

In the system of noun declension, the primary positions for the occurrence of the vowel~zero alternation are those case forms which take the zero ending (nominative singular and genitive plural). They condition the presence of the vowel alternant in a preceding slash position, while a vowel conditions the presence of a zero, as follows:

Grammatical Forms	Vowel Alternant Before Zero Ending	Zero Alternant Before Vocalic Ending
Masc. N Sg.~G Sg.	<i>dzi/e/ń</i> 'day', <i>pi/e/s</i> 'dog', <i>s/e/n</i> 'dream', <i>chłopi/e/c</i> 'fellow'	<i>d/nia</i> , <i>p/sa</i> , <i>s/nu</i> , <i>chłop/ca</i>
Fem. N Sg.~G Sg.	<i>wi/e/ś</i> 'village'	<i>w/si</i>
Fem. G. Pl.~N Sg.	<i>gi/e/r</i> 'game', <i>lal/e/k</i> 'doll', <i>kres/e/k</i> 'line', <i>owi/e/c</i> 'sheep'	<i>g/ra</i> , <i>lal/ka/</i> , <i>kres/ka</i> , <i>ow/ca</i>
Neut. G. Pl.~N. Sg.	<i>d/e/n</i> 'bottom', <i>oki/e/n</i> 'window', <i>jaj/e/k</i> 'egg', <i>t/e/ł</i> 'background'	<i>d/no</i> , <i>ok/no</i> , <i>jaj/ko</i> , <i>t/ło</i>

In the verb system, one the most important manifestations of the vowel~zero alternation can be seen in the prefix, which has its vowel alternant conditioned by a non-syllabic root (C/C), and its zero alternant conditioned by a syllabic root (C/V/C). The choice of root is often (but not exclusively) caused by the derivation of the imperfective aspectual form, which specifies that a non-syllabic root becomes syllabic in the imperfective. While the prefixal alternation has the same *e*~zero as do nouns, the root vowel alternation itself is *e*~zero only before [r]; otherwise it is usually *i/y*~zero (e.g. *zamknąć* 'close (perf.)'/*zamykać* (imperf.)). Examples follow, with morphemes separated due to the complexity of these alternations:

Prefixal Vowel Alternant Before C/C Root	Prefixal Zero Alternant Before C/V/C Root
<i>od/e/-b/r-a-ć</i> 'select'	<i>od-bi/e/r-a-ć</i> (<i>od/-bi/er-aj-a</i>)
<i>roz/e-r/w-a-ć</i> 'tear up'	<i>roz-r/y/w-a-ć</i> (<i>roz/-r/y/w-aj-a</i>)
<i>z/e/-p/r-a-ć</i> 'wash out'	<i>s/-pi/e/r-a-ć</i> (<i>s/-pi/er-aj-a</i>)
<i>z/e/-p/ch-ną-ć</i> 'push down'	<i>s/-p/y/ch-a-ć</i> (<i>s/-p/y/ch-aj-a</i>)
<i>w/e/s-t/ch-ną-ć</i> 'sigh'	<i>w/z-d/y/ch-a-ć</i> (<i>w/z-dych-aj-a</i>)

It might be noted that this alternation may be considered either inflectional or derivational, depending on whether the perfective and imperfective forms are considered the same or different lexical items. When prefixes and roots undergo the vowel~zero alternation, there are important consequences for the spelling of the words, since the consonantal voiced-voiceless assimilation of a prefixal or root-initial consonant is reflected in the spelling. Thus, if the mobile vowel /e/ follows a prefixal consonant or if /y/ follows the root-initial consonant, it appears in its basic shape (e.g. the *z-* of *zeprać*, or the *d-* of *wzdychać*). However, when the zero variant of the prefix or root occurs, the same consonant undergoes assimilation to voiceless, and it is spelled that way: *spierają*, *westchnąć*.

Another position in the verb system for the vowel~zero alternation is before the past tense ending, which consists of the consonant [ɨ] plus zero for the masculine singular, but [ɨ] plus vowel for masculine, feminine, and plurals, as follows:

Vowel Alternant Before -ɨ-Ø Ending	Zero Alternant Before -ɨ-a, -ɨ-o, -ɨ-y, -ɨ-i Endings
s/e/chɨ 'dry up (3sg. masc. past)	s/chɨa (fem.), s/chɨo (neut.), s/chɨy (non-vir. pl.), s/chɨi (vir. pl.)
sz/e/dɨ 'go (3sg. masc. past)	sz/ɨa (fem.), sz/ɨo (neut.), sz/ɨy (non-vir. pl.), sz/ɨi (vir. pl.) (Note that the [d] is deleted due to the [szdɨ] cluster)

When prefixes occur before these variable roots, they are also variable:

Prefixal Vowel Alternant	Prefixal Zero Alternant
od/-s/e/ch-ɨ 'dry up and fall off (3sg. masc. past)'	od/e/-s/ch-ɨa (3sg. fem. past)
pod/-sz/e/d-ɨ 'approach (3sg. masc. past)'	pod/e/-sz/(d)-ɨa (deleted [d] in parentheses) (3sg. fem. past)

Chapter 3. The Polish Noun

1. Introduction to Polish declension.

Polish is a highly inflected language and the topic of nominal inflection is of considerable importance. Each Polish noun has a specific gender, called masculine, neuter, or feminine.⁷ Additionally, each such noun has special forms for each of the seven cases (nominative, accusative, genitive, locative, dative, instrumental, and vocative) in both singular and plural numbers. It often happens that certain classes of noun have two or more cases which coincide in form, a phenomenon called **syncretism** (such as masculine nouns which may coincide in nominative and accusative). Other noun classes or genders may differentiate the very same forms. If we take a given noun and multiply it times the two numbers and seven cases, we might theoretically expect a maximum number of fourteen forms; allowing for the fact that the nominative and vocative plural are always syncretic, the potential maximum would be thirteen forms for a given noun. However, in reality, the actual number is always less than thirteen, due to further instances of syncretism. Each of the genders has particular subsets, which take different groups of case endings. Due to the importance of both gender and the declensional classes that form subgroups within each gender, this chapter will present noun declension within three large classes that correspond to the genders.⁸ Within each gender type, the most basic and commonly occurring type will first be presented as the basic masculine, feminine, and neuter types, respectively, and further comments will then be devoted to the most important groups which deviate from the norm of each gender. No attempt will be made to provide a full list of all exceptions.

Since genders alone are not sufficient to determine all of the noun types (i.e. there are several paradigms within each gender), it may be helpful to review the fact that gender is really defined on the basis of the noun's agreement with a modifying adjective or a verbal past tense form. Thus, if we take a masculine noun, such as *stół* 'table', it pairs with the masculine nominative singular adjective *dobry* 'good', while a neuter noun, such as *słowo* 'word', pairs with the neuter adjectival form *dobrze*, and a feminine noun, such as *książka* 'book', goes with the feminine adjective *dobra*. In order to use any given Polish noun, one must know its gender, as well as the behavior of its particular declensional subclass, in case it does not follow the basic type for that gender. In most cases, a noun's nominative singular form gives us the information about what the gender is.

Each of the three genders will be subdivided on the basis of whether its nominative singular presents a vowel ending or not. In the case of masculines, the zero ending is taken as basic and listed first, while for feminines and neuters, it is the type with a nominative singular vowel ending that is to be considered basic, as follows:

⁷ Based on agreement with adjectives, nouns can readily be identified as masculine, neuter, or feminine in the singular. However, in the plural, the only adjective agreement classes are virile and non-virile. Therefore, pluralia tantum (words only used in the plural, such as *drzwi* 'door') can only have their gender identified as virile or non-virile, rather than the usual ternary distinction of masculine, neuter, feminine.

⁸ Since gender and declension class do not coincide in Polish, there have been many discussions and differences of opinion as to whether agreement gender or the paradigmatic declensional class should serve as the basis for the division of noun classes. Orzechowska (1984:227-8) attempted an innovative scheme that excluded gender. It later was criticized for unnecessarily complicating the description of nouns (Gruszczyński 1987:45) and Orzechowska's later edition (1999:270-3) went back to a more traditional gender scheme. The present description uses gender as its starting point, based on the criteria of simplicity and pedagogical effectiveness.

A. Masculine nouns.

Masc. I: Basic type: masculine nouns with $-\emptyset$ ending in nominative singular. E.g. *chłop* ‘peasant’.

Masc. II: Secondary type: masculine nouns with the nominative singular ending in a vowel (either *-a* or rarely *-o*). E.g. *turysta* ‘tourist’.

B. Feminine nouns.

Fem. I: Basic type: feminine nouns with the nominative singular ending in a vowel (*-a* or exceptionally *-i*). E.g. *ryba* ‘fish’.

Fem. II: Secondary type: feminine nouns with a zero-ending ($-\emptyset$) in the nominative singular. The preceding consonant is always of the soft type (including both historical and synchronic softs). E.g. *noc* ‘night’.

C. Neuter nouns.

Neut. I: Basic type: neuter nouns with the nominative singular in a vowel ending (*-o* or rarely *-ę*). E.g. *słowo* ‘word’.

Neut. II: Secondary type: neuter nouns with an unchanging singular. E.g. *muzeum*.

Within each basic type listed, there are additional subtypes which refer to phonological information and are often called **hard** and **soft** types. This refers to the type of consonant found at the end of the stem, to which the grammatical ending is added. Since the terms **hard** and **soft** are often used, but seldom defined adequately, a few comments on this topic are in order. Phonetically speaking, soft consonants are those which have a higher frequency, or tonality, and which manifest a tongue position which fills most of the space immediately below the palate. For Polish, these include the palatalized and palatal consonants [p', b', f', v', m', ś, ź, ć, dź, ń, j], all of which can appear in the stem-final position. However, the class of Polish soft stem-finals also includes the dental affricates [c, dz], and the alveolar sounds [sz, ż, cz, dż, l], which are no longer phonetically soft, in the sense of having a raised tongue position, but still have the same grammatical effects as the true soft palatals. Such situations are frequent in languages and can be explained by the fact that the grammatical distribution into hard and soft declension types goes back to an earlier period when dental affricates, alveolars, and palatals all used to be phonetically soft. In order to distinguish the two categories of softs, the sounds which used to be soft but are no longer phonetically soft, are often called the **historical softs**. The following table depicts the situation:

Functionally Hard (Take Hard Endings)			Functionally Soft (Take Soft Endings)	
			A. Synchronic “softs”	B. Historically “soft”
p/b	t/d	k/g	p'/b'	
f/w	s/z	ch	f'/w'	ś/ź
				ć/dź
m	n		m'	ń
	r			
	ł			l
			j	

Note that *l* has both phonetically hard and soft variants. Before [i] it is realized as palatalized [l'].

In any case, it functions as a soft. Velars are actually a special category, usually following the behavior of the hard category, but occasionally patterning with the softs. Phonetically, they can be grouped together with the labials and dentals in the hard class. Functionally, they behave as hard in the class of mostly feminine *a*-nouns, while in the zero and *o*-nouns (mainly masculines and neuters), velars pattern as softs.

In addition to phonological factors which influence the declension within a given gender, within the masculine gender, semantic properties condition differences in declension. The semantic categories depend on whether the noun is a person, animal, or inanimate object. The affected case forms are the masculine accusative and nominative plural.

A. Masculine Nouns.

Masc. I: Masculine nouns with $-\emptyset$ ending in nominative singular.

Animate and virile categories of masculine nouns

Masculine nouns (in contrast to feminine) never have an independent, non-syncretic accusative case. Their accusative is always equivalent to either the nominative or genitive case, and the choice of which one depends on which category of animacy and virility the noun belongs to. Inanimate nouns are defined as being neither animate nor virile; animals are animate, but not virile, while masculine human beings are both animate and virile. **Virile** nouns have both their accusative singular and plural equal to the genitive; **animate** nouns have only their accusative singular equal to genitive but their accusative plural is equal to the nominative; **inanimates** have both accusatives equal to the nominative.

Virile nouns also have a special ending in the nominative plural. Most hard stem viriles have a morphophonemic alternation of their stem-final consonant (cf. the Nsg./Npl. relations *Polak/Polacy* ‘Pole/Poles’, *student/studenci* ‘student/students’, *Norweg/Norwedzy* ‘Norwegian/Norwegians’, *Czech/Czesi* ‘Czech/Czechs’); however, certain hard and soft viriles (lexically determined) use the Npl. *-owie* ending (e.g. *Arabowie* ‘Arabs’, *profesorowie* ‘professors’, *królowie* ‘kings’).

In most cases, these categories correspond to an intuitive sense of what is human, animate, and inanimate, but there are two major types of exceptions to this intuitive rule, which must be learned on an individual lexical basis. The first exception includes derogatory terms for humans, which take the non-virile nominative plural, e.g. *łobuz/łobuzy* ‘rascal’. Often, the treatment of a noun can optionally be non-derogatory or derogatory, e.g. *chłopi/profesorowie* ‘peasants, professors (neutral)’ vs. *chłopy/profesorzy* (derogatory). The second exceptional use of animacy is somewhat opposite, involving inanimates that are raised in rank to the animate category. This includes such nouns as *papieros* ‘cigarette’, *walc* ‘waltz’, *Ford* ‘Ford car’, which all have A=G in the singular, following the pattern of *kot* ‘cat’.

Each of the three masculine semantic subsets also has a familiar phonological subdivision, depending on the stem-final consonant, into the classes of hard non-velar (i.e. labial/dental), velar, and soft, each one having its own particular paradigmatic differences. Thus, the simple, basic masculine type can occur in three semantic varieties, based on animacy, and three phonological varieties, based on hard/velar/soft. The inanimate hard type will be presented as basic, and the small changes introduced by animacy and velar/soft consonants will be shown.

Basic type: inanimate with stem-final in a hard non-velar.

The apostrophe in stem-final position (e.g. locative *'-e*) refers to the fact that there is a morphophonemic alternation of the stem-final consonant. It affects the locative and vocative in the singular and the virile nominative plural.

Inanimate: *nos* 'nose'/*plot* 'fence'

	Singular	Plural	Singular	Plural
N	-Ø	-y/-i	N	nos/plot
A	= Nsg.	= Npl.	A	= Nsg.
G	-a/-u	-ów	G	nosa/plota
L	'-e	-ach	L	nosie/plotcie
D	-owi	-om	D	nosowi/plotowi
I	-em	-ami	I	nosem/plotem
V	= Lsg.	= Npl.	V	= Lsg.
				nosy/ploty
				= Npl.
				nosów/plotów
				nosach/plotach
				nosom/plotom
				nosami/plotami
				= Npl.

The inanimate masculine paradigm (hard, velar, and soft) has two possible genitive singular endings, either *-a* or *-u*. There is no sure way to predict which ending will be used on the basis of phonetic criteria. There are some semantic guidelines for the choice of one or the other, but they are far from absolute, and often two different criteria will be found within one lexical item. Here is a sampling of the criteria that are most often mentioned:⁹

1. The *-a* ending is favored by nouns with certain suffixes, especially *-/k* and *-/c* (e.g. *zaimek* 'pronoun', *dzieciniec* 'kindergarten'; for tools (*młotek* 'hammer'); months (*maj* 'May'); weights and measures (*litr* 'liter'); Polish cities (*Kraków* 'Cracow').
2. The Gsg. in *-u* is more common for abstract nouns (*gniew* 'anger', *ból* 'pain', *żal* 'sorrow'); nouns ending in a zero-suffixed verbal stem (*samochód* 'automobile', *wóz* 'car, cart', *wstyd* 'shame', *rozum* 'intelligence', *postój* 'stop for transportation', *zbiór* 'collection'); mass nouns (*sok* 'juice', *miód* 'honey'); foreign loan words (*teatr* 'theater', *numer* 'number'); foreign countries and cities (*Londyn* 'London', *Rzym* 'Rome', but not *Paryż* 'Paris', which takes Gsg. *-a*); and masculine days of the week, in spite of the fact that they take the *-/k-* suffix (*poniedziałek* 'Monday', *wtorek* 'Tuesday', *czwartek* 'Thursday', *piątek* 'Friday').

However, since two of the opposite semantic features may co-occur, such as **measure** and **foreign noun** in *litr*, or *-/k-* suffix and **day of the week** in *wtorek*, for example. Other coinciding factor are found when Polish city names end in zero-suffixed verbal roots, such as *Krasnystaw*, *Białystok*, which take Gsg. *-u* on the basis of their verbal root. Note that *Białystok* declines each of its morphemes individually: *Białegostoku* Gsg.

Animate and Virile Nouns

⁹ See Orzechowska (1999:306-7) for a detailed treatment of which inanimates take *-a* and which take *-u*.

Animates differ in their use of only *-a* for the Gsg. and due to the Asg.=Gsg. syncretism. Since the masculine accusative is always syncretic and equal to the nominative or genitive, it has been indicated as = Gsg., even though our usual practice has been to consider the first occurring ending as basic, and write the equal sign after that.

Animate: *tygrys* ‘tiger’/*Ford* ‘Ford car’

	Singular	Plural		Singular	Plural
N	-∅	-y/-i	N	tygrys/Ford	tygrysy/Fordy
A	= Gsg.	= Npl.	A	= Gsg.	= Npl.
G	-a	-ów	G	tygrysa/Forda	tygrysów/Fordów
L	‘-e	-ach	L	tygrysie/Fordzie	tygrydach/Fordach
D	-owi	-om	D	tygrynowi/Fordowi	tygrysom/Fordom
I	-em	-ami	I	tygrysem/Fordem	tygrydami/Fordami
V	= Lsg.	= Npl.	V	= Lsg.	= Npl.

Viriles, i.e. masculine nouns for persons, have two further differences in the plural: an *-i/-y* ending with consonant alternation in the Npl., and plural A=G syncretism, as follows:

Virile: *student* ‘student’/*biskup* ‘bishop’

	Singular	Plural		Singular	Plural
N	-∅	‘-i	N	student/biskup	studenci/biskupi
A	-a	-ów	A	studenta/biskupa	studentów/biskupów
G	-a	-ów	G	studenta/biskupa	studentów/biskupów
L	‘-e	-ach	L	studencie/biskupie	studentach/biskupach
D	-owi	-om	D	studentowi/biskupowi	studentom/biskupom
I	-em	-ami	I	studentem/biskupem	studentami/biskupami
V	‘-e	‘-i	V	studencie/biskupie	studenci/biskupi

Masculine velar-stem nouns (stem-final in a velar (*k/g/ch*) and the suffix *-e/c-*).

Notice that the velar criterion is a phonological one, while the suffix *-e/c-* is a semantic one, since the phonological *-c* ending without this particular suffix counts as a different type: the soft type. This means that stems which end in phonetic [c] can belong to two different masculine types. Velar-stem nouns differ from labial/dental hard stems in that their locative singular has the *-u* ending with no morphophonemic stem changes (e.g. *o raku* ‘about the crab’, *o chłopcu* ‘about the boy’, in contrast to labial and dental hard stems, which take *-e* with stem changes, as seen above in the basic masculine type. There is also a small difference between velar and some virile *-e/c-* suffixed nouns, in the vocative singular, in that velar stems use the same ending as the locative (*-u*), while a limited number of exceptional *-e/c-* suffixed nouns use *-e* and have the alternation of *c > cz*, e.g. *chłopiec* Nsg.~*chłopcze* Vsg., *młodzieniec* ‘youth, Nsg.’~*młodzieńcze* Vsg., in addition to the isolated and similar vocatives *Bóg* ‘God Nsg.’~*Boże* Vsg. and *szewc* ‘shoemaker Nsg.’~*szewcze* Vsg. Some more recent virile nouns in *-e/c-* the regular *-u* vocative, e.g. *związkowiec* ‘trade unionist Nsg.’~*związkowcu* Vsg.

Velar-stem nouns are illustrated in the three familiar varieties of inanimate, animate, and virile.

Inanimate: *brzuch* ‘belly’/*targ* ‘fair’

	Singular	Plural	Singular	Plural	
N	-∅	-y/-i	N	brzuch/targ	brzuchy/targi
A	= Nsg.	= Npl.	A	= Nsg.	= Npl.
G	-a/-u	-ów	G	brzucha/targu	brzuchów/targów
L	-u	-ach	L	brzuchu/targu	brzuchach/targach
D	-owi	-om	D	brzuchowi/targowi	brzuchom/targom
I	-em	-ami	I	brzuchem/targiem	brzuchami/targami
V	= Lsg.	= Npl.	V	= Lsg.	= Npl.

Animate: *rak* ‘crab’/*karaluch* ‘cockroach’

	Singular	Plural	Singular	Plural	
N	-∅	-y/-i	N	rak/karaluch	raki/karaluchy
A	= Gsg.	= Npl.	A	= Gsg.	= Npl.
G	-a	-ów	G	raka/karalucha	raków/karaluchów
L	-u	-ach	L	raku/karaluchu	rakach/karaluchach
D	-owi	-om	D	rakowi/karaluchowi	rakom/karaluchom
I	-em	-ami	I	rakiem/karaluchem	rakami/karaluchami
V	= Lsg.	= Npl.	V	= Lsg.	= Npl.

Virile: *Norweg* ‘Norwegian’/*związkowiec* ‘trade unionist’

	Sing.	Plur.	Singular	Plural	
N	-∅	‘-y/-i	N	Norweg/związkowiec	Norwedzy/związkowcy
A	= Gsg.	= Gpl.	A	= Gsg.	= Gpl.
G	-a	-ów	G	Norwega/związkowca	Norwegów/związkowców
L	-u	-ach	L	Norwegu/związkowcu	Norwegach/związkowcach
D	-owi	-om	D	Norwegowi/związkowcowi	Norwegom/związkowcom
I	-em	-ami	I	Norwegiem/związkowcem	Norwegami/związkowcami
V	-u’-e	= Npl.	V	Norwegu/związkowcu	= Npl.

Note that velars in *-k* and *-ch* would alternate to *-cy/-si* in the Npl., e.g. *Polacy* ‘Poles’/*Czesi* ‘Czechs’

Masculine soft-stem nouns (with stem-final in a soft dental affricate, alveopalatal, or palatal)

The major difficulty in predicting the soft masculine paradigm is the form of the genitive plural. Often, both endings can occur with a given noun: *-y/-i* ending on the one hand, and *-ów* on the other. For example, *pisarz* ‘author’ tolerates both *pisarzy* and *pisarzów* as its genitive plural. In spite of that, some general guidelines can be given. The *-ów* ending is often the only permissible one after *-c/-dz* and *-j* stem-finals, while the other soft finals tend to take the *-y/-i* ending more often. Note that in the soft type, viriles do not have a special nominative plural ending and alternation which opposes them to animates and

inanimates. Nevertheless, viriles and animates still have the accusative/genitive syncretism which sets them off from inanimates.

Inanimate: *kraj* ‘country’/*nóż* ‘knife’

	Singular	Plural	Singular	Plural
N	-∅	-e	N kraj/nóż	kraje/noże
A	= Nsg.	= Npl.	A = Nsg.	= Npl.
G	-a/-u	-y/-i, -ów	G kraj/noża	krajów/noży
L	-u	-ach	L kraju/nożu	krajach/nożach
D	-owi	-om	D krajowi/nożowi	krajom/nożom
I	-em	-ami	I krajem/nożem	krajami/nożami
V	= Lsg.	= Npl.	V = Lsg.	= Npl.

Animate: *paw* ‘peacock’/*jeż* ‘hedgehog’

	Singular	Plural	Singular	Plural
N	-∅	-e	N paw/jeż	pawie/jeże
A	= Gsg.	= Npl.	A = Gsg.	= Npl.
G	-a	-y/-i, -ów	G pawia/jeża	pawi/jeży
L	-u	-ach	L pawiu/jeżu	pawiach/jeżach
D	-owi	-om	D pawiowi/jeżowi	pawiom/jeżom
I	-em	-ami	I pawiem/jeżem	pawiami/jeżami
V	= Lsg.	= Npl.	V = Lsg.	= Npl.

Virile: *nauczyciel* ‘teacher’/*pisarz* ‘author’

	Singular	Plural	Singular	Plural
N	-∅	-e	N nauczyciel/pisarz	nauczyciele/pisarze
A	= Gsg.	= Gpl.	A = Gsg.	= Gpl.
G	-a	-y/-i, -ów	G nauczyciela/pisarza	nauczycieli/pisarzy
L	-u	-ach	L nauczycielu/pisarzu	nauczycielach/pisarzach
D	-owi	-om	D nauczycielowi/pisarzowi	nauczycielom/pisarzom
I	-em	-ami	I nauczycielem/pisarzem	nauczycielami/pisarzami
V	= Lsg.	= Npl.	V = Lsg.	= Npl.

Notice that the stem-final of *paw* is structurally soft, palatalized [w’], but that it hardens in final position, which happens to be the dictionary and usual citation form. It would be more accurate to represent the stem as *paw’-*.

Other lexical irregularities in the masculine zero declension.

Other irregularities of note occur in both the genitive, locative, and dative singular and the nominative and genitive plural of animates only:

1. Two animates take genitive *-u* instead of *-a*: *wół* 'ox' and *bawół* 'buffalo'.
2. Several nouns take the anomalous masculine dative singular *-u* ending instead of *-owi*, including *ojciec* (*ojci/e/c*) 'father', *brat* 'brother', *chłop* 'peasant', *chłopiec* 'boy', *pan* 'gentleman, you', *Bóg* 'God', *ksiądz* 'priest', *diabeł* (*diabl/e/ł*) 'devil', *pies* (*pi/e/s*) 'dog', *kot* 'cat', *świat* 'world', *lew* (*ll/e/w*) 'lion'.
3. A few masculine viriles take Lsg. *-u* instead of expected *-e*: *syn* 'son', *pan* 'gentleman, you', plus the inanimate *dom* 'house'.
4. Many viriles, regardless of stem-final, take special endings in both Npl. (*-owie*) and Gpl. (*-ów*). The Gpl. *-ów* ending is unusual only if the noun is in a soft consonant which normally would take *-y/-i*. This pair of endings is often found with names of nationalities and various honorific titles, e.g. *królowie* 'king, Npl.', *królów* Gpl. Each virile lexical item which takes *-owie* must be individually memorized, but the fact that the Apl. and Gpl. will then be *-ów* is predictable.

Masc. II: Masculine (virile) nouns with the nominative singular ending in a vowel (either *-a* or rarely *-o*). E.g. *turysta* 'tourist'.

One could say that the mirror image of feminine zero nouns (e.g. *kość* 'bone') are the masculine nouns which have their nominative singular in the ending that is most typical for feminine nouns (*-a*) (or, more rarely with the typical neuter ending, *-o*). However, while the feminine zero nouns give no phonological or semantic clue that they are indeed feminine (i.e. that they require feminine agreement with modifiers, such as *dobra kość*), the masculine nouns with a Nsg. vowel ending give an obvious semantic clue, in that they all refer to male persons. Therefore, one can infer that an *-a* noun that refers to a male person is of the masculine gender and, further, of the masculine II declension type.

The morphological paradigm of masculine nouns in a vowel is something of a hybrid: the singular that follows the feminine *a*-noun declensional pattern, while the plural follows the masculine zero-noun pattern. Therefore, the singular forms are phonologically divided into same two major categories that apply to feminine *a*-nouns, based on whether the stem ends in hard or soft. Hard stems (e.g. *turysta* 'tourist', *starosta* 'group leader', *kolega* 'colleague') share the feminine singular property of having the *-e* ending in both dative and locative, together with a morphophonemic change (*turyście*, *staroście*, *koledze*), while soft stems (*radca* 'advisor', *woźnica* 'coachman', *doża* 'doge (Italian leader)', *Kucia* 'Kucia (surname)') share the syncretic GDLsg. ending *-y/-i* (*radcy*, *doży*, *Kuci*).

In the plural, masculine II nouns follow the pattern of regular masculine nouns. This specifies that virile nouns may have either a regular Npl. in *-i/-y*, or the special virile *-owie*, which is lexically conditioned. In the case of the examples that have been given, *starosta*, *doża*, and *Kucia* are specified as taking the Npl. *-owie* ending (e.g. *starostowie*, *dożowie*, *Kuciovie*). Of the remaining nouns which do not

take the special *-owie* ending, hard stems and *-e/c-* or *-c-* suffix nouns (i.e. *turysta*, *kolega*, *radca*) have the Npl. *-y/-i* ending with a morphophonemic change of the virile type (*turyści*, *koledzy*, *radcy*), while soft stems (*woźnica*) have the *-e* ending without an alternation (*woźnice*).

In other words, *turysta*, *starosta*, *kolega* follow the feminine type 1 hard stem pattern in the singular, as do the feminines *ryba* and *łąka*. The feminine type 3 soft stem pattern is followed by *radca*, *woźnica*, *doża*, *Kucia* in the singular, following the same pattern as the regular feminine softs *praca* 'work', *ziemia* 'earth'. In the plural, *turysta*, *kolega* follow the pattern of regular hard masculines *student*, *Norweg* 'Norwegian'; while the soft *woźnica* follows *dziedzic* 'heir'. These paradigms can be exemplified as follows:

Virile Nsg. in Vowel: *kolega* 'colleague' / *woźnica* 'coachman'

	Sing. =Fem. =Masc.	Plur.		Singular	Plural
N	-a	'-y/-i	N	kolega/woźnica	koledzy/woźnice
A	-ę	= Gpl.	A	kolegę/woźnicę	= Gpl.
G	-y/-i	-ów	G	kolegi/woźnicy	kolegów/woźniców
L	'-e	-ach	L	koledze/woźnicy	kolegach/woźnicach
D	= Lsg.	-om	D	= Lsg.	kolegom/woźnicom
I	-ą	-ami	I	kolegą/woźnicą	kolegami/woźnicami
V	-o	= Npl.	V	kolego/woźnico	= Npl.

B. Feminine Nouns.

Fem. I: Feminine *a*-nouns (nominative singular in the vowel *-a*).

Basic Type: Hard consonant (labial, dental, or velar stop, fricative, or sonorant) plus the Nsg. ending *-a*.

Examples: *ryba* 'fish' / *łąka* 'meadow'

	Singular	Plural		Singular	Plural
N	-a	-y/-i	N	ryba/łąka	ryby/łąki
A	-ę	= Npl.	A	rybę/łąkę	= Npl.
G	-y/-i	-Ø	G	ryby/łąki	ryb/łąk
L	'-e	-ach	L	rybie/łące	rybach/łąkach
D	= Lsg.	-om	D	= Lsg.	rybom/łąkom
I	-ą	-ami	I	rybą/łąką	rybami/łąkami
V	-o	=Npl.	V	rybo/łąko	= Npl.

As noted above, syncretism creates a situation in which all paradigms share at least some endings across two or more case/number slots. These will be indicated by showing such case identities with an equal sign and a reference to the identical case. E.g., hard feminine *a*-nouns have such syncretisms in the dative singular, as well as the accusative and vocative plural. For clarity, the first of the two identical cases

listed will display the form and the second will be listed as equal to the first. Note that subtypes, such as soft stems, may have slightly different patterns of syncretism than the basic type.

Feminine Soft Stems (including historical softs)

Soft Type 1: Stem-final in a single soft consonant (-VC'-).

Examples: *praca/kula* 'work'/'sphere'

	Singular	Plural		Singular	Plural
N	-a	-e	N	praca/kula	prace/kule
A	-ę	= Npl.	A	pracę/kule	= Npl.
G	-y/-i	-Ø	G	pracy/kuli	prac/kul
L	= Gsg.	-ach	L	= Gsg.	pracach/kulach
D	= Gsg.	-om	D	= Gsg.	pracom/kulom
I	-ą	-ami	I	pracą/kulą	pracami/kulami
V	-o	= Npl.	V	praco/kulo	= Npl.

This type is defined as having a single soft consonant before the Nsg. ending *-a*. “Soft” includes both synchronic and historic palatalized and palatal consonants, which means that it is theoretically defined as a feminine noun in a palatalized labial (*-pia/-bia/-fia/-wia/-mia*), dental affricate (*-ca/-dza*), alveopalatal (*-sza/-ża/-cza/-dża/-rza/-la*), or palatal (*-sia/-zia/-cia/-dzia/-nia/-ja*).

One of the most important differences between feminine hard and soft stem-final consonants is the shape of the syncretic dative and locative singular endings: soft finals take the *-i/-y* ending, while hards take the *-e* ending, as shown in type one above. Thus, softs have a three-way syncretism with the Gsg., while hards have only a two-way type between Lsg. and Dsg. When a soft noun, such as *praca* ‘work’, has its L-D sg. form, *pracy*, juxtaposed to that of hard *łaska*, which has L-D sg. *łace*, the student is sometimes confused by the fact that the very same consonant [c] appears in the soft paradigm before *-y*, and also in the hard paradigm before *-e*. This situation even has been used as a problem in a recent book on phonological theory. The solution, however, is simple, and is directly related to what the basic form is considered to be. The hard example comes from *łaska*, where the hard consonant [k] determines the use of the *-e* ending, but confusingly alternates to the affricate [c]. In the soft example, the [c] is found in the basic form, which defines it as the soft type 3, meaning that the locative-dative is in *-i/-y*. The remaining complexity stems from the fact that the modern “soft” declension--type 3 here--actually includes synchronic softs, such as palatals, which opt for the ending *-i*, in contrast to historically soft dental affricates and alveopalatals, which opt for the ending *-y*. Thus, *-k* finals are hard and choose *-e*, *-c* finals are historically soft and choose *-y*, while palatal finals (like [ć]) select the *-i* ending. The other major difference is the nominative-accusative plural, in which the soft type takes the *-e* ending, in contrast to type 1 hards, which take *-i/-y* (but like the unusual type 2 *szansa* in this respect). The paradigm has the following forms for such nouns as *praca* ‘work’ and *kula* ‘sphere’, where *c* represents a consonant which can be followed by *-y* and not *-i*, while *kula* has the opposite rule:

Palatalized labials present certain complications when used in the stem-final position, partly due to the fact that labials can be palatalized only in pre-vocalic position, but harden before the zero ending, when they are in word-final position, as the following paradigm of *ziemia* 'earth' makes clear. The following section addresses that issue in more detail, after which we proceed with the soft feminine paradigms of type three.

	Singular	Plural
N	ziemia	ziemie
A	ziemię	= Npl.
G	ziemi	ziem
L	= Gsg.	ziemiach
D	= Gsg.	ziemiom
I	ziemią	ziemiami
V	ziemio	= Npl.

Excursus on Labial plus *-ia* Spellings in Polish

Polish stem-final spellings of labial plus *-ia* are ambiguous. In native Polish words, they indicate such groups as soft labial plus [a], e.g. *ziemia* 'earth' [żem'a], but in loans they indicate an additional *j* consonant between the labial and the vowel, e.g. *armia* 'army' [arm'ja]. Note that the *ziemia* type belongs to our group 3, while *armia*, with its stem-final consonant cluster [m'j] belongs to type 4. The major difference lies in the genitive plural, with type 3 taking the zero ending (e.g. *ziem*--note the phonologically automatic hardening of final labials), while type 4 takes the G pl. *-y/-i* ending (e.g. *armii* [arm'j-i]). Since the palatalized labials (e.g. [m']) themselves are known to permit the alternate pronunciations of both [m'] and [m'j], this poses a potentially complex question for the pronunciation and declension of *ziemia* and *armia*. The solution lies in the fact that any word with the standard [m'] plus vowel pronunciation also admits [m'j] plus vowel as a pronunciatonal variant, but such stem-finals are nevertheless treated as containing [m'a] as underlying grammatical entities and belong to feminine noun class 3, with the zero genitive plural. On the other hand, such a word as *armia* only admits the stem-final cluster [m'j] as the pronunciation and no such [*m'a] is possible here. Therefore, it can only be treated grammatically as a cluster and, therefore, it belongs to our type 4.

Soft Type 2: Feminine nouns with stem-final consonant cluster ending in a soft (-CC'-).

This is a stem ending in a cluster of more than one consonant, in which the last consonant must be soft. This includes a large number of borrowed nouns which have stems ending in consonant plus *-ja* or *-ia*, representing the final of the type [Cj] (e.g. *stacja*, *kopia*, *mumia*). It differs from the previous type only in the fact that the stem-final position has a cluster, rather than a single consonant and the only difference of grammatical ending is the use of *-y/-i* in the genitive plural, rather than the zero seen above. Since this is also the regular Gsg. ending, it also makes the Gpl. syncretic with three singular cases, as seen in the paradigms illustrated below.

Examples: *rzeźnia/stacja* ‘slaughterhouse’/‘station’

	Singular	Plural		Singular	Plural
N	-a	-e	N	rzeźnia/stacja	rzeźnie/stacje
A	-ę	-e	A	rzeźnię/stację	= Npl.
G	-y/-i	-y/-i	G	rzeźni/stacji	= Gsg.
L	= Gsg.	-ach	L	= Gsg.	rzeźniach/stacjach
D	= Gsg.	-om	D	= Gsg.	rzeźniom/stacjom
I	-ą	-ami	I	rzeźnią/stacją	rzeźniami/stacjami
V	-o	-y/-i	V	rzeźnio/stacjo	= Npl.

Some declensional irregularities are caused by a confusion of the genitive plural ending of the two soft types (i.e. ending in a single or double consonant), as follows:

1. Noun stems ending in a single consonant which behave as if they ended in cluster, taking the Gpl. *-y/-i* ending instead of zero. E.g. *obroża* ‘dog collar’.
2. Noun stems ending in a consonant cluster which behave as if they ended in a single consonant, taking the zero ending in the Gpl. instead of *-y/-i*. E.g. *tarcza* ‘shield’.

Other minor exceptions to feminine *-a* declension.

Exception 1. Feminine nouns with stem-final in *-ns*.

Feminine noun stem-finals spelled *-ns-* plus *-a* are actually pronounced with a labialized nasal glide in place of the spelled *n*, according to the rules of Polish phonology (e.g. *szansa* ‘chance’ [šawsa]). Such nouns are by no means a large or important class, but are different from other hard finals and they predictably differ from the large class just presented in the single detail that their syncretic NAV pl. takes the *-e* ending, rather than *-i/-y*, which results in the following paradigm for *szansa* and other nouns like it:

Example: *szansa* ‘chance’

	Singular	Plural		Singular	Plural
N	-a	-e	N	szansa	szanse
A	-ę	= Npl.	A	szansę	= Npl.
G	-y/-i	-∅	G	szansy	szans
L	‘-e	-ach	L	szansie	szansach
D	= Lsg.	-om	D	= Lsg.	szansom
I	-ą	-ami	I	szansą	szansami
V	-o	= Npl.	V	szanso	= Npl.

Exception 2. Feminine nouns with Nsg. in *-i*.

When feminine nouns have the Nsg. in *-i*, the stem-final consonant is soft and the Nsg. and Vsg. are the only forms which differ from those of the regular feminine soft paradigm. By far the most frequently

used noun of this type, *pani* ‘lady, you’, has yet another irregular form--the anomalous A sg. *panią*. Perhaps this is due to its grammaticalized use as a second person pronoun. These nouns tend to refer to women in positions of prestige or power.

Example: *gospodyni* ‘landlady’

	Singular	Plural		Singular	Plural
N	-i	-e	N	gospodyni	gospodynie
A	-ę	= Npl.	A	gospodynię	= Npl.
G	-y/-i	-Ø	G	gospodyni	gospodyń
L	= Gsg.	-ach	L	= Gsg.	gospodyniach
D	= Gsg.	-om	D	= Gsg.	gospodyniom
I	-ą	-ami	I	gospodynią	gospodyniami
V	-i	= Npl.	V	gospodyni	= Npl.

Exception 3. Vocative singular of diminutives.

Feminine diminutives and hypocoristics fit type three, the regular soft type, except for the vocative, which uses either the *-u* ending (or zero), instead of *-o*.

Ewusia ‘Ewa, dim.’, *mamusia* ‘mother, dim.’, *Marysia* ‘Maria, dim.’

	Singular	Plural		Singular	Plural
N	-a	-e	N	mamusia	mamusie
A	-ę	-e	A	mamusię	= Npl.
G	-y/-i	-Ø	G	mamusi	mamuś
L	= Gsg.	-ach	L	mamusi	mamusiach
D	= Gsg.	-om	D	mamusi	mamusiom
I	-ą	-ami	I	mamusią	mamusiami
V	-u (~Ø)	-y/-i	V	mamusi	= Npl.

Fem. II: Feminine nouns with nominative singular in zero (-Ø).

The feminine zero noun nominative singular is indistinguishable from that of the class of soft masculine nouns, requiring some notation about its gender. In this case, paradigmatic predictability requires both grammatical and phonological information, in contrast to most types of feminine *-a* nouns. In addition to the regular type, which has the regular feminine soft Npl. in *-e* (e.g. *noc* ‘night’), there is a second type with a Npl. in *-y/-i* (e.g. *mysz* ‘mouse’). The word *postać* ‘aspect’ can take either type of nominative plural (*postaci* or *postacie*).

Regular feminine zero type.*noc* 'night' *sień* 'hallway'

	Singular	Plural		Singular	Plural
N	-∅	-e	N	noc/sień	noce/sienie
A	= Nsg.	= Npl.	A	noc/sień	= Npl.
G	-y/-i	= Gsg.	G	nocy/sieni	= Gsg.
L	= Gsg.	-ach	L	= Gsg.	nocach/sieniach
D	= Gsg.	-om	D	= Gsg.	nocom/sieniom
I	-ą	-ami	I	nocą/sienią	nocami/sieniami
V	= Gsg.	= Npl.	V	= Gsg.	= Npl.

These nouns follow the **soft -a** noun pattern except for the obvious difference of the Nsg. zero and the two syncretisms which are characteristic of inanimate masculine zero nouns: Nsg.=Asg. and Lsg.=Vsg., which is also syncretic with the Gsg., creating a total of **five** syncretic cases with the *-y/-i* ending.

The second type of feminine zero-noun has its Npl. in *-y/-i*, rather than *-e*, which can be said to be lexically conditioned by certain suffixes and lexical items. For example, important and productive suffixes (such as *-ość*) follow this type, as well as other common words, e.g. *mysz* 'mouse', *pamięć* 'memory', and *kość* 'bone' (which phonetically ends in [ość], but not the suffixal morpheme *-ość*). Since all feminine zero nouns with a stem ending in *-ość* are of this type, rather than just those with the suffix, one could say that there is a minor subtype of phonological conditioning of this paradigm within the entire group, which is primarily conditioned on a lexical basis. This paradigm has a very high number of syncretic cases, since the Npl. have the same ending as the Gsg. The paradigm is as follows:

wiadomość 'news item' *mysz* 'mouse'

	Singular	Plural		Singular	Plural
N	-∅	= Gsg.	N	wiadomość/mysz	= Gsg.
A	= Nsg.	= Gsg.	A	= Nsg.	= Gsg.
G	-y/-i	= Gsg.	G	wiadomości/myszy	= Gsg.
L	= Gsg.	-ach	L	= Gsg.	wiadomościach/myszach
D	= Gsg.	-om	D	= Gsg.	wiadomościom/myszom
I	-ą	-ami	I	wiadomością/myszą	wiadomościami/myszami
V	= Gsg.	= Gsg.	V	= Gsg.	= Gsg.

Two nouns in this class (*kość* 'bone', *nić* 'thread') have exceptional Ipl. forms in *-mi* instead of the expected *-ami*. A small number of masculine soft stem nouns have the same exceptional form, which is listed under soft masculines.

C. Neuter Nouns

There are three major phonological subtypes of neuter nouns, analogous to the three-way split of masculine zero nouns: hard non-velar, velar, and soft. The cases which are sensitive to stem-finals are

the Nsg. and Lsg. The hard non-velar type has both Nsg. *-o* ending and Lsg. *-e* with alternation, the velar type has Nsg. *-o*, but Lsg. *-u*, while the soft type has Nsg. *-e* and Lsg. *-u*, as follows:

Neut. I: Neuter nouns with the nominative singular in a vowel ending (*-o* or rarely *-e*).

Basic Type: Stem-final in a hard non-velar.

lato ‘summer’/*słowo* ‘word’

	Sing.	Plur.		Singular	Plural
N	-o	-a	N	lato/słowo	lata/słowa
A	= Nsg.	= Npl.	A	= Nsg.	= Npl.
G	-a	-∅	G	lata/słowa	lat/słów
L	‘-e	-ach	L	lecie/słowie	latach/słowach
D	-u	-om	D	latu/słowu	latom/słowom
I	-em	-ami	I	latem/słowem	latami/słowami
V	= Nsg.	= Npl.	V	= Nsg.	= Npl.

Note that a morphophonemic change of final consonant occurs in the Lsg. In addition, there is a locative alternation of *a~e* in *lato*, and an alternation of *o~ó* in the Gpl. of *słowo*, conditioned by the zero ending and closed syllable.

Neuter velar-stem nouns (stem-final in a velar *k/g/ch*).

jabłko (*jabłko*) ‘apple’/*echo* ‘echo’

	Sing.	Plur.		Singular	Plural
N	-o	-a	N	jabłko/echo	jabłka/echa
A	= Nsg.	= Npl.	A	= Nsg.	= Npl.
G	-a	-∅	G	jabłka/słowa	jabłek/ech
L	‘-e	-ach	L	jabłku/echu	jabłkach/echach
D	-u	-om	D	jabłku/echu	jabłkom/echom
I	-em	-ami	I	jabłkiem/echem	jabłkami/echami
V	= Nsg.	= Npl.	V	= Nsg.	= Npl.

Since *jabłko* is structurally *jabłk-o*, with a vowel-zero alternation preceding the *k*, the zero ending genitive plural ending conditions a vowel. Note also that in the Isg. a phonological rule causes [k] to soften to [kʲ] before [e], which is symbolized by the *i* which is written after the velar. However, only velar stops, rather than the velar fricative, are subject to this rule, hence *ch* undergoes no such change in the Isg, e.g. *dachem* ‘roof (Isg)’.

Neuter soft-stem (stem-final in a soft).*danie* ‘food course’/*zdjęcie* ‘photograph’

	Sing.	Plur.		Singular	Plural
N	-e	-a	N	danie/zdjęcie	dania/zdjęcia
A	= Nsg.	= Npl.	A	= Nsg.	= Npl.
G	-a	-Ø	G	dania/słowa	dań/zdjęć
L	-u	-ach	L	daniu/zdjęciu	daniach/zdjęciach
D	= Lsg.	-om	D	= Lsg.	daniom/zdjęciom
I	-em	-ami	I	daniem/zdjęciem	daniami/zdjęciami
V	= Nsg.	= Npl.	V	= Nsg.	= Npl.

Lexical neuter exceptions

One of the major neuter exceptions to the above pattern includes nouns which have the genitive plural *-y/-i* ending, instead of zero. It tends to occur in derived neuters, particularly those which have an obviously recognizable prefix and a soft stem-final, such as *narzędzie* ‘tool’, *przedpole* ‘foreground’. One can obviously see that this ending is not phonologically predictable by comparing the unsuffixed *pole* ‘field’, with its zero ending Gpl. *pól*, to the Gpl. of *przedpole*, which is *przedpoli*, with the *-y/-i* ending. Since nouns such as *zdjęcie* can take the zero Gpl. and be difficult to structurally distinguish from *przedpole*, neuters with non-zero Gpl. may have to be learned on a lexical basis.

Neuter nouns with nominative singular in *-ę*.

This small group of nouns has an extra stem syllable which does not appear in the Nsg. before *-ę*, but reappears in the other case forms. In addition, the singular stems have soft stem-finals, but the plurals revert to hard stem-finals. There are two main types, based on the inserted syllable (singular/plural): *-eń/-on-* and *-ęć/-ęt-*. The best guideline to which of the two inserted syllable will be used is the stem-final consonant of the Nsg. If a soft *m* (spelled *mi*) precedes the Nsg. *-ę* ending (e.g. *ramię*, *imię*, *wymię*), one can assume inserted *-eń/-on-*, while other consonants indicated that *-ęć/-ęt-* is the inserted syllable, as follows:

imię ‘name’/*cielę* ‘calf’

	Sing.	Plur.		Singular	Plural
N	-ę	-a	N	imię/cielę	imiona/cielęta
A	= Nsg.	= Npl.	A	= Nsg.	= Npl.
G	-a	-Ø	G	imienia/cielecia	imion/cieląt
L	-u	-ach	L	imieniu/cieleciu	imionach/cielętach
D	= Lsg.	-om	D	= Lsg.	imionom/cielętom
I	-em	-ami	I	imieniem/cieleciem	imionami/cielętami
V	= Nsg.	= Npl.	V	= Nsg.	= Npl.

The type with inserted *-ęć/-ęt-* is often used for the young of animals, and there is a tendency to substitute

the masculine suffix *-ak-* for it (to avoid the changes in stem length), even though the former type is unmarked for gender, while the latter is specifically masculine.

Neut. II: neuter nouns with indeclinable singular (*muzeum, stypendium*).

This group of neuters, all Latin loans in *-um*, is highly irregular in Polish, in that it uses the ending *-um* in all forms of the singular. The plural uses departs from the regular neuter pattern in the Gpl., taking the usual masculine ending *-ów*, as follows.

muzeum ‘museum’

	Sing.	Plur.		Singular	Plural
N	-um	-a	N	muzeum	muzea
A	=Nsg.	= Npl.	A	= Nsg.	= Npl.
G	=Nsg.	-ów	G	= Nsg.	muzeów
L	=Nsg.	-ach	L	= Nsg.	muzeach
D	=Nsg.	-om	D	= Nsg.	muzeom
I	=Nsg.	-ami	I	= Nsg.	muzeami
V	=Nsg.	= Npl.	I	= Nsg.	= Npl.

Chapter 4. Polish Adjectival Declension and Comparison. Notes on the Adverb

Adjectival declension primarily differs from nominal in that adjectives do not have an inherent, unchanging gender, but agree in gender with the noun they modify. Consequently, the number of grammatical forms possible for a given adjective is much larger than the number a noun can have, since the adjective will have masculine, neuter, and feminine forms in the singular, plus virile and non-virile forms in the plural. In spite of this, the declension of adjectives is much simpler than that of nouns, since there is really only a single declension type. The only variation in endings is due to predictable phonological factors. For example, if three adjectival stems end in a hard non-velar (e.g. [r]), a velar (e.g. [k]), and a soft palatal consonant (e.g. [ń]), a basic /i/ ending will be automatically realized in three different ways: [ry/k'i/ni], as seen in the nominative singular of *dobry* 'good'/*wielki* 'large', *tani* 'cheap'. The major morphophonemic alternation within adjectival declension is found in the Npl. of viriles, which has been described in detail in the chapter on alternation types, where it was referred to as the virile alternation. It is an even more extensive alternation for adjectives than that found in virile nouns, since nouns do not have an alternation of the stem-final consonant if it is -sz/-ż, (in such cases, virile nouns use the same desinences that would apply to non-virile nouns, e.g. *listonosze* 'mailmen', *kosze* 'baskets'). However, adjectives, in contrast to nouns, do have alternations of the above two stem-final consonants; the orthographic nominative singulars -sz/-ży correspond to the virile nominative plural -si/-zi; e.g. *duży~duzi* 'big, masc. Nsg. and vir. Npl.' and *lepszy~lepsi* 'better, masc. Nsg. and vir. Npl.'. Sample paradigms of the adjectives *dobry/wielki/tani* are as follows:

dobry 'what kind of?'

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	dobry	dobrze	dobrze	dobrzy	dobrze
A	dobry/ dobrego	dobrze	dobrze	dobrych	dobrze
G	dobrego	dobrego	dobrze	dobrych	dobrych
L	dobrym	dobrym	dobrze	dobrych	dobrych
D	dobremu	dobremu	dobrze	dobrym	dobrym
I	dobrym	dobrym	dobrze	dobrymi	dobrymi

wielki 'large'

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	wielki	wielkie	wielka	wielcy	wielkie
A	wielki/ wielkiego	wielkie	wielka	wielkich	wielkie
G	wielkiego	wielkiego	wielkiej	wielkich	wielkich
L	wielkim	wielkim	wielkiej	wielkich	wielkich
D	wielkiemu	wielkiemu	wielkiej	wielkim	wielkim
I	wielkim	wielkim	wielka	wielkimi	wielkimi

tani ‘cheap’

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	tani	tanie	tania	tani	tanie
A	tani/ taniego	tanie	tanią	tanich	tanie
G	taniego	taniego	taniej	tanich	tanich
L	tanim	tanim	taniej	tanich	tanich
D	taniemu	taniemu	taniej	tanim	tanim
I	tanim	tanim	tanią	tanimi	tanimi

Note that *tani* has a stem which ends in a soft consonant, i.e. palatal *ń*. When palatal *ń* is the base form, it does not have a different alternation value, so *tani* functions as both the nominative singular and virile nominative plural. On the other hand, if hard (dental) *n* is the stem-final consonant in the nominative singular, it changes to palatal *ń* in the virile nominative plural, e.g. *napisany/napisani* ‘written, Nsg./virile Npl.’.

Adjectival Comparison

Polish has both synthetic and analytical types of adjectival comparison. The synthetic type involves the addition of a suffix to the adjective stem, with possible stem changes (comparable to the adding of *-er* in English), while the analytical involves the use of the separate word *bardziej* ‘more’, together with the regular positive degree of the adjective, similar to English comparison with *more*. As in English, each adjective is lexically specified as using synthetic, analytical, or both types of comparison. The following basic rules are a general guideline for Polish synthetic adjectival comparison.

The simplest type of Polish comparative morpheme is the suffix *-sz*, which is used for adjectival stems ending in a single consonant and certain clusters, which are permitted even when *-sz* is added to them. E.g. *nowy* ‘new, masc. Nsg.’/*nowszy* ‘newer’ with one consonant; but also *prosty* ‘simple’/*prostsz* ‘simpler’. When consonant clusters are at the end of the adjectival stem, the usual comparative suffix is *-ejsz*. Before both comparative suffixes there may be a morphophonemic alternation of the last consonant of the adjectival stem (e.g. *miły/milszy* ‘dear/more dear’, *drogi/droższy* ‘expensive/more expensive’). The *-ejsz* suffix often has a consonant alternation similar to the type found for verbs in Conjugation I (which occurs before endings in *-e*, e.g. *trę/trzesz*, ‘rub 1sg./2sg.’), e.g. *jasny/jasniejszy* ‘bright/brighter’, *mądry/mądrzejszy* ‘wise/wiser’, *lekki/lżejszy* ‘light/lighter’.

When various adjectival suffixes occur with *-k* (e.g. *-k/-ek/-ok*), the suffix is deleted and the comparative suffix *-sz* is added, which often leads to a mutation of the modified adjectival stem; e.g. *niski* ‘low’ (which has the root *niz-*) drops the *-k* and mutates the *-z* to *-ź* (*niższy* ‘lower’). Cf. the following similar pairs: *głęboki/głębszy* ‘deep/deeper’, *daleki/dalszy* ‘far/farther’, and the unusual case of *wysoki/wyższy* ‘tall/taller’, in which there is an anomalous change of voiceless *s* to voiced *ż*. The superlative (cf. English *-est*) is formed by adding the prefix *naj-*, added to the comparative form. E.g. *najprostsz* ‘simplest’, *najniższy* ‘lowest’.

As in English, some of the most common comparative forms use suppletive stems. E.g. *dobry/lepszy* ‘good/better’, *zły/gorszy* ‘bad/worse’, *wielki/większy* ‘large/larger’, *mały/mniejszy* ‘small/smaller’.

As in English, the analytic comparative is often used with participial forms that are used adjectivally. E.g. *bardziej interesujący* 'more interesting', *bardziej opalony* 'more sunburnt'. The analytic superlative is formed with *najbardziej* instead of the comparative *bardziej*, e.g. *najbardziej interesujący* 'most interesting', *najbardziej opalony* 'most sunburnt'.

The equivalent of English *than* is either the Polish preposition *od* or the conjunction *niż*. The preposition *od*, which governs the genitive case, may be used when the second part of the comparison involves a noun which may be put into the genitive case. E.g. *Ona jest lepsza od brata*. 'She is better than her brother.' However, if the comparison is to an entire clause, *niż* must be used, e.g. *Ona była lepsza, niż brat kiedykolwiek był*. 'She was better than her brother has ever been.'

Notes on Adverbs

Some adverbs are not derived from adjectives, such as *jutro* 'tomorrow', *zawsze* 'always', etc. When adverbs are derived from adjectives, they generally use either the *-o* or *-e* ending after the adjective stem, which is not predictable and must be learned as such. A given adjective may select adverbial *-e*, *-o*, or both, with differing lexical or grammatical uses of each. When *-e* is used, there is a softening of the previous (i.e. stem-final) consonant.¹⁰ Some examples of adjectives and their related adverbs in *-o*: *jasny/jasno* 'bright/brightly', *szybki* 'fast'/*szybko* 'fast'. Pairs in *-e*: *dobry* 'good'/*dobrze* 'well', *zły* 'bad'/*źle* 'badly', *ładny* 'nice'/*ładnie* 'nicely'. Note that both endings occur with *smutny* 'sad'; *smutno*, typically as a predicative adverbial (e.g. *Było nam bardzo smutno bez niego*. 'We were very sad without him.', but *Dosyć smutnie wygląda*. 'He looks rather sad.').

Adverbial comparatives are formed with the suffix *-ej*, which is usually affixed to the same stem as is the adjectival comparative in either *-sz* or *-ejsz*. E.g. *jaśniejszy/jaśniej*, *lepszy/lepiej*, *głębszy/głębiej*. Adverbial superlatives are also formed by adding the prefix *naj-* to the comparative: *najlepiej/najgłębiej*, etc. In other words, adverbial comparatives follow most of the rules for adjectival comparison, except for the use of the different suffix.

¹⁰ Due to this mutation, regardless of whether the adverb is formed with *-o* or *-e*, it will not coincide with the neuter adjective in *-e*, since the adverbial *-e* causes a softening mutation of the stem-final consonant, while the adjectival neuter *-e* does not (e.g. neuter adjectival *dobrze* 'good' vs. *dobrze* 'well').

Chapter 5. Polish Numerals

If Polish numbers behaved like regular adjectives, no separate chapter about them would be required. However, they are much more complex than the simple adjectival relationship found in such languages as English. The problem stems from the fact that certain numbers act more like nouns than adjectives in specific case forms, while they act more like adjectives in others. Therefore, each separate group of numbers must be learned in terms of whether we have an adjectival agreement relationship or a noun relationship, with the modified noun in the genitive case. The closest comparison to English might be imagined by considering two possible ways of saying 'five books'--either adjectival 'five books' or nominal 'a fiver of books'. As a matter of fact, the Polish numbers two, three, and four are more like the former, adjectival situation (*dwie, trzy, cztery książki*), while the Polish numbers for five, six, seven, eight, nine, and ten are like the second, nominal one (*pięć, sześć, siedem, osiem, dziewięć, dziesięć książek*). The Polish numbers that present this complexity do not include the number 'one', *jeden*, for several reasons: it behaves as a normal adjectival modifier and also has the morphological paradigm of a regular pronominal adjective (such as *mój* 'my'), even including all of the regular gender distinctions plus grammatical number (singular and plural forms), the latter in the meaning 'several'. An obvious reason for this is the fact that it refers to a singular noun. All of the complications of the Polish number system relate to numbers two and above, involving the more complex category of plural. This chapter will concentrate on how to combine numbers two and above with nouns.

As a starting point, let us refer to the number plus the noun it modifies as a **numeral phrase**. This may also include an adjective in between, as in such English phrases as 'three books' or 'three good books'. When the Polish numeral phrase itself is in a syntactic position that would normally require the nominative case, such as the subject slot, we do not always have the usual agreement relationship in the numeral phrase, so our first special topic will focus on how to deal with numeral phrases that are in the subject slot. When numbers are in positions other than the subject slot (and as long as the required form is not syncretic with the nominative case), the relationship becomes easier and is a more usual one of agreement. Therefore, the most important thing to learn is how numeral phrases work in the subject position. For reference, the case forms of the numerals have been listed in the following tables:

Paradigms of numerals:

A. *jed/e/n* 'one'

	Singular			Plural	
	M	F	N	Virile	Non-Virile
N	jeden	jedna	jedno	jedni	jedne
A	jeden/ jednego	jedną	jedno	jednych	jedne
G	jednego	jednej	jednego	jednych	jednych
L	jednym	jednej	jednym	jednych	jednych
D	jednemu	jednej	jednemu	jednym	jednym
I	jednym	jedną	jednymj	ednymi	jednymi

B. *dwa* 'two'

	Virile	Non-Virile M/N	F
N	dwaj (dwóch)	dwa	dwie
A	dwóch	dwa	dwie
G	dwóch	dwóch	dwóch
L	dwóch	dwóch	dwóch
D	dwóm	dwóm	dwóm
I	dwoma	dwoma	dwoma/dwiema

C. *trzy* 'three', *cztery* 'four'

	Virile	Non-Virile	
N	trzej/czterej (trzech/czterech)	dwa	dwie
A	trzech/czterech	dwa	dwie
G	Virile and Non-Virile trzech/czterech		
L	trzech/czterech		
D	trzem/czterem		
I	trzema/czterema		

D. *pięć* 'five'

	Virile	Non-Virile
N	(pięciu)	pięć
A	pięciu	pięć
G	Virile and Non-Virile pięciu	
L	pięciu	
D	pięciu	
I	pięciu/pięcioma	

Numbers 6-10 (*sześć*, *sied/e/m*, *osi/e/m*, *dziewięć*, *dziesięć*) have a similar declension to *pięć*, except for the vowel~zero alternations indicated in *sied/e/m* and *osi/e/m*, plus the fact that the final hard labials of the latter two numbers have underlying softness, which appears in non-final position (e.g. *siedmiu*, *ośmiu*, etc.)

D. Numbers from 11-19 (*jedenaście/dwanaście, trzynaście, czternaście, piętnaście, szesnaście, siedemnaście, osiemnaście, dziewiętnaście*), all ending in *-naście* and declined with the same endings. Note that the nasal vowel *ę*, though written, is pronounced as if [e] in the numbers from 11-19.

E. *jedenaście* 'eleven'

	Virile	Non-Virile
N	(jedenastu)	jedenaście
A	jedenastu	jedenaście
	Virile and Non-Virile	
G	jedenastu	
L	jedenastu	
D	jedenastu	
I	jedenastu/jedenastoma	

Numeral Phrases in the Subject Slot

Since the numbers under discussion all refer to more than one, they are grammatically similar to plurals. If one considers the plural of adjectives, it is clear that the nominative plural has two main forms, based on whether the modified noun is virile or non-virile. Thus, the virile Npl. adjectival form for 'good' is *dobrzy*, which must refer to male persons (e.g. *dobrzy studenci*), while the non-virile form is *dobrze*, and it can refer to any nouns in the universe, so long as they do not include any male human beings (e.g. *dobrze dziewczyny, lwy, domy, słowa*). Therefore it should be expected that numeral phrases containing virile and non-virile nouns have very different grammatical patterns. Let us consider them in sequence, starting with the easier non-virile numeral phrases.

A. Numeral phrases with non-virile nouns.

If we think of a clause containing a numeral phrase plus a verb, we are speaking of three entities, the number, the noun, and the verb. When the noun is a non-virile, the number is in the expected nominative case, and only the number 'two' (*dwa/dwie*) is inflected for gender. The noun and verb have two different situations, though, depending on the number involved. If the number is either 2, 3, or 4 (or larger compounds ending in 2, 3, and 4, such as 23, 32, 54), the whole phrase acts like a simple nominative plural adjectival phrase, with the noun in the nominative plural and the verb having the same present or past tense agreement that it has with any other nominative plural subject. Observe that it is usual to invert the verb in a numeral phrase, putting the verb before the numeral phrase. For example:

1. Tu są/były dwa koty . 'Two cats are/were here.'
2. Tu są/były dwie kobiety . 'Two women are/were here.'
3. Tu są/były trzy koty . 'Three cats are/were here.'
4. Tu są/były trzy kobiety . 'Three women are/were here.'

However, with numbers five and above (plus their compounds and compounds ending in 1, such as 21, 25, 37, 71, 89), the noun and any intervening adjective appear in the genitive plural, and the verb behaves as if were agreeing with a neuter singular noun. This can be seen if we take the simple examples just cited and rephrase them for numbers over five:

1. Tu jest/było pięć kotów. 'Five cats are/were here.'
2. Tu jest/było siedem kobiet. 'Seven women are/were here.'
3. Tu jest/było dwadzieścia stołów. 'Twenty tables are/were here.'
4. Tu jest/było dwadzieścia jeden drzew. 'Twenty-one trees are/were here.'

Thus, there are two main groups of numeral phrases with non-viriles, depending on whether the number is below five or five and above.

B. Numeral phrases with virile nouns.

In the case of virile nouns, there are two alternative ways of treating numeral phrases with 2, 3, and 4. The more common and colloquial way treats 2, 3, and 4 just like all numbers 5 and above, and that is the first type we shall look at. In this type, used for all numbers over one, there is no grammatical subject at all in the nominative case. A typical Polish impersonal sentence is used, in which the grammatical subject is absent, but the logical subject (equivalent to the numeral phrase) appears in the accusative/genitive case (which share the same form for viriles). Since there is no subject, the verb can have only the default type of agreement found in all impersonal sentences, which treats the verb as if it is agreeing with a neuter singular noun. To illustrate, all of the above examples will be rewritten to express virile nouns in the numeral phrase:

1. Tu jest/było dwóch studentów . 'Two students are/were here.'
2. Tu jest/było dwóch kolegów . 'Two friends are/were here.'
3. Tu jest/było trzech żołnierzy . 'Three soldiers are/were here.'
4. Tu jest/było trzech nauczycieli. 'Three teachers are/were here.'
5. Tu jest/było pięciu królów. 'Five kings are/were here.'
6. Tu jest/było siedmiu inżynierów. 'Seven engineers are/were here.'
7. Tu jest/było dwudziestu profesorów. 'Twenty professors are/were here.'
8. Tu jest/było dwudziestu jeden prezydentów. 'Twenty-one presidents are/were here.'

The illustrated examples contained the intransitive verb *być* 'to be'. If there had been a transitive verb with a direct object, the sentence would have had both the numeral phrase plus an additional noun phrase in the accusative case, e.g. *Czytało moją książkę sześciu profesorów*. 'Six professors were reading my book.'

Virile nouns have an alternative nominative case for the numbers 2, 3, 4, which occurs more rarely and less colloquially than the impersonals just illustrated. As an example, the alternative personal virile numeral phrases for 2, 3, and 4 would take the following form for the above four sentences:

1. Tu są/byli dwaj studenci . 'Two students are/were here.'
2. Tu są/byli dwaj koledzy . 'Two friends are/were here.'
3. Tu są/byli trzej żołnierze . 'Three soldiers are/were here.'
4. Tu są/byli trzej nauczyciele. 'Three teachers are/were here.'

Table: Polish Numeral Phrase Subject Plus Verb

3 main parts of number phrase:

VERB

+

NUMERAL

+

NOUN

VERB = PLURAL stały, były, chciały	NUMBER = NOMINATIVE 2, 3, 4, and compounds (22, 23, 24, etc.) (<i>NON-VIRILE</i>)	NOUN = NOMINATIVE książki, domy, stoły, koty, studentki
VERB = NEUTER SINGULAR stało, było, chciało	NUMBER = NOMINATIVE ALL EXCEPT 2, 3, 4 AND THEIR COMPOUNDS (5, 6, 10, 20, 21, 30, 37 49, ETC.) (<i>NON-VIRILE</i>)	NOUN = GENITIVE PLURAL książek, domów, stołów, studentek
VERB = NEUTER SINGULAR stało, było, chciało	NUMBER = GENITIVE ALL NUMBERS OVER 1 (dwóch, trzech, pięciu, dwudziestu, czterdziestu jeden) (<i>VIRILE</i>)	NOUN = GENITIVE PLURAL studentów, panów, nauczycieli
VERB = PLURAL stali, byli, chcieli	NUMBER=NOMINATIVE Alternative Virile Numbers for 2, 3, 4 (dwaj, trzej, czterej)	NOUN= NOMINATIVE PLURAL studenci, panowie nauczyciele

Numeral Phrases Outside the Subject Slot

Outside the subject slot, we have a much simpler situation, in which the number and noun each agree with each other in case; the noun, of course, is in the plural, rather than the singular. Verb agreement is not an issue, since the numeral phrase is not in the subject slot. If the numeral phrase is in the direct object slot, non-viriles use the same case form as the nominative plural for both number and noun, while the viriles have an accusative that equals the genitive plural. Let us illustrate some of the familiar numeral phrases, now as the direct object of the verb *widzieć* 'see'. First, the non-virile, with their accusative case the same as the nominative case for both numeral and non-virile noun:

1. Widzę tu dwa koty . 'I see two cats here.'
2. Widzę tu dwie kobiety . 'I see two women here.'
3. Widzę tu trzy koty . 'I see three cats here.'
4. Widzę tu trzy kobiety . 'I see three women here.'
5. Widzę tu pięć kotów. 'I see five cats here.'
6. Widzę tu siedem kobiet. 'I see seven women here.'
7. Widzę tu dwadzieścia stołów. 'I see twenty tables here.'
8. Widzę tu dwadzieścia jeden drzew. 'I see twenty-one trees here.'

The same sentences with virile direct objects illustrate that the accusative case is equivalent to the genitive for both the numeral and virile noun, as follows:

1. Widzę tu dwóch studentów. 'I see two students here.'
2. Widzę tu dwóch kolegów. 'I see two friends here.'
3. Widzę tu trzech żołnierzy. 'I see three soldiers here.'
4. Widzę tu trzech nauczycieli. 'I see three teachers here.'
5. Widzę tu pięciu królów. 'I see five kings here.'
6. Widzę tu siedem inżynierów. 'I see seven engineers here.'
7. Widzę tu dwadzieścia profesorów. 'I see twenty professors here.'
8. Widzę tu dwadzieścia jeden prezydentów. 'I see twenty-one presidents here.'

Other cases forms, such as the objects of various prepositions, or non-prepositional genitives, datives, or instrumentals, just have both the numeral and noun in their proper case form, in the adjectival agreement relationship, unlike the complexity of the subject slot. For example, if the genitive of absence is used with *nie malnie było*, the genitive of both number and noun occur, regardless of the virility or non-virility of the noun. For example:

1. Tu nie ma dwóch kobiet. 'The two women are not here.'
2. Tu nie ma dwóch studentów. 'The two students are not here.'
3. Tam nie było czterech studentek. 'The four female students were not here.'
4. Tam nie było pięciu profesorów. 'The five professors were not here.'
5. Byłem tam bez tych dwóch pań. 'I was there without these two ladies.'
6. Byłem tam bez tych dwóch panów. 'I was there without these two gentlemen.'
7. Robię to dla pięciu studentek. 'I am doing this for the five female students.'
8. Robię to dla pięciu studentów. 'I am doing this for the five students.'

Quantitative pronouns

The pronoun *tyle* and its interrogative partner *ile* substitute for a cardinal number or quantitative word. They behave like the Polish numbers for 5, 6, 7, 8, rather than the lower numbers 2, 3, 4. As such, they are followed by the genitive plural of a count noun or the genitive singular of a mass noun. Their declensions are similar to those of the cardinal numbers. The pronoun *tyle* can be defined as 'so much/so many', while *ile* represents the question 'how much/how many'. The declension is as follows:

	Virile	Non-Virile
N	-----	tyle
A	tylu	tyle

Virile and Non-Virile

G	tylu
L	tylu
D	tylu
I	tyloma

Chapter 6. Polish Pronouns

Two major criteria can be used to classify and present the Polish pronouns: grammatical and semantic. This chapter will proceed from the notion that pronouns can substitute for either nouns or adjectives. Formal criteria for this difference are not generally agreed upon in the extant grammars of Polish. Grammarians have been inconsistent as to whether the formal or semantic criterion should be used as the basic classificational principle. My point of departure is based on the fact that the nominal type is generally not inflected for gender (the one exception being the third person pronoun), a fact which makes it morphologically closer to the noun. Conversely, the adjectival pronoun is obligatorily inflected for gender, like the adjective. Within each grammatical subdivision of the pronoun (nominal and adjectival), there are several traditional semantic classes, some of which apply to both nominal and adjectival types, while others only apply to one of the two. The following six main groups will be presented:

- I. Nominal pronouns.
 - A. Personal/Reflexive
 - 1. Personal
 - 2. Reflexive
 - B. Interrogative
 - C. Indefinite/Negative

- II. Adjectival pronouns
 - A. Demonstrative
 - B. Interrogative/Relative
 - C. Possessive

I. Nominal Pronouns

A. Personal/Reflexive

1. Personal Pronouns

The alternatives which appear after the slashes in the following table are clitic forms, which are used when certain oblique cases of pronouns are not emphasized in the sentence and do not carry their own stress. Subjects of verbs are normally omitted entirely when they are not emphasized, which explains why the nominative case forms do not have enclitics (in a sense, an omitted, or zero pronoun, is the nominative case clitic form). For example, non-emphatic *Nauczyciel dał mi książkę*. 'The teacher gave me the book.', vs. *Nauczyciel mnie dał książkę*. 'I was the one the teacher gave the book to.' The use of clitic forms in the first and second persons singular (*mię, cię*) is subject to stylistic restrictions which vary somewhat from grammar to grammar (see Dąbkowska and Jaworski 1968:90-1). Generally speaking, the accusative is more common than the genitive, and first person *mię* is used in the colloquial, rather than the formal style. Forms that are rare in the standard language have been parenthesized.

	First Person Singular	First Person Plural
N	ja	my
A	mnie/(mię)	nas
G	mnie/(mię)	nas
L	mnie	nas
D	mnie/mi	nam
I	mną	nami

	Second Person Singular	Second Person Plural
N	ty	wy
A	ciebie/cię	was
G	ciebie/(cię)	was
L	tobie	was
D	tobie/ci	wam
I	tobą	wami

Polish third person pronouns are highly exceptional within the universe of nominal pronouns, due to the fact that they are inflected for gender. This can be explained by noting that they were originally demonstrative (and hence, adjectival) pronouns. Their inclusion in the nominal class can be justified on the basis of the fact that they are used to substitute for third person nouns.

Third Person Singular Pronouns

	Masculine	Neuter	Feminine
N	on	ono	ona
A	jego/go	je	ją
G	jego/go	jego/go	jej
L	nim	nim	niej
D	jemu/mu	jemu/mu	jej
I	nim	nim	nią

Third Person Plural Pronouns

	Virile	Non-Virile
N	oni	one
A	ich	je
G	ich	ich
L	nich	nich
D	im	im
I	nimi	nimi

Third person pronouns which begin with *j-* and *i-* begin with /ń/ when the pronoun in question is governed by a preposition. In the case of base pronouns in *j-* (e.g. *jego, jej*), the /ń/ appears in place of the /j/ (e.g. *niego/niej*); in the case of pronouns in *i-*, the /ń/ precedes the *i-* (e.g. *nich*); note that some pronouns always begin in /ń/ (e.g. *nią, nimi*). Cf. *Dziś nie ma jego*. 'He is the one absent today.' vs. *Idziemy do niego*. 'We are going to his place.' The appearance of initial /ń/ is not caused by the mere fact

of a preposition preceding a pronoun but, rather, by the fact that the pronoun is the object of the preposition in question; thus, a possessive third person pronoun may follow a preposition and not take on the /ń/. Compare: *Wracamy od jego brata*. 'We are returning from his brother.' vs. *Wracamy od niego*. 'We are returning from him (his place).'

The Second Person Pronoun: Polish Equivalents of English 'You'

Polish has several equivalents which express the single English second person pronoun 'you'. In addition to the familiar singular and plural forms *ty* and *wy*, there are forms which are marked for politeness, which share the root *pan-*, in both singular and plural numbers, as well as masculine, feminine, and mixed genders. The words for 'you', based on the stem *pan-*, all have their own core meanings ('gentleman, lady, etc. '), in addition to their use as second person pronouns. While the pronouns *ty* and *wy* require second person agreement, the *pan-* series has third person agreement, in spite of its second person reference. A summary of the words for 'you' follows:

Polish Equivalents of English 'You'

1. *ty* Familiar, singular. Second person agreement.
2. *wy* Familiar, plural. Second person agreement.
3. *pan* Formal, masc. singular. Third person agreement. Also means 'gentleman, lord'.
4. *pani* Formal, fem. singular. Third person agreement. Also means 'lady'.
5. *panowie* Formal, masc. plural. Third person agreement. Also plural of 'gentleman'.
6. *panie* Formal, fem. plural. Third person agreement. Also plural of 'lady'.
7. *państwo* Formal, mixed gender plural. Third person plural agreement (e.g. *Ci państwo tu mieszkają*). 'This couple resides here.', in spite of singular form. Also means 'married couple' and 'state'.

2. Reflexive pronouns

In addition to the various nominal and adjectival first, second, and third person pronouns, Polish also has a series of reflexive pronouns, roughly equivalent to the English 'myself, yourself, himself, itself, herself, themselves'. However, Polish does not differentiate the various numbers and persons of the reflexive. The basic meaning of the reflexive is the same person as the subject, but in a syntactic position other than the subject slot. For example, *On to zrobił dla siebie*. 'He did it for himself.' If it had been herself in English, the Polish sentence would only differ by having the subject *ona*, not by having a different word for 'self': *Ona to zrobiła dla siebie*. The equivalent of English 'each other' is also expressed with the proper case of *siebie* as the complement, e.g. *Oni się widzą*. 'They see each other.' Since the reflexive is defined as a pronoun which agrees in meaning with the non-reflexive subject, it does not have a nominative case subject case form and, can be said to have an incomplete or 'defective' paradigm. Number also agrees with the subject, so there is no number opposition either, as follows:

A	siebie/się
G	siebie/się
L	sobie
D	sobie
I	sobą

Although *się* is a clitic form of *siebie*, it is much more than that. It is an unchanging part of the verb in the class of verbs known as **reflexives**. While many such verbs do actually use *się* to mean 'self'

(e.g. *Ona myje się*. ‘She is getting washed.’), there are numerous verbs in which *się* is used only to indicate that the verb is intransitive (e.g. *Ona boi się ojca*. ‘She is afraid of her father.’). Since there is no general rule that all intransitives use *się*, the reflexive particle must be learned as part of the verb on a case-by-case basis. In addition, many verbs do not have a consistent use of *się* as reflexives, but simply use *się* to as the equivalent of such English examples as ‘one speaks this way’, ‘one does it this way’, etc., Polish *tak się mówi*, *tak się to robi*.

B. Interrogative Pronouns

Interrogative pronouns occur in both nominal and adjectival varieties. The nominal include:

<i>kto</i> who	<i>co</i> ‘what’
N kto	N co
A kogo	A co
G kogo	G czego
L kim	L czym
D komu	D czemu
I kim	I czym

C. Negative and Indefinite

Negative pronouns include the negated forms of *kto/co*, in the meaning ‘nobody’ and ‘nothing’. They are formed by prefixing the negative morpheme *ni-* to the interrogative. In the nominative case, the final vowel *-o* is dropped, but the rest of the paradigm is equivalent to *ni-* plus the positive interrogative pronoun in the corresponding case form. E.g. *nikt/nic*, but *nikogo*, *niczego*, etc. Paradigmatically:

<i>nikt</i> ‘nobody’	<i>nic</i> ‘nothing’
N nikt	N nic
A nikogo	A nic
G nikogo	G niczego
L nikim	L niczym
D nikomu	D niczemu
I nikim	I niczym

Indefinite pronouns are equivalent to such English pronouns as *someone/something*. In Polish, they are formed by adding the indefinite morpheme *-ś* to the form of the interrogative pronoun. This particle has a very broad usage with interrogatives, and is added to interrogative adverbs as well (e.g. *gdzie* ‘where’/*gdzieś* ‘somewhere’). The paradigms of *ktoś/coś* are:

<i>ktoś</i> ‘someone’	<i>co</i> ‘something’
N ktoś	N coś
A kogoś	A coś
G kogoś	G czegoś
L kimś	L czymś
D komuś	D czemuś
I kimś	I czymś

In addition to *-ś*, interrogative pronouns can also add the morpheme *-kolwiek* or the orthographic word *bądź*. They are equivalent to the English ‘-ever’, as in ‘whoever, whatever’ *ktokolwiek, cokolwiek* or *kto bądź, co bądź*.

II. Adjectival Pronouns.

This section will present the declensions of the demonstrative, interrogative/relative, and possessive categories. These pronouns can be termed adjectival on the basis of the fact that they substitute for adjectives. However, most adjectival pronouns have a declension that differs from that of adjectives in an essential property: the nominative and accusative cases regularly use nominal, rather than adjectival endings. Thus, for example, the masculine nominative singular uses the nominal zero ending instead of the adjectival *-y* (e.g. *ten, ów, czyj, nasz* vs. *dobry*), and the neuter nominative singular uses nominal *-o* instead of adjectival *-e* (e.g. *to, owo* vs. *dobrze*). Note that *czyje* and *nasze* occur not as adjectival endings, but due to the fact that soft stems require *-e* rather than *-o* in the nominal declension, cf. *słowo* ‘word’ but *morze* ‘sea’.

A. Demonstrative Pronouns.

Demonstratives include *ten* ‘this’, an unmarked and proximal demonstrative, referring to closer objects; *tamten* ‘that’, which refers to more distant ones; *ów* ‘that’, similar to *tamten* in meaning, but stylistically restricted and considered bookish; plus *taki* ‘such’. *Ten* and *tamten* share a stem ending in *-ten* only in the nominative singular, where the syllable *-en* has been added to *t-*. They differ in the fact that *ten* uses the nominal ending *-ę* in the feminine accusative (*tę*), while *tamten* uses the adjectival *-ą* (*tamtą*). It should be noted that *tę* is colloquially rendered on the adjectival model, pronounced as if it were **tą*, pronounced as *tę* in the formal style. Otherwise, they both conform to the pattern of nominal endings in the direct (nominative and accusative) cases, and adjectival in the oblique cases. For example, in the neuter singular, in which the nominal ending is *-o* (e.g. *to/tamto*). *Taki* ‘such’, on the other hand, uses regular adjectival endings here and elsewhere (e.g. neuter NAsg *takie*, which follows the regular adjectival model).

ten ‘this’ (*tamten* has the same declension, except for the initial syllable *tam-* and the fem. Asg. *tamtą*)

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	ten	to	ta	ci	te
A	ten/ tego	to	tę (tamtą)	tych	te
G	tego	tego	tej	tych	tych
L	tym	tym	tej	tych	tych
D	temu	temu	tej	tym	tym
I	tym	tym	tą	tymi	tymi

ów ‘that (bookish)’

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	ów	owo	owa	owi	owe
A	ów/ owego	owo	ową	owych	owe
G	owego	owego	owej	owych	owych
L	owym	owym	owej	owych	owych
D	owemu	owemu	owej	owym	owym
I	owym	owym	ową	owymi	owymi

taki ‘such (a)’

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	taki	takie	taka	tacy	takie
A	taki/ takiego	takie	taką	takich	takie
G	takiego	takiego	takiej	takich	takich
L	takim	takim	takiej	takich	takich
D	takiemu	takiemu	takiej	takim	takim
I	takim	takim	taką	takimi	takimi

ten, tamten, taki

B. Interrogative/Relative Pronouns

The adjectival interrogative pronouns include *jaki*, *który*, and *czyj*. The declension of the first two follows a purely adjectival model. The third pronoun, *czyj*, is both interrogative and possessive, and could have been listed either in this section or the next. It follows the expected declensional pattern of possessive pronouns, using nominal endings in the direct cases, with the exception of the adjectival *-ą* in the fem. Asg. The forms are as follows:

jaki ‘what kind of?’

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	jaki	jakie	jaka	jacy	jakie
A	jaki/ jakiego	jakie	jaką	jakich	jakie
G	jakiego	jakiego	jakiej	jakich	jakich
L	jakim	jakim	jakiej	jakich	jakich
D	jakiemu	jakiemu	jakiej	jakim	jakim
I	jakim	jakim	jaką	jakimi	jakimi

który 'which?'

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	który	które	która	którzy	które
A	który/ którego	które	którą	których	które
G	którego	którego	której	których	których
L	którym	którym	której	których	których
D	któremu	któremu	której	którym	którym
I	którym	którym	którą	którymi	którymi

czyj 'whose?'

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	czyj	czyje	czyja	czyi	czyje
A	czyj/ czyjego	czyjie	czyją	czyjich	czyje
G	czyjego	czyjego	czyjej	czyich	czyich
L	czyim	czyim	czyjej	czyich	czyich
D	czyjemu	czyjemu	czyjej	czyim	czyim
I	czyim	czyim	czyją	czyimi	czyimi

Interrogative pronouns are also used as relative pronouns. For example, *który* can have both of these functions. As an interrogative, it asks 'which one', as in *Która godzina?* 'What time (lit. hour) is it?'. As a relative pronoun, *który*, can have virtually any noun as its antecedent, in contrast to English, which restricts 'which' and 'who' on the basis of animacy. It must be remembered that Polish *który* has a gender and number specification based on agreement with its antecedent noun, but a case form based on the clause in which it occurs itself. E.g.

1. *Byłem w mieście, które bardzo mi się podoba.* 'I was in a city which I like very much.'
2. *Tu mieszka student, którego zna moja córka.* 'The student whom my daughter knows lives here.'
3. *Ludzie, o których mówiliśmy, nawet nie wiedzą o tym.* 'The people we were talking about don't even know it.'

C. Possessive pronouns.

Corresponding to the first and second persons singular are *mój* and *twój*; plurals are *nasz* and *wasz*. They fit the pattern of nominal endings in the nominative and adjectival elsewhere. The two singular forms have the alternation of *o~ó* before the zero ending of the masc. Nsg. The possessive reflexive pronoun *swój* 'one's own' has the same pattern as *mój* and *twój*. The paradigms follow:

mój ‘my’ (*twój/swój* are similar)

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	mój	moje	moja	moi	moje
A	mój/ mojego	moje	moją	moich	moje
G	mojego	mojego	mojej	moich	moich
L	moim	moim	mojej	moich	moich
D	mojemu	mojemu	mojej	moim	moim
I	moim	moim	moją	moimi	moimi

nasz ‘our’ (*wasz* is similar)

	Singular			Plural	
	M	N	F	Virile	Non-Virile
N	nasz	nasze	nasza	nasi	nasze
A	nasz/ naszego	nasze	naszą	naszych	nasze
G	naszego	naszego	naszej	naszych	naszych
L	naszym	naszym	naszej	naszych	naszych
D	naszemu	naszemu	naszej	naszym	naszym
I	naszym	naszym	naszą	naszymi	naszymi

Third person possessives use the genitive cases of the third person pronouns. Thus, there is the following correspondence:

Third Person Personal Pronoun Possessive (=genitive case)

on	jego
ono	jego
ona	jej
oni	ich
one	ich

In contrast to the adjectival possessive pronouns, they do not decline. E.g.

To jest moja książka. ‘This is my book.’/To jest jego książka. ‘This is his book.’

Nauczyciel wziął moją książkę. ‘The teacher took my book.’/Nauczyciel wziął jego książkę. ‘The teacher took his book.’

Swój vs. the Other Possessive Pronouns

Notice that the English sentence ‘John lost his book.’ is ambiguous, and can mean either that John lost his own book or somebody else’s. In Polish, third person possessive pronouns must make this

distinction. If the possessive agrees with the subject of the clause, then the appropriate form of *swój* must be used. However, if they do not agree, then the non-reflexive *jego/jej/ich* are selected. Therefore, the ambiguous English sentence has two unambiguous Polish equivalents: *Jan zgubił swoją książkę*. 'John lost his own book.' and *Jan zgubił jego książkę*. 'Jan lost his (someone else's) book. In the first and second persons, the choice is more of a stylistic one, since ambiguity cannot occur as it can in the third person (e.g. *Mam moją/swoją książkę*. 'I have my book.', *Masz twoją/swoją książkę*. 'You have your book.'

Chapter 7. The Polish Verb: Conjugation and Notes on Aspect

The following description uses a one-stem system for the description of the Polish verb. This system, originally introduced in 1948 by Roman Jakobson for the description of Russian, was adapted to the Polish verb in 1954, by Alexander Schenker. The basic principle of the system is that a single stem, rather than two or more, can suffice for the prediction of the entire verbal paradigm, as long as the body of phonological and morphophonemic rules is known. These rules govern the operation of conjugation, which can be thought of as the addition of a variety of grammatical endings to a given basic stem. Once the rules of conjugation are learned, the single basic stem can be used as the representative of any regular verb.

Within most full verbal paradigms, stems (i.e. the verb minus the grammatical ending) occur in two lengths: a longer size, which includes a stem-final vowel or consonant at the very end, and a shorter one which lacks the extra stem-final vowel or consonant. Generally speaking, the longer stem is chosen as the basic one, and the "extra" stem-final vowel or consonant is predictably truncated before certain endings. Since one can easily predict the dropping of a particular vowel or consonant in the shorter stem, but one cannot predict the addition of a specific vowel or consonant within the longer one, the longer stem is normally considered to be basic. For example, the infinitive *słyszeć* 'hear' and the 1sg. *słyszę* contain the respective stems *słysze-(ć)* and *słysz-(ę)*. The basic stem is recognized as *słysze-*, since one can readily predict the loss of *-e-* before the ending *-ę*; if, however, *słysz-* had been selected as basic, it would not have been possible to predict that *-e* gets inserted before the infinitive ending *-ć*. In some instances, however, two differing paradigmatic stems are of the same length, and one must choose between them without resorting to the easy method of simply selecting the non-truncated stem. The general principle is that one selects as basic the stem which allows more predictability. For example, the infinitive *gryźć* 'gnaw' has the stem [gryś], due to the devoicing and palatalizing effect of the ending *-ć*, while the present tense has both [gryz] (as in 1sg and 3pl *gryzę, gryzą*) and [gryź] (as in 3sg *gryzie*). Note that the three illustrated stem shapes are all four phonemes long, so that stem length cannot be decisive here. However, the devoiced final [gryś] would clearly be rejected, since it could indicate a basic stem in either a voiced or voiceless consonant. Furthermore, [gryz] would seem to be the best choice as the ultimate basic stem, in preference to [gryź], since the *-e* ending can predict the palatal value [ź]. On the other hand, the choice of stem is not as obvious in other cases. For example, analyses have differed as to whether to consider the basic stem to be *nios-* 'carry' (e.g. 1sg *niosę* and non-virile 3pl. past *niosły*) or *nies-* (based on 3sg *niesie* and virile 3pl. past *nieśli*). I will opt for *nies-*, even though phonetic [ńes] does not occur as such, since the palatalization of *s > ś* can be predicted, as well as the change of root *e > o* between a preceding soft consonant and following dental (*niosę*).

The entire system is predicated on the interaction of vowels and consonants on the boundary between the stem and ending. With respect to the stem-ending boundary, stems can end in either vowels or consonants and, likewise, endings can begin in either consonants or vowels. Therefore, four combinations of vowels (V) and consonants (C) are possible: CV, VC, CC, and VV. When dissimilar elements are combined (CV and VC), the tendency is for both elements to be retained, while combinations of similar elements (CC and VV) generally cause the first segment to be deleted, and are often accompanied by additional mutations and complications. Some Polish endings use a zero, rather than a vowel or consonant. Based on these criteria, one can divide stems into two large groups, depending on whether they end in a consonant (e.g. *piek-* 'bake', *nies-* 'carry', *t/n-* 'cut') or a vowel (e.g. *pisa-* 'write', *widzie-* 'see'). Endings can also be divided into two groups, based on the sound with which

the ending begins, a consonant (e.g. infinitive *-ć* and past-tense *-ł-* and *-l-*) or a vowel (e.g. *-ę* '1Sg', *-isz* '2Sg', *-ą* '3Pl', etc.)

When the basic stem is known, the correct ending must be added to it, in accordance with the general rules of conjugation. Outside the present tense (e.g. in the infinitive, imperative, and past tense), endings tend to be uniform across the different verb classes, but in the present tense there are three major sets of endings, a situation which has given rise to the terms Conjugation I, II, and III. In other words, the definition of a Conjugation I, II, or III verb is one which uses the corresponding set of present tense endings. The ending of these conjugations are as follows, in the singular and plural forms of the three persons:

Conjugation I (-e- conjugation)

	Singular	Plural
Person		
1	-ę	-emy
2	-esz	-ecie
3	-e	-ą

Conjugation II (-i/-y- conjugation)

	Singular	Plural
Person		
1	-ę	-imy/-ymy
2	-isz/-ysz	-icie/-ycie
3	-i/-y	-ą

Conjugation III (-∅- conjugation)

	Singular	Plural
Person		
1	-m	-my
2	-sz	-cie
3	-∅	-ą

Excursus on variant interpretations of Conjugation III

With reference to the third, or ∅-conjugation, there have been two different types of interpretation of the relevant morphemes. Both interpretations agree that the most common and productive stem-type using this conjugation has the suffix *-aj-* (e.g. *czytaj-* 'read'). Schenker's view (1954:473,476) is that the endings are all vocalic (*-am*, *-asz*, *-a*, *-am*, *-acie*, *-ą*), but with a special rule that a stem-final suffix in *-aj-* is deleted before an ending beginning with *-a*, e.g. *czytaj+am* ⇒ *czytąj+am*, i.e. *czytam*. The drawback of this system is its *ad hoc*, counterintuitive loss of *-aj-* before *-am*, *-asz*, etc. The one-stem version used in this chapter follows the alternative system devised by Laskowski (1999:236), according to which the ∅-conjugation derives its name from a zero vocalic theme in all forms. All present-tense endings outside the third person have consonantal endings, which cause the regular truncation of stem-final *-j-*, e.g. *czytaj-m*,

czytaj-sz, etc. The 3Pl form has a vocalic ending which allows stem-final *-j* to remain intact: *czytaj-q*. The only systematic difficulty occurs in the 3Sg, in which a zero-ending behaves as a consonant, causing the stem-final *-j* to be truncated: *czytaj-Ø* ⇒ *czyta*, a rule which does not occur in the imperative, where the zero behaves like a vowel and does not cause the stem-final *-j* to truncate, i.e. *czytaj-Ø* ⇒ *czytaj*. In any case, both systems require the use of at least some *ad hoc* rules in Conjugation III. However, Schenker's system requires them in five of the six present-tense forms, while Laskowski's does so only in the single form of the third person singular. Therefore, the latter will be used in this chapter. (For a more detailed discussion of why a system such as Laskowski's is preferable, see Feldstein (1987).

The chapter on consonant and vowel alternations indicated that there are three main types of consonant alternations in the Polish verb system, which were referred to as:

1. The *a*-suffix alternation. (Final consonant changes in all forms of the present tense, and the imperative: e.g. *pisa-ć*, but *pisz-ę* 1Psg and *pisz* Impv. (i.e. *pisz-Ø*).
2. The Conjugation II alternation. (Final consonant changes in before nasal vowel endings of Conjugation II, i.e. in 1Psg. and 3Ppl.: e.g. *prosi-ć*, but *prosz-ę/prosz-q*.) Note that when a palatal occurs in the basic form, it changes to an alveolar before nasal vowel endings, as shown; however, when an alveolar occurs in the basic form, it remains: e.g. *slysze-* 'hear', *slysze/słyszq* 1Psg/3Ppl.
3. The pre-*e* alternation. (Final consonant changes before the vowel *-e* in Conjugation I, i.e. everywhere in the present except before nasal vowel endings, somewhat the opposite of alternation two: basic dentals mutate to palatals (e.g. *nios-ę/nios-q* 'carry', but *niesi-e* [ńeś-e]), while basic velars mutate to alveolars (e.g. *piek-ę/piek-q* 'bake', but *piecz-e*).

Notice that all of the present tense endings of the first two conjugations begin in vowels, i.e. they have vowels at the all-important boundary of stem and ending. Conjugation III is very different, in that it has a vowel ending only in the 3Ppl.; all of the other endings are either consonants or a zero ($-\emptyset_{3P}$ in 3Psg.), which functionally acts as a consonant and can cause the deletion of a stem-final consonant.

The present tense has the most complex system of endings. Other important parts of the verbal paradigm are the past tense, infinitive, imperative, participles (verbal adjectives, passive and active), verbal adverbs, present and past, and the verbal noun. The endings of these verb forms, including examples of changes which occur in the process of affixation, are as follows:

1. Past tense.

These forms have both person and gender. In the singular, there are the three familiar genders (masculine, feminine, and neuter), plus two in the plural (virile and non-virile), as also found in adjectives and modifiers generally, as follows:

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	-ł-em	-ł-am		-l-i-śmy	-ły-śmy
2	-ł-eś	-ł-aś		-l-i-ście	-ły-ście
3	-ł-Ø	-ł-a	-ł-o	-l-i-Ø	-ły-Ø

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	писаłem	писаłam		pisaliśmy	pisałyśmy
2	писаłeś	писаłaś		pisaliście	pisałyście
3	писаł	pisała	pisało	pisali	pisały

(Theoretically possible, but unlikely first and second person neuters have been omitted.)

Since the past tense always begins with a consonant (*-ł* or *-l*), a stem ending in a vowel has the easiest combination (e.g. *pisa-ła*), while a stem ending in a consonant (particularly certain sonorants) can be deleted (e.g. *myj-ła* 'she washed' > *myła*, *dostan-ła* 'she received' > *dostała*). Note that nasal vowels lose their nasality before this ending, although this is not seen in the spelling (*płyną-ł* is pronounced [płynoł]). Concerning stress, note that the personal endings, even when syllabic (*-śmy*, *-ście*) can be considered extrametrical in the sense that they do not count for the purpose of assigning stress to the penultimate syllable, giving us the following stressed forms: *pisáłyśmy*, *pisáliście*. A similar rule applies to the conditional mood below.

2. Infinitive.

The ending is *-ć*. When used after a vowel, the combination is simple addition (*pisa-ć*, *robi-ć*). After a consonant, three results are possible: the stem-final consonant can be deleted (e.g. *myj-ć* > *myć*), it can be modified (e.g. *kład-ć* > *kłaść*), or the combination of a velar plus *-ć* can result in a different single consonant (e.g. *piek-ć* > *piec*).

4. Future tense.

Imperfectives and perfectives form the future tense in different ways. When the endings introduced above as "present tense" are affixed to imperfective stems, they result in a present tense meaning, but when affixed to perfective stems, the meaning is future, not present tense (e.g. imperfective *piszē* 'I write', perfective *napiszē* 'I will write'). Imperfectives form the future with the use of an auxiliary (equivalent to the future tense of the verb 'to be', *będ-*) plus either the suffixed *-ł* form of the verb (but inflected only for number and gender, not person) or, less often, the infinitive form. For example, using the imperfective verb *pisa-ć* and the perfective *napisać*:

Imperfective Future

	Singular	Plural
Person		
1	będę robi -ł/-ła/-ło	będziemy robi -li/-ły
2	będziesz robi -ł/-ła/-ło	będziecie robi -li/-ły
3	będzie robi -ł/-ła/-ło	będą robi -li/-ły

Perfective Future

	Singular	Plural
Person		
1	napiszę	napiszemy
2	napiszesz	napiszeście
3	napisze	napiszą

For the purposes of this chapter, imperfective and perfective aspects will be treated as if they belong to separate paradigms, since they each have their own individual basic stems.¹¹ Since the endings commonly known as **present tense** actually create present tense meanings only with imperfective stems, but future tense meaning in combination with perfective stems, the “present tense” endings are often referred to as **non-past**. However, the more traditional term **present tense** will be maintained in this chapter, unless special attention is being focused on the issue.

3. Imperative mood.

The regular ending of the second person singular imperative is zero ($-\emptyset_{Impv}$), which functions as a front vowel for the purposes of mutation and truncation. As such, it does not cause deletion of stem-final consonants, but does cause their softening in paradigms which experience regular softening before *-e*, e.g. *nios*- \emptyset_{Impv} > *nieś*. After a vowel, it causes the deletion of the vowel: *mówi*- \emptyset_{Impv} > *mów*, *pisa*- \emptyset_{Impv} > *pisz*. After certain consonant clusters, especially those consisting of the entire root or those which contain a suffix beginning in *-n*, the imperative uses the ending *-yj/-ij* instead of zero: *tr*- \emptyset_{Impv} > *trzyj*, *rwa*- \emptyset_{Impv} > *rwij*, *krzykną*- \emptyset_{Impv} > *krzyknij*. The use of *-yj* as opposed to *-ij* is due to the fact that the preceding consonant, *r*, mutates to alveolar *rz*, which can be followed by the vowel *-y*, but not *-i*.

The *o~ó* root alternation frequently occurs before voiced obstruents followed by the imperative ending (e.g. *robi*- \emptyset_{Impv} > *rób*). For the formation of imperative endings other than the second person singular, additional endings are added to the zero, as follows:

- a. first person plural (*-my*, e.g. *piszmy*)
- b. second person plural (*-cie*, e.g. *piszcie*)

¹¹ The fact that many Polish verbs do not have a paired verb of the opposite aspect is another reason for not obligatorily including both aspects in a single verbal paradigm.

4. Conditional mood.

The Polish conditional is roughly equivalent to English *would* or *would have* (e.g. *would do*, *would have done*, etc.). It is formed with the conditional particle *by*, which is usually affixed to a form equivalent to the third person past tense, after which the personal endings appear. The conditional forms of *pisać* are as follows:

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	pisal by m	pisal aby m		pisaliby ś my	pisaliby ś my
2	pisal byś	pisal abyś		pisaliby ście	pisaliby ście
3	pisal by	pisal aby	pisal oby	pisaliby	pisaliby

Notice that neither the conditional morpheme *-by*, nor the personal endings, count for the assignment of stress; i.e. *pisala* 'she wrote', *pisalaby* 'she would write', and *pisalibyśmy* 'we would write', all stress the syllable *sa*, since it is the penultimate syllable of the forms *pisala/pisali*, in spite of any conditional mood morphemes that may follow. Conditional morphemes are sometimes separated from the postverbal position, e.g. *mybysmy pisali*, *wczorajbysmy pisali*, equivalent to *wczoraj pisalibyśmy* 'we would have written yesterday'.

The Polish conditional does not make any tense distinction, in contrast to English. Thus, *pisal**by**m* could mean both 'I would write' or 'I would have written.' However, a rarely used marked past conditional does exist in Polish, formed by the conditional of *być* 'to be', plus the *ł*-form of another verb. E.g. *był**by**m pisał* 'I would have written', *byliby pisali* 'they would have written'.

4. Passive participle.

Just as the English past participle can use either *-en* or *-ed* (*written*, *jumped*), Polish has the choice of *-n*, *-on*, and *-t* endings, which are predictable from the basic verb stems, as follows:

Stem-Type	Participial Ending	Examples
Obstruent stems (in <i>t/d</i> , <i>s/z</i> , <i>k/g</i>)	<i>-on</i>	<i>kładziony</i> , <i>niesiony</i> , <i>pieczony</i>
<i>-i/-y</i> suffixed stems	<i>-on</i>	<i>mówiony</i> , <i>puszczony</i> , <i>kupiony</i>

Sonorant stems (in <i>m/n</i> , <i>r</i> , <i>j</i>)	<i>-t</i>	<i>zaczęty</i> , <i>tarty</i> , <i>zepsuty</i>
<i>-nq</i> suffixed stems	<i>-t</i>	<i>wyciągnięty</i>

Suffixes ending in <i>-a(j)</i> , <i>-e(j)</i> , i.e. <i>-a</i> or <i>-e</i> , with or without following <i>-j-</i>	<i>-n-</i>	<i>czytany</i> , <i>pisany</i> , <i>widziany</i> , <i>rozumiany</i>

In other words, the first illustrated group contains stems ending in obstruents or high vowels, the second group always has a root-final sonorant or suffix-final nasal vowel, while the third group always has contains a non-high oral vowel.

Related to the passive participle is the impersonal participial form, which has the same stem as the passive participle, but takes the adverbial *-o* ending (e.g. adjectival participle *robiony*/impersonal passive *robiono*). The impersonal participle can be formed from intransitive as well as transitive verbs, and has the meaning “one performs this action”, e.g. *tu mówiono po polsku* ‘one speaks Polish here’.

5. Active participle.

The active participle describes a noun as being subject who is performing the action of the verb in question. It is formed by affixing the suffix *-qc-* plus regular adjectival endings. The rule for adding *-qc-* to the stem follows the same rules as the affixation of the phonologically similar 3Psg. present ending *-q*. So, practically speaking, if the 3Psg. is already known, one can instantly derive the active participle by adding *-cy* for the Nsg. masc. adjectival form, e.g. *piszący, robiący*.

6. Verbal adverbs.

One variety refers to an action which occurs at the same time as the verb to which it refers. It can be referred to as a present tense verbal adverb, and is formed in the same way as the previously described active participle, except for the fact that the verbal adverb lacks an adjectival ending. It is formed from an imperfective verb, since perfectives do not form the present tense; it is often translated ‘while doing’, e.g. *piszqc* ‘while writing’.

The second type of verbal adverb refers to an action which took place prior to the action of the verb to which it refers. Since the adverbial action must be completed before that of the main verb, the adverb is normally formed from perfectives and can be considered either as a past tense or perfective verbal adverb. The endings are either *-wszy* or *-wszy*, plus adjectival endings, and the choice depends on the phonological form of the stem as combined with the past tense *-ł* morpheme. When a stem-final obstruent appears before past *-ł*, then the past verbal adverb uses *-wszy*, e.g. *wyniósłszy*. However, when the past tense has a vowel which immediately precedes *-ł* (either due to the fact that it is a vowel stem or that a consonant was deleted), then *-wszy* is the ending of the past verbal adverb, e.g. *zrobiwszy*.

7. Verbal noun.

The verbal substantive is a soft neuter noun, formed using the same stem as that of the passive participle, but with the change of any participial *-on-* to *-en-* in the verbal noun, due to the following soft consonant. Participial suffixes *-n* and *-t* correspond to palatal *-ń, -ć* in the verbal noun, immediately followed by neuter noun ending *-e*.; e.g. the passive participles *pisany, mówiony, niesiony, bity* have the corresponding verbal substantives *pisanie, mówienie, niesienie, bicie*.

Survey of the Verbal Stem Types

The following description will separately examine each of the major verbal stem types, and is grouped into larger sections which correspond to Conjugations I, II, and III, and smaller subsections under those headings. There are approximately twenty subtypes of stems, although there are only three basic conjugations, or ending sets. Presentations of the verb system, even those which agree on the one-stem approach, often do not agree on the precise enumeration of the basic types, since some types occur only in a very small number of verbs and can be considered either as small regular types or as irregular and anomalous by different authors (e.g. such as the two unique verbs with present stem ending in *-oj*, which is dropped before the past tense/infinitive suffix *-a*: *stać* 'stand' and *bać się* 'be afraid'). Once it is determined that a consistent verb type is numerous enough to be considered a regular part of the inventory, the general principle of classification is that the basic stem should unambiguously predict the full paradigm. Therefore, the number of basic stems directly corresponds to the number of paradigmatic types. Thus, although some may be inclined to say that there is a single *-nq* suffix verb, based on the occurrence of this suffix in the infinitive, I follow both Schenker and Laskowski in dividing this group into several subtypes, since some verbs never drop the suffix (*krzyknq-* 'scream'), some drop it only in the past tense (*słab(nq)-* 'weaken'), while others drop it in both the past tense and infinitive (*bieg(n)-* 'run'). The following list sets out the major verb classes and the types which will be presented in the following sections:

I. Conjugation I verbs (i.e. verbs using the *-e-* set of present tense endings).

A. Unaffixed

1. Obstruent.

a. Dental class (stem ends in stops *t/d* or fricatives *s/z*)

i. **gniet-** 'press'

ii. **kład-** '

iii. **nies-**

iv. **gryz-**

b. Velar class (stem ends in stops *k/g*)

i. **piek-**

ii. **mog-**

2. Sonorant

a. Syllabic (only in *-j*): **psuj-**

b. Non-syllabic

i. Nasal type.

a. **dm-**

b. **ćn-**

ii. *-r* type: **tr-**

B. Affixed

1. Vocalic suffix ending in *-a*

a. *-a*: **pisa-**

b. *-owa*: **kupowa-**

c. *-ywa*: **pokazywa-**

d. *-ej(a)*: **grzej(a)-**

e. *CC-a* (non-syllabic root plus *-a*): **rwa-**

2. Vocalic suffixes ending in *-j*:
 - a. *-ej*: **siwej-**
 - b. *-awa*: **dawa-**
3. *-nɔ* suffix
 - a. Suffix not deleted: **krzyknɔ-**
 - b. Suffix deleted in past tense: **chud(nɔ)-**
 - c. Suffix deleted in both past and infinitive, only surfacing as *-n-*: **pad(n)-**

II. Conjugation II verbs (i.e. verbs using the *-i/-y-* set of present tense endings).

- A. *-i/y* verbs: **prosi-**, **marzy-** (the *-y* appears automatically after alveolars)
- B. *-e* verbs: **siedzie-**

III. Conjugation III (i.e. verbs using the zero set of present tense endings): **czytaj-**

The boldfaced verbs in the above list, which number 23, are the basic verb classes which will be presented below. After defining the essential features these types, the discussion will focus on which of the various grammatical endings are added in a simple, straightforward manner, and which ones result in complications, such as deletion and mutations. The forms to be covered in detail include the present tense, past tense, infinitive, imperative, and passive participle. The other forms can usually be derived without much difficulty once these parts of the paradigm are known. Although many details are involved, the one-stem approach at least permits an unambiguous system, in which any difference in the basic stem is correlated with an actual paradigmatic difference.

I. Conjugation I verbs.

A. Unaffixed verbs of Conjugation I.

Unaffixed verbs do not have a verbal suffix after the root, so the root comes in direct contact with the Conjugation I endings. Since roots virtually all end in consonants (except for some recent loan words) and present tense endings begin in a vowel, the stem-ending boundary always looks like *-C+V-*. The major alternation is the palatalization (or **softening**) caused by the endings which begin with *-e* and which can further cause the root vowel alternation *o~e* (e.g. *niosę~niesie*). The same alternation can also occur in the sonorant *-r* stems (e.g. *umrę/umrzesz* 'die'). The endings which consist of nasal vowels *-ę* and *-ą* do not affect the root-final consonant. Alone among suffixed verbs, the *-nɔ* suffixed type also undergoes a similar softening, due to the fact that the *-ą* is truncated in the present tense, leaving *-n* as stem final (e.g. *krzyknę/krzykniesz*).

The major division within the unaffixed type recalls the classificatory division between the two main classes of consonants themselves: obstruents and sonorants (or resonants). Not all obstruent or sonorant classes are represented as stem finals, however. The obstruent classes include dental stops and fricative and the velar stops. The sonorant classes include the glide *j*, the nasal consonants *m* and *n*, plus the trill *r*.

1. Obstruent (dental and velar): e.g. Dentals: *nies-* 'carry by hand'/*gryz-* 'gnaw', *gniet-* 'press'/*kład-* 'put'; Velars: *piek-* 'bake'/*mog-* 'be able'.

In the present tense, the final dental mutates to a palatal and the velar to an alveopalatal, before endings in *-e*: e.g. *niosę/niesie, gryzę/gryzie, gnioę/gniecie, kładę/kładzie; piekę/pieczę, mogę/może*. A root basic *e* (*nies-*, *gniet-*), which occurs after a soft consonant, but before a dental, regularly changes to *o* before soft (*niosę/gnioę*). When the *e* stands before a non-dental, it does not change; root vowels other than *e* also do not undergo this change in the present. E.g.

nies-, *gryz-*, *piek-*

	Singular	Plural
Person		
1	<i>niosę/gryzę/piekę</i>	<i>niesiemy/gryziemy/pieczemy</i>
2	<i>niesiesz/gryziesz/pieczesz</i>	<i>niesiecie/gryziecie/pieczecie</i>
3	<i>niesie/gryzie/pieką</i>	<i>niosą/gryzą/pieką</i>

In the past tense, the root final obstruent is in contact with the lateral *ł/l* ending, but no deletions occur. The major change to note is the palatalization of dental fricatives *s/z > ś/ź* before the soft *l* of the virile plural past tense ending: non-virile *niosły/gryżły*, but virile *nieśli/gryźli*. This palatalization of the consonant which precedes the past morpheme *-l* occurs in the case of dental fricatives, but not dental stops (e.g. *nieśli*, but *wiedli*). The alternation of the group *-os-~-eś-*, just illustrated, is conditioned by the hardness or softness of the past tense *-ł/-l*. Another alternation of root vowel can be caused by the syllabic or non-syllabic nature of the past tense ending. Since the masculine singular past ending is non-syllabic *-ł-∅*, as opposed to the other past endings which are syllabic (*-ł-a/-ł-o*, etc.), the root vowel can take the form of *o, ę* before syllabic past endings, but *ó, q* before the non-syllabic: e.g. *niosła~niosł, trzęsa* ‘shook’~*trząsł*. E.g.

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	<i>niosłem</i>	<i>niosłam</i>		<i>nieśliśmy</i>	<i>niosłyśmy</i>
2	<i>niosłeś</i>	<i>niosłaś</i>		<i>nieśliście</i>	<i>niosłyście</i>
3	<i>niosł</i>	<i>niosła</i>	<i>niosło</i>	<i>nieśli</i>	<i>niosły</i>
1	<i>gryzłem</i>	<i>gryzłam</i>		<i>gryźliśmy</i>	<i>gryżłyśmy</i>
2	<i>gryzłeś</i>	<i>gryzłaś</i>		<i>gryźliście</i>	<i>gryżłyście</i>
3	<i>gryzł</i>	<i>gryzła</i>	<i>gryzło</i>	<i>gryźli</i>	<i>gryżły</i>

The infinitive ending *-ć* illustrates the addition of one obstruent to another, which predictably causes changes to the root vowel, the stem-final consonant and even the infinitive ending itself. Stems ending in dental stops (*t/d*), as well as the dental fricative *ś*, wind up with the combination *-ś-ć*. When the root final consonant is *-z*, the same phonetic result occurs (i.e. [ść]), but it is written as *-ź (-źć)*. Velar stem finals undergo the most drastic change before the infinitive *-ć*: both consonants together result in the single consonant *c* (e.g. *piec, móc*). The change of *o > ó* can also occur in the infinitive (e.g. *móc*), as it does in the past tense (*mógł*). The *ę~q* alternation occurs before the non-syllabic infinitive ending (e.g. *trzęse~trząść*). A list of examples follows:

Basic Stem	Infinitive
nies-	nieść
gryz-	gryźć
gniet-	gnieść
kład-	kłaść
piek-	piec
mog-	móc

In the imperative, the unsuffixed obstruent verbs take the zero ending, which does not alternate to *-yj/-ij*, since clusters do not occur stem-finally. This zero can condition the same change *o > ó* seen above, e.g. *pomog-* 'help' has the imperative *pomóż*. The stem-final consonant exhibits palatalization, with dentals going to palatals and velars going to alveopalatals, as follows:

Basic Stem	Imperative
nios-	nieś
gryz-	gryź
gniot-	gnieć
kład-	kładź
piek-	piecz
mog-	(po-)móż (imperative not used unless prefixed)

The passive participle uses the *-on* ending and, in the virile plurals, *s/z* and *k/g* display the same consonantal palatalization which was just illustrated for the imperative (which is also the same before the *-e* endings of the present tense as well). However, the *t/d* have an unusual alternation to *c/dz* in the virile form. Thus, if one added the syllable *-ony* to the imperative forms just illustrated, the result would be the masc. Nsg. of the passive participle, except for the *c/dz* of the virile form, as highlighted below. Before the adjectival Npl. virile ending, the *n* changes to a palatal, which, in turn, causes the preceding *o* to front to *e*, so that the entire *-on->-eń-*, as follows:

Basic Stem	Passive Participle (Masc. Nsg.)	Virile Form
nios-	niesiony	niesieni
gryz-	gryziony	gryzieni
gniot-	gnieciony	gnieceni
kład-	kładziony	kładzeni
piek-	pieczony	pieczeni

2. Sonorant stems (in *-j*); e.g. *psuj-* 'spoil', *myj-* 'wash'.

(Note that these verbs are **non-suffixed** in *-j*. There is another stem type which is **suffixed** and also ends in *-j*, namely the *-aj* class, which differs from the non-suffixed type in many ways.)

This category presents few alternations and complications in conjugation. The present tense involves simple addition. In the infinitive and past tense forms, the *-ć* and *-ł/-l* endings simply cause the deletion of the stem-final *-j*. In the imperative, the *-j* remains unchanged before the zero. The passive participle uses the ending *-t*, which causes the deletion of the stem-final *-j*. For example:

psuj- 'spoil'

Present:

	Singular	Plural
Person		
1	psuję	psujemy
2	psujesz	psujecie
3	psuje	psują

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	psułem	psułam		psuliśmy	psułyśmy
2	psułeś	psułaś		psuliście	psułyście
3	psuł	psuła	psuło	psuli	psuły

Infinitive: psuć

Imperative: psuj

Passive participle: psuty

b. Non-syllabic stems ending in a sonorant: (Nasal *-m/-n*, e.g. *(za-)cz/n-* 'begin', *ć/n-* 'cut', *d/m-* 'blow', *(za-)j/m-* 'occupy'; Trill *-r*, e.g. *t/r-* 'rub', *d/r-* 'tear, flay'.

As indicated by the examples, there are two main types of unsuffixed non-syllabic sonorant stems: those ending in a nasal consonant (*m* or *n*), and those ending in *-r*. These verbs are more complicated than most, in view of the fact that their roots have the form *C/C*, where the slash is used to indicate that a vowel~zero alternation that takes place in the root, particularly when consonantal endings are used and the final consonant is deleted, such as those of the infinitive, past tense, and passive participle. On the other hand, the vocalic endings of the present tense and the imperative zero do not condition a vowel in the root. When the non-syllabic root ends in a nasal, the inserted vowel is a nasal vowel, where *ɛ* and *ɔ* themselves alternate, based on whether the consonantal ending is syllabic (e.g. *zajęła*) or not (e.g. *zajął*). After this inserted nasal vowel, the first and second person masculine endings of the past tense (*-em/-es*) are not considered in determining whether the root nasal is in open or closed position (i.e. *ɔ* occurs both in *zajął* and *zająłem*). The analogous feminine forms, with the endings *-am/aś* (e.g. *zajęłam*, *zajęłaś*), clearly illustrate the effect of a vocalic ending which conditions the root *-ɛ-*, rather than *-ɔ-*. (The same principle applies to stem final *ɛ/ɔ* in general, as seen in *-nɔ* suffixed verbs, such as masculine *krzyknąłem* 'scream' vs. feminine *krzyknęłam*.) This pattern is different than the open/closed syllabic behavior of the *ó~o* alternation in such obstruent verbs as *nies-*, where there is a difference between *niósł* and *niosłem*; the situation can be summarized by stating that a root nasal vowel alternation does not evaluate *-em/-es* as vocalic, while the *ó~o* alternation does.

The root-initial consonant can be hard in all forms (e.g. *d/m-*), soft in all forms (e.g. the *j* of *-j/m-*); the most complex situation occurs when it is soft (palatalized) with the root vowel option (*C/V/C*), but hard when the zero option is used (e.g. *ciąć/cięła* with vowel option, but *tnę/tniesz* with zero option). The best choice for the root-initial consonant of the basic stem is the option that occurs in the syllabic root alternant, but shown in *C/C* format, even though such a configuration cannot occur as such, e.g. *ć/n-*. This permits one to predict that the consonant will be palatal when a vowel is inserted and also provides the information that the root itself is of the non-syllabic type. The non-syllabic *-r* verbs have several

isolated types of fill vowels in various morphological forms. In the infinitive, an *e* is inserted **after** the *r* (e.g. *trzeć*), while an *a* is inserted in the past tense between the two root consonants (e.g. *tarł*, *tarła*, *tarli*).

Except for the complications caused by the vowel~zero alternation in the root, these verbs are not very different from the syllabic sonorant type. A mutation occurs before present tense *-e*. In the past tense, nasals are deleted before the *-ł/-l* ending, but root-final *-r* is not deleted. The imperative regularly requires the use of the *-yj/-ij* ending, instead of the zero, due to the omnipresent consonant cluster in the present tense stem, and the passive participle selects the *-t* ending, inasmuch as the stem-final consonant is a sonorant. The main forms of the paradigm are:

ć/n- ‘cut’, *zaj/m-* ‘occupy’, *t/r-* ‘rub’

Present (or Perfective Future):

	Singular	Plural
Person		
1	tnę/zajmę/trę	tniemy/zajmiemy/trzemy
2	tniesz/zajmiesz/trzesz	tniecie/zajmiecie/trzecie
3	tnie/zajmie/trze	tną/zajmą/trą

Past:

	Singular:		
	M	F	N
Person			
1	ciąłem/zająłem/tarłem	cięłam/zajęłam/tarłam	
2	ciąłeś/zająłeś/tarłeś	ciętaś/zajętaś/tarłaś	
3	ciął/zajął/tarł	cięta/zajęta/tarła	cięto/zajęto/tarło

Plural:

	Virile	Non-Virile
Person		
1	cięliśmy/zajęliśmy/tarliśmy	ciętyśmy/zajętyśmy/tarłyśmy
2	cięliście/zajęliście/tarliście	ciętyście/zajętyście/tarłyście
3	cięli/zajęli/tarli	cięty/zajęty/tarły

Infinitive: *ciąć/zająć/trzeć*

Imperative: *tnij/zajmij/trzyj*

Passive participle: *cięty/zajęty/tarty*

Note that the verb *wziąć* ‘take, perfective’ is not completely regular, but is similar to the non-syllabic nasal type, with a basic stem of *w/e/zm-*, as follows:

wziąć- ‘take, perfective’

Perfective Future:

	Singular	Plural
Person		
1	wezmę	weźmiemy
2	weźmiesz	weźmiecie
3	weźmie	wezmą

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	wziąłem	wzięłam		wzięliśmy	wzięłyśmy
2	wziąłeś	wzięłaś		wzięliście	wzięłyście
3	wziął	wzięła	wzięło	wzięli	wzięły
	Infinitive: wziąć		Imperative: weź		Passive participle: wzięty

B. Suffixed Verbs of Conjugation I.

Suffixed verbs can be found in all of the three conjugational classes, in contrast to unsuffixed verbs, which only occur in Conjugation I and have just been presented above. Therefore, all of the remaining types in our review are of the suffixed type. The classification will be based upon the nature of the suffix, particularly the final basic sound of the suffix. This is one of the most important features of the suffix, since the final suffixal sound is also the stem-final sound, which must interact with the ending of the given conjugation. Conjugation I suffixes will be treated in the following groups:

1. Suffixes which end in the vowel *-a*. (*-a*, *-owa*, *-ywa*, *(ej)-a*, and *(CC)-a* types)
2. Suffixes ending in *-j*. (*-ej*, *(aw)-aj* types)
3. Suffixes beginning with *-n*. (*-nq*, *-(nq)*, *-(n)* types)

Several of the listed suffixes have been represented with parentheses. When the parentheses occur before the suffix, they refer to the fact that when certain root types are used before the suffix, there are special rules which apply. For example, the *(ej)-a* suffix has the rule that when the root ends in *-ej* before the *-a* suffix, the sequence *-ej* is dropped when the *-a* appears in the form, but when the *-a* is deleted as a result of its contact with the ending, then the root *-ej* remains intact. The *(CC)-a* type has often been called the non-syllabic *-a* type, and it contains a root which consists only of consonants; a vowel~zero alternation may or may not occur in such a root, so that one could further distinguish *(CC)-a* and *(C/C)-a* subtypes. In a sense, the parenthesized varieties are an attempt to symbolize the behavior of certain verbs which have a somewhat irregular, idiosyncratic behavior, but still share certain regular properties with other verb classes.

1. Suffixes ending in *-a* .

- a. *-a* (e.g. *pisa-* 'write', *plaka-* 'cry', *kapa-* 'bathe', *szepta-* 'whisper')

This type, by definition, has a syllabic root preceding it, since non-syllabic roots follow other rules. The main feature of this verb type is that the deletion of the suffixal *-a* conditions a further mutation of the preceding root-final consonant (or consonant cluster), which has been termed the **a-suffix** alternation in our accompanying chapter on alternations. This deletion occurs in the present tense and imperative, since those paradigms have either vocalic endings or a zero which behaves as one. When consonantal endings are used, they are simply added to the stem which ends in the *-a* suffix. This can be illustrated as follows:

pisa- 'write'

Present:

	Singular	Plural
Person		
1	piszę	piszemy
2	piszesz	piszecie
3	pisze	piszą

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	pisałem	pisałam		pisaliśmy	pisałyśmy
2	pisałeś	pisałaś		pisaliście	pisałyście
3	pisał	pisała	pisało	pisali	pisały

Infinitive: *pisać*

Imperative: *pisz*

Passive participle: *pisany*

b. *-owa* and *-ywa* (e.g. *interesowa-* 'interest', *pokazywa-* 'show')

The *-owa* and *-ywa* types are extremely important due to their large numbers and productivity. The *-owa* class is very productive for forming verbs from nouns, especially borrowed nouns (e.g. *interesowa-*, *studiowa-* 'study', etc.) The *-ywa* type is productive as an imperfectivizing suffix, deriving imperfectives from stems ending in *-a* or *-aj* (e.g. *przepisywa-* 'rewrite', from *przepisa-*; *zaczytywa-* 'wear out books by frequent reading', from *zaczytaj-*, etc.) Both *-owa* and *-ywa* types share a major feature with the *-a* suffixed type: the fact that deletion of the stem-final *-a* before vocalic endings and the imperative zero condition further change in the stem. While the *-a* suffix had the complication of mutating the root-final consonant, the *-owa* and *-ywa* types experience an important mutation within the suffixes themselves. Both *-ow* and *-yw* sequences are mutated to *-uj* whenever the suffix final *-a* is dropped. Therefore, the present tense and imperative of these verbs have stems that end in *-uj*. In the past tense, infinitive, and passive participle, when consonantal endings are added, the basic form of these suffixes remains unchanged. Thus, we have the following paradigmatic forms:

interesowa- 'interest'

Present:

	Singular	Plural
Person		
1	interesuję	interesujemy
2	interesujesz	interesujecie
3	interesuje	interesują

	Singular			Plural	
	M	F	N	Virile	Non-Virile
Person					
1	interesowałem	interesowałam		interesowaliśmy	interesowałyśmy
2	interesowałeś	interesowałaś		interesowaliście	interesowałyście
3	interesował	interesowała	interesowało	interesowali	interesowały
Infinitive:	interesować			Imperative: interesuj	Passive participle: interesowany

pokazywa- 'show'

Present:

	Singular		Plural	
Person				
1	pokazuję		pokazujemy	
2	pokazujesz		pokazujecie	
3	pokazuje		pokazują	
	Singular		Plural	
	M	F	N	
Person				
1	pokazywałem		pokazywałam	
2	pokazywałeś		pokazywałaś	
3	pokazywał		pokazywała	
	Plural		Non-Virile	
	Virile		Non-Virile	
	pokazywaliśmy		pokazywałyśmy	
	pokazywaliście		pokazywałyście	
	pokazywali		pokazywały	

Infinitive: pokazywać Imperative: pokazuj Passive participle: pokazany

c. *(ej)-a* verbs. (e.g. *l(ej)-a* 'pour', *grz(ej)-a* 'warm')

The *(ej)-a* verb class represents a situation with a present tense stem ending in *-ej* (e.g. *grzeje*, *leje*), but a past/infinitive stem lacking the *-ej-* and ending in *-a* (*lać*, *grzać*). Thus, we can say that the sequence *-ej* is deleted whenever *-a* remains in the stem, i.e. before the consonantal endings which are added to *-a* without deletion. When *-a* does get deleted, as in the present tense and imperative, the *-ej* group remains intact. Thus, we have *lać/grzać* when the *-a* remains intact before a consonantal ending, but *leje/grzeje* when the *-a* gets deleted before a vocalic ending. The paradigms are:

l(ej)a- ‘pour’

Present:

	Singular	Plural
Person		
1	leję	lejemy
2	lejesz	lejecie
3	leje	leją

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	lałem	lałam		laliśmy	lałyśmy
2	lałeś	lałaś		laliście	lałyście
3	lał	lała	lało	lali	lały

Infinitive: *lać* Imperative: *lej* Passive participle: *lany*

d. *(CC)-a* verbs. (e.g. *rwa-* ‘tear’, *b/ra-* ‘take’)

These verbs differ from regular syllabic *-a* verbs (such as *pisa-*) primarily due to the fact that they do not have full mutation throughout the present tense and the imperative. Their mutation is like that of unsuffixed verbs, occurring only before *-e* present tense endings and the imperative, but not before nasal vowel endings. Moreover, the mutation is of a different type than found for *-a* verbs, as detailed in the chapter on alternations. The *(CC)-a* verb class is divided into two subtypes (*(CC)-a* and *(C/C)-a*), due to the fact that some have no vowel~zero alternation in the root, while others do. When the alternation does occur (as in *b/ra-*), the vowel *e* is inserted in the present tense, i.e. whenever the *-a* suffix is deleted. This further conditions a palatalization of the preceding consonant, and an alternation with *o*, depending on whether a soft or hard consonant follows, as can be seen in the following sample paradigmatic forms:

rwa- ‘tear’, *b/ra-* ‘take’

Present:

	Singular	Plural
Person		
1	rwę/biorę	rwiemy/bierzemy
2	rwiesz/bierzesz	rwiecie/bierzecie
3	rwie/bierze	rwą/biorą

Past

	Singular		
Person	M	F	N
1	rwałem/brałem	rwałam/brałam	
2	rwałeś/brałeś	rwałaś/brałaś	
3	rwałeś/brał	rwała/brała	rwa/brało

Plural

Virile	Non-Virile
rwaliśmy/braliśmy	rwałyśmy/brałyśmy
rwaliście/braliście	rwałyście/brałyście
rwali/brali	rwały/brały

Infinitive: rwać/brać

Imperative: rwij/bierz

Passive participle: rwany/brany

2. Conjugation I Suffixes ending in -j.

a. *-ej* suffix. (e.g. *siwiej*- 'become gray')

This suffix, which is often used with adjectival roots to create intransitive verbs which signify "becoming" or "being," with respect to an adjectival quality. In combination with endings, the *-ej* suffix verbs act very much like unsuffixed verbs in *-j* (e.g. *myj*-), except for the following two major differences:

1. The passive participial ending, which is *-t* for unsuffixed sonorant verbs, is *-n* for *-ej* suffixed. Of course, as intransitives, these verbs do not form adjectival passive participles, but they can form the impersonal participle in *-o*, e.g. *siwiano*.

2. The vowel *e* of the *-ej* suffix alternates with *a*, whenever the *j* is deleted and the suffixal vowel stands directly before a hard dental consonant, which can be found in the past tense (*-ł*) and the impersonal/passive participle (*-n*).

The forms are as follows:

siwiej- 'become gray'

Present:

	Singular	Plural
Person		
1	siwieję	siwiejemy
2	siwiejesh	siwiejecie
3	siwieje	siwieją

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	siwiałem	siwiałam		siwieliśmy	siwiałyśmy
2	siwiałeś	siwiałaś		siwielicie	siwiałyście
3	siwiał	siwiała	siwiało	siwieli	siwiały

Infinitive: siwieć

Imperative: siwiej

Impersonal participle: siwiano

b. *-(aw)-aj* suffix. (Only three verbs plus their compounds: *d(aw)aj*- 'give', *(przy)-zn(aw)aj*- 'confess', *(do)-st(aw)aj*- 'receive')

This type represents the particular instance of the *-aj* suffix which appears after roots ending in *-aw*. In the present tense, when the stem-final *-j* is retained intact, the parenthesized sequence *-aw* is dropped (e.g. *daję* ‘I give’). However, this does not apply to the imperative, where both the *-aw* and *-j* elements are found together: *dawaj*. In the past tense and infinitive, when the *-j* is deleted, due to its position immediately before a consonant, the *-aw* remains: *dawał*. Thus, there is an interplay between the use of *-aw* and *-j* in present and past tenses, as seen in these forms:

d(aw)aj- ‘give’

Present:

	Singular	Plural
Person		
1	daję	dajemy
2	dajesz	dajecie
3	daje	dają

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	dawałem	dawałam		dawaliśmy	dawałyśmy
2	dawałeś	dawałaś		dawaliście	dawałyście
3	dawał	dawała	dawało	dawali	dawały

Infinitive: *dawać*

Imperative: *dawaj*

Passive participle: *dawany*

3. Conjugation I Suffixes beginning in *-n*: *-nq*, *-(nq)*, *-(n)*.

The three Polish suffixes beginning with *-n* differ mainly in the set of grammatical forms in which they appear. The type symbolized as *-nq* (e.g. *krzyknąć* ‘let out a single scream’) appears in all grammatical forms. The second, symbolized in parentheses as *-(nq)* (e.g. *chud(nq)-* ‘become thin’), is not used in the past tense and related forms (such as the past verbal adverb, *schudłszy* ‘having become thin’), but is used in the present tense and infinitive. The third type, symbolized only as *-(n)*, is found only in the present tense system, including the imperative, but is absent in both the infinitive and past tense forms (e.g. *pad-(n)-* ‘fall’). In the forms in which the suffix is not dropped due to the specific grammatical environments mentioned, the final vowel *q* is deleted before the vocalic endings of the present tense, and the consonant *n* undergoes palatalization before *-e* endings and the imperative zero. When used in the past tense and infinitive, the entire suffix *-nq* stays intact, but the vowel *q* shifts to *ę* when the grammatical ending is syllabic. This includes all of the past tense endings other than the masculine singular; in the masculine singular and the infinitive, the syllable *-nq* remains intact. It should also be noted that all three *-n* type suffixes use the passive or impersonal participial ending *-t* (with some exceptions, such as *krad(n)-*: *kradziono* ‘put’, in contrast to *bieg(n)-*: *biegnięto* ‘run’). When the *-n* or *-nq* suffix is not used in a particular grammatical form, such as the past tense or infinitive, a root-final obstruent will end the verbal stem and it will observe the same *C+C* combination rules as occur for unsuffixed obstruent verbs. E.g. when *pad(n)-* drops its suffix in the infinitive, the *d+ć* combination yields *ść*, following the same rule as for the non-suffixed type. The following table illustrates the behavior of the three types of verbs with an *-n* type suffix:

krzyknąć- 'shout'

Present/Future Perfective:

	Singular	Plural
Person		
1	krzyknę	krzykniemy
2	krzykniesz	krzykniecie
3	krzyknie	krzykną

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	krzyknąłem	krzyknęłam		krzyknęliśmy	krzyknęłyśmy
2	krzyknąłeś	krzyknęłaś		krzyknęliście	krzyknęłyście
3	krzyknął	krzyknęła	krzyknęło	krzyknęli	krzyknęły

Infinitive: *krzyknąć*Imperative: *krzyknij*Impersonal participle: *krzyknięto**chud(nąć)*- 'become thin'

Present:

	Singular	Plural
Person		
1	chudnę	chudniemy
2	chudniesz	chudniecie
3	chudnie	chudną

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	chudłem	chudłam		chudliśmy	chudłyśmy
2	chudłeś	chudłaś		chudliście	chudłyście
3	chudł	chudła	chudło	chudli	chudły

Infinitive: *chudnąć*Imperative: *chudnij*Impersonal participle: *chudnięto**pad(nąć)*- 'fall'

Present:

	Singular	Plural
Person		
1	padnę	padniemy
2	padniesz	padniecie
3	padnie	padną

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	padłem	padłam		padliśmy	padłyśmy
2	padłeś	padłaś		padliście	padłyście
3	padł	padła	padło	padli	padły

Infinitive: paść

Imperative: padnij

Impersonal participle: padnięto

Note: Some verbs have variant infinitives, both with and without *-nq*; e.g. *róść* ~ *rosnąć*. In terms of my notation, this means that such verbs have a variation of the basic stems *ros-* and *ros(n)-*.

II. Stems which use Conjugation II endings.

In contrast to Conjugation I, both Conjugations II and III have only suffixed types. The two major types are the *-i/-y* suffix and the *-e* suffix. There is a minor type, which is listed as the *-(oj)a* suffix.

A. Conjugation II Suffixes in *-i/-y* (e.g. *robi-* ‘do’, *prosi-* ‘request’, *płatci-* ‘pay’, *suszy-* ‘dry’)

Since these stems all end in a vowel (except for the 2sg imperative), their most complex combination occurs before the vocalic endings of the present tense. The suffixal vowel is regularly dropped, and when the ending is a nasal vowel (1Psg. and 3Ppl.), the root-final consonant is mutated, according to the mutation type called the Conjugation II type alternation in the chapter on alternations (e.g. *robię/proszę/płaceę/suszę*). The passive participle, which uses the ending *-on*, has the same mutation as found before nasal vowels of the present (e.g. *robiony/proszony/płacony/suszony*). In the other forms of the present, which begin with *-i/-y*, the consonant of the basic stem is retained (e.g. *robi/prosi/płaci/suszy*). Before the past tense *-ł/-l* and infinitive *-ć* there is the simple addition of the ending to the stem. This can be illustrated as follows:

prosi- ‘request’

Present:

Person	Singular		Plural		
	M	F	N	Virile	Non-Virile
1	proszę			prosimy	
2	prosisz			proście	
3	prosi			proszą	

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	prosiłem	prosiłam		prosiłiśmy	prosiłyśmy
2	prosiłeś	prosiłaś		prosiłiście	prosiłyście
3	prosił	prosiła	prosiło	prosiłi	prosiły

Infinitive: prosić

Imperative: proś

Passive participle: proszony

B. Conjugation II Suffixes in *-e* (e.g. *siedzie-* ‘be seated’, *krzycze-* ‘scream’)

These stems recall the morphological of the previous *-i/-y* type in the present tense, but differ in the shape of the infinitive, past tense and passive participle. The infinitive merely differs by having the *-e* suffix, rather than *-i/-y*; in the past tense, the *-e* suffix of this type is modified to *-a* when followed by a dental (*-t* or *-n*), which includes all of the singular and plural non-virile forms of the past tense (cf. *siedział* ‘he was seated’ and *siedzieli* ‘(the men) were seated’), plus the ending of the passive/impersonal participle in *-n* (note that it differs from the *-on* of the *-i/-y* suffix), e.g. *siedziano*. For reference, the forms are:

siedzie- ‘be seated’

Present:

	Singular		Plural		
Person	M	F	N	Virile	Non-Virile
1	siedzę			siedzieliśmy	siedziałyśmy
2	siedzisz			siedzieliście	siedziałyście
3	siedzi		siedziało	siedzieli	siedziały

Infinitive: *siedzieć*

Imperative: *siedź*

Impersonal participle: *siedziano*

III. Conjugation III stems: *-aj* suffix (e.g. *czytaj-* ‘read’)

The vast majority of Conjugation III verbs use the productive suffix *-aj*. Since only two basic stems (*umiej-* ‘know how’, together with *roz-umiej-* ‘understand’, plus *śmiej-* ‘dare’) use the suffix *-ej* with this set of conjugational endings, they will be considered anomalous. Of course, there is also a productive *-ej* suffix which uses Conjugation I endings (e.g. *siwiej-*), which is the regular type for the *-ej* suffix. Therefore, a stem-based word list or dictionary should assume that such stems as *siwiej-* imply Conjugation I, while a special notation would have to be used in the case of the two irregular stems of Conjugation III, such as *umiej-* (III).

The use of the *-aj* suffix presents no instances of consonant alternation, but the final *-j* is deleted before all present tense endings, except the 3Ppl. ending, since all of the other Conjugation III endings begin in a consonant or a zero (in the 3Psg.) which behaves as a consonant. The imperative zero, since it behaves as a vowel, does not cause the deletion of *-j*. In the past tense and infinitive, the consonantal endings do cause the deletion of *-j*. Therefore, this conjugational type presents a very large percentage of instances in which the stem-final consonant is deleted, in contrast with the other types. In fact, the full suffix *-aj* remains intact only in the 3Ppl. of the present (and the analogous present participle) and the imperative. The paradigm has the following appearance:

czytaj- 'read'

Present:

	Singular	Plural
Person		
1	czytam	czytamy
2	czytasz	czytacie
3	czyta	czytają

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	czytałem	czytałam		czytaliśmy	czytałyśmy
2	czytałeś	czytałaś		czytaliście	czytałyście
3	czytał	czytała	czytało	czytali	czytały

Infinitive: *czytać*

Imperative: *czytaj*

Passive participle: *czytany*

Anomalous Verbs

The verbal stems presented above are considered regular in the one-stem verb system, which means that it is possible to derive the paradigm by means of a single stem and systematic rules. Such stems and rules have been presented for the major verb classes of Polish. However, there are a number of important verbs that stand outside the set of regular verbs. I am dividing anomalous verbs into two main types, based on whether the anomaly is **statistical** or **structural**. Statistical anomalies are those in which a perfectly functional stem-type could be posited, having its own particular features, but contains only a tiny number of verbs. In a sense, the statistical anomaly can be considered a **minor type**. In the case of a structural anomaly, two different basic stem types occur within the paradigm, i.e. it is a form of suppletion.

A. Statistical anomalies. Three such isolated verb types can be found, one in each of the major conjugations, as follows:

I. Anomalous Conjugation I verb type: *stan- się* 'become', plus other prefixed forms, such as *dostan-* 'receive', *zostan-* 'remain', etc.

This group of verbs is the only instance of a syllabic sonorant stem which does not end in *-j*. Due to its isolated nature, some have attempted to fit it into other verbal categories, such as the *-n-* suffixed type, but that would assume yet another isolated irregularity, i.e. a verbal root ending in a vowel.

dostan- 'receive, perf.'

Future:

	Singular	Plural
Person		
1	dostanę	dostaniemy
2	dostaniesz	dostaniecie
3	dostanie	dostaną

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	dostałem	dostałam		dostaliśmy	dostałyśmy
2	dostałeś	dostałaś		dostaliście	dostałyście
3	dostał	dostała	dostało	dostali	dostały

Infinitive: dostać

Imperative: dostań

No passive participle in the modern language (the form *dostany* is considered archaic).

II. Anomalous Conjugation II Suffix in *-(oj)a*: only two verbs, *b(oj)a-* (*się*) 'fear', and *st(oj)a-* 'be standing'.

This suffix recalls the Conjugation I *-(ej)a* type. When the *(oj)a-* suffix experiences the deletion of the final *-a*, the root-final sequence *oj* remains; conversely, when *-a* remains, the sequence *oj* is dropped. Thus, we have *oj* and no *-a* in the present tense, when the vocalic endings cause the stem-final vowel *-a* to be deleted (e.g. *stoję*); in the infinitive and past tense, the consonantal endings permit the stem-final *-a* to remain intact and the entire *oj* sequence is deleted (e.g. *stać/stał*). The forms are as follows:

st(oj)a- 'be standing'

Present:

	Singular	Plural
Person		
1	stoję	stoimy
2	stoisz	stoicie
3	stoi	stoją

	Singular			Plural	
Person	M	F	N	Virile	Non-Virile
1	stałem	stałam		staliśmy	stałyśmy
2	stałeś	stałaś		staliście	stałyście
3	stał	stała	stało	stali	stały

Infinitive: stać

Imperative: stój

Impersonal participle: stano

III. Anomalous *-ej* suffix of Conjugation III. Only two stems: *umiej-* ‘know how’, together with prefixed *roz-umiej-* understand, and *śmiej-* ‘dare’.

These suffixes are very similar in use to *-aj* of Conjugation III, with the exception of the alternation of the suffixal *e~a*, an alternation which always occurs with verbal suffixes in either *-e* or *-ej*. According to the usual pattern, the *a* alternant occurs when followed by a hard dental, in the past tense (*-ł*) or the passive/impersonal participle (*-n*). The paradigm is as follows:

umiej- ‘know how’

Present:

	Singular	Plural
Person		
1	umiem	umiemy
2	umiesz	umiecie
3	umie	umieją

	Singular			Plural	
	M	F	N	Virile	Non-Virile
Person					
1	umiałem	umiałam		umieliśmy	umiałyśmy
2	umiałeś	umiałaś		umielście	umiałyście
3	umiał	umiała	umiało	umieli	umiały

Infinitive: *umieć*

Imperative: *umiej*

Impersonal participle: *umiano*

B. Structurally anomalous stems.

In these instances of irregular verbs, a single stem cannot be readily used for predicting the entire paradigm. Usually, two suppletive stems are needed to represent the paradigm. The two stems can either be very similar to each other, or totally different, in which case one can more readily recognize the **suppletion**. Quite often, the present tense system, including the imperative and active participle, uses one stem, while the past tense system, including the passive participle, uses another. However, the infinitive can use either the present or past stem. The following list presents some of the most important these two-stem anomalous verbs:

First Stem:	Second Stem:	Gloss
Present/Perfective Future	Past	

Conjugation I:

id- (inf. *iść*)

sz/e/d-

‘go on foot’

(Past tense *d* is present when mobile */e/* and non-vocalic ending occur: *sz/e/d-ł*. When */e/* alternates to zero and vocalic ending is used, the *d* is deleted, due to the impermissible **szdł-* cluster: *sz/-ła*.)

<i>znajd-</i>	<i>znalaz-</i> (inf. <i>znaleźć</i>)	‘find (perfective)’
<i>jad-</i>	<i>jecha-</i> : (inf. <i>jechać</i>)	‘go by vehicle’
<i>siąd-</i> (inf. <i>siąść</i>)	<i>sied-</i>	‘sit down (perfective)’

(In past tense, there is a rare instance of a verbal root with *e* before non-dentals, alternating with *a* before dentals: *siadł* 'he sat', *siedli* 'they sat, masc. pl.'.)

<i>chc-</i>	<i>chcie-</i> (inf. <i>chcieć</i>)	‘want’
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Conjugation II:

<i>śpi-</i>	<i>spa-</i> (inf. <i>spać</i>)	‘sleep’
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Conjugation III:

<i>maj-</i>	<i>mie-</i> (inf. <i>mieć</i>)	‘have’
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In the present/perfective future forms of the next three verbs, the stems end in *-dz* and are analogous to the Conjugation III stems in *-j* (such as *czytaj-*), in that stem-final *-dz* is deleted before the consonantal endings of the present (e.g. *wie~~dz~~-m* 1Sg, but *wiedz-q* 3Pl). In fact this small group of *-dz* verbs could almost be considered a subtype of Conjugation III, if not for the infinitives and a few other forms which do not fit in with that conjugation, such as the imperative of *dadz-* (i.e. *daj-*).

<i>wiedz-</i>	<i>wiedzie-</i> (inf. <i>wiedzieć</i>)	‘know’
<i>dadz-</i>	<i>da-</i> (inf. <i>dać</i>)	‘give (perfective)’
<i>jedz-</i>	<i>jad-</i> (inf. <i>jeść</i>)	‘eat’

The verb *być* is so irregular in the present, that not even two stems are sufficient to predict the paradigm. It is also unique in being the only verb with a separate present tense and non-compound future, and is conjugated as follows:

być ‘to be’

Present:

	Singular	Plural
Person		
1	jestem	jesteśmy
2	jesteś	jesteście
3	jest	są

Past:

Person	Singular			Plural	
	M	F	N	Virile	Non-Virile
1	byłem	byłam		byliśmy	byłyśmy
2	byłeś	byłaś		byliście	byłyście
3	był	była	było	byli	były

Future:

Person	Singular	Plural
1	będę	będziemy
2	będziesz	będziecie
3	będzie	będą

Infinitive: być

Imperative: bądź

Notes on Verbal Aspect and Imperfective Derivation

The scope of this grammatical description does not permit more than a cursory glance at the very important topic of aspect. Any given Polish verb can be assigned to one of the two aspects, perfective or imperfective. In general, perfectives indicate that the verbal action represents a complete whole, rather than a continuing process or repetition. One of the possible meanings of perfective verbs has been referred to as "change of state" (e.g., in perfective *napisał list* 'he wrote the letter', the letter went from being unwritten to written), as opposed to a continuing, unchanged state that uses the imperfective (e.g., in imperfective *cały dzień pisał list* 'he was writing the letter for a whole day', there is continuous state of writing, rather than a change). The imperfective can be used when no particular emphasis is being placed on whether the action was complete or incomplete, i.e. when that factor is irrelevant to the speaker. In actual practice, it is easiest for the student to become familiar with the aspectual facts which pertain to each tense and/or part of the paradigm. In the present tense, there is no aspectual opposition. When imperfectives use the present tense series of endings (either of Conjugation I, II, or III), the meaning is that of present tense, but when perfectives use the very same endings, the meaning is that of a completed action in the future (perhaps due to the fact that if an action is complete, it cannot be taking place in the present tense). The imperfective creates its future by means of the auxiliary construction introduced above (e.g. *będę pisał* 'I will write'). Outside of the present and future, both aspects have a regular opposition without the use of auxiliary verbs, that is, in such parts of the paradigm as the past tense, infinitive, imperative, past participles, and even the verbal noun. A few examples of the imperfective/perfective opposition can be given on the basis of *pisa-/napisa-*, as follows:

Past:

(I) *On zawsze pisał takie listy.* 'He always used to write such letters.'(P) *On wczoraj napisał list.* 'Yesterday he wrote (and completed) the letter.'

Future:

(I) *Jutro będę pisał listy.* ‘Tomorrow I’ll be writing letters.’

(P) *Jutro napiszę list, zanim przyjdę do ciebie.* ‘Tomorrow I’ll write the letter before I come to your place.’

Infinitive:

(I) *Nie lubię pisać takich listów, nieciekawe są.* ‘I don’t like to write such letters, they’re uninteresting.’

(P) *Nie mogę napisać tego listu, bo nie mam czasu.* ‘I can’t write (and finish) this letter because I don’t have the time.’

Since many verbs occur in pairs of imperfective and perfective, it is often assumed that this is the norm, and that every verb occurs in such a pair. Actually, the situation is more complicated than that. To clarify the aspectual situation more concisely, let us trace the process of prefixation and suffixation. Unprefixed verbs can be referred to as **simplex**.¹² Such verbs are almost always imperfective, and they may be illustrated with some of the most familiar verbs of the language, such as *pisa-*, *czytaj-*, *robi-*, *ptaci-*, *pracowa-*, *leże-*, etc. Simplex verbs are frequently used with prefixes which have a broad range in terms of how much they change the basic lexical meaning of the simplex. In most cases, simplexes are imperfective, although a small number of perfective simplexes does exist. The prefixes range from those that barely change the meaning, if at all, to those which drastically change it to a very different lexical meaning. However, a given prefix does not make the same lexical change to all verbs it interacts with. The aspectual change, however, is uniform. If we assume that our simplex is imperfective, as is usually the case, as illustrated in the examples of simplex stem given above, the action of adding a prefix changes the aspect from imperfective to perfective. What happens next depends on how much the prefix changes the lexical meaning of the simplex. Generally speaking, three situations are possible, as follows:

1. The meaning is hardly changed at all, except that the verb has become perfective, in comparison with the imperfective unprefixed simplex. In this case, the prefix is often called **empty** and the pair of the simplex and the prefixed verb is known as an aspectual pair. This can be exemplified by such a pair as *pisa-* and *napisa-*.

2. The meaning is changed a bit, but not enough to say that the lexical meaning of the verb has changed. Of course, the prefix also has its usual effect of perfectivizing. This type of prefix often describes a time period during which the action takes place, such as ‘for a little while’ or ‘throughout a period of time’. These types of verbs are often referred to as **procedurals**; their relationship is also known by the German term *Aktionsart*. It can be exemplified by the Polish imperfective *leże-* ‘lie down’, as compared to perfective *poleże-* ‘lie down for a while’, or imperfective *pracowa-* ‘work’, as compared to perfective *przepracowa-* ‘work for a period of time’. In these cases, the prefixes are not empty, yet the new perfectives are not so different lexically as to require new imperfective pairs, although these are sometimes formed by speakers on an occasional basis.

3. In addition to making the simplex perfective, the prefix can add a totally different meaning, not just a difference in the time frame of the action. For example, the simplex *mówi-* means ‘speak’, but if the

¹² More precisely, simplex refers to a non-iterative unprefixed verbal stem; a stem that lacks the additional iterative suffix found in such verbs as *czytywać* ‘read from time to time’, *pisywać* ‘write from time to time’, etc.

prefix *za-* is attached, the new perfective *zamówi-* means ‘order’, e.g. order merchandise from a store. The original simplex is so far from the meaning of the prefixed perfective, that the language creates a new imperfective to match it by means of suffixation, resulting in *zamawiaj-*, where the secondary imperfectivizing suffix *-aj* is added, and the stem vowel *ó* is also changed to *a*. This is known as the process of secondary imperfectivization and it produces a pure aspectual pair which is identical in meaning. In this case it is perfective *zamówi-/imperfective zamawiaj-*. However, the same basic stem may be used with prefixes of both the procedural type and the fully lexical type. For example, *mówi-* can be used with the prefix *po-*, i.e. *pomówić*, in the sense of ‘talk for a little while’, in addition to its cited use with *za-*, meaning ‘order’. Thus, each time a prefixed verb is learned by the student, it would be very beneficial to think of what sort of meaning is brought in by the prefix: little beyond perfective completion and/or change of state (*napisać*); temporal or procedural meaning (*pomówić*); or a totally new lexical meaning (*zamówić*).

4. Some pairs are suppletives, from totally different stems. E.g. *mówi-*, *powiedz-~powiedzie-* ‘say’; *b/ra-*, *w/e/zm-* ‘take’.

Rules cannot readily be stated to predict whether a given prefix plus simplex combination will fall into the empty, procedural, or lexical category. Nevertheless, the morphological process of secondary imperfectivization is quite systematic and the rules can be correlated to the basic stem-types of verbs which were reviewed earlier in this chapter. For reference, the following list indicates three of the most important types of suffixes for secondary imperfectivization (*-ywa/-aj/-waj*), keyed to the basic verbal stems with which they generally occur.

Perfective Basic Stem Type	Imperfectivizing Suffix	Comment
1. a. <i>-aj</i> suffixed b. <i>-a</i> suffixed c. <i>-owa</i> suffixed	<i>-ywa</i>	Basic stem suffixes all begin or end in <i>-a-</i> .
E.g. <i>odczytaj-</i> , <i>odczytywa-</i> ‘read aloud’ <i>podpisa-</i> , <i>podpisywa-</i> ‘sign’ <i>opanowa-</i> , <i>opanowywa-</i> ‘master’		
2. a. Unaffixed obstruent stem b. Non-syllabic roots c. <i>-nq</i> , <i>-(nq)</i> , <i>-(n)</i> d. <i>-i</i> suffixed verbs	<i>-aj</i>	Non-syllabic roots add a vowel between C/C of root, which is <i>-y/-i</i> , but <i>-e</i> before <i>r</i> . <i>-i</i> suffixed verbs change root <i>o</i> or <i>ó</i> to <i>a -i</i> and mutate the final root consonant.

E.g.

wypiek-, wypiekaj- ‘bake’

wy-b/r-a, wy-bil/e/raj- ‘choose’

zawilgną-, zawilgaj- ‘get wet’; zastyg(ną)-, zastygaj- ‘harden’; okrad-(n)-, okradaj- ‘burglarize’

opłaci-, opłacaj- (się) ‘be worthwhile’

3. -waj These stems tend to have stem-final -e and/or -j.

a. Unaffixed syllabic sonorant (-j)

b. -e

c. -ej

d. -(ej)-a

odżyj-, odżywaj- ‘revive’

dobrzemie-, dobrzmiewaj- ‘die down (of a sound)

dorozumiej-, dorozumiewaj- (się) ‘guess’

ogrz(ej)a-, ogrewaj- ‘heat’

Verbs of Motion and Their Aspects

The Polish verbs of motion (which refer to such concepts as going on foot, riding, flying, swimming, running, and carrying by hand or vehicle) differ from other verbs in the language in certain ways that often make them a separate topic. In the first place, some of the motion verbs differ from their English counterparts, due to the fact that Polish verbs of going and transporting distinguish between vehicular and non-vehicular motion. If the speaker wishes to specifically state that the trip took place by vehicle or if the distance makes it obvious that a vehicle would have been the only possible type of trip, the special vehicular verbs are used. However, if the speaker emphasizes that the trip took place on foot, or if both are equally probable, then the non-vehicular verbs are used. For example:

1. Jan jedzie do Francji. ‘John is going (by vehicle) to France.’

(The only possible trip, due to the distance.)

2. Jan idzie do sklepu. ‘John is going to the store.’

(Close enough that either one would be possible.)

3. Siostra niesie książki do pokoju. ‘Sister is carrying books into the room.’

(Transport on foot is the only logical possibility.)

4. Siostra wiezie książki z Polski. ‘Sister is bringing (by vehicle) books from Poland.’

(Vehicular transport is the only logical possibility.)

Not all motion verbs are opposed on the basis of vehicular/non-vehicular distinction. However, motion verbs can be considered a special, unified category due the fact that in their unprefixated form, each motion verb has not one, but two different imperfective stems. One (the **indeterminant**, e.g. *chodzi-*) is used for frequent, round-trip, or general motion, while the other is used for a specific trip in one direction (called the **determinate**, e.g. *id-*). These categories are somewhat reminiscent of the English present and present progressive (i.e. *I go to school.* vs. *I am going to school.*) The Polish distinction of determinacy applies to every form in the entire paradigm. It is important to note that the determinacy opposition can only occur within the imperfective, which means that each such pair of motion verbs has two ways of

expressing the present tense. Each pair of imperfectives also has an associated prefixed perfective, which is not necessarily a totally empty prefix, and sometimes adds the meaning of incipient action to the general notion of perfectivity. The most important such imperfective pairs, together with their associated prefixed perfectives, are as follows (some stems have different present and past/infinitive stems, as presented above):

		Prefixed	
Indeterminate	Determinate	Perfective	Gloss
chodzi-	id- (~szed-)	pójd-	‘go on foot’
jeździ-	jad- (~jecha-)	pojad- (~pojecha-)	‘go by vehicle’
nosi-	nios-	odnios-	‘carry on foot’
wozi-	wioz-	odwioz-	‘carry by vehicle’
pływaj-	płyną-	popłyną-	‘swim, go by boat’
lataj-	lecie-	polecie-	‘fly’
biegaj-	bieg-(n)-	pobieg-(n)-	‘run’

Some examples of the differences between the three types of verbs are:

1. Zawsze chodziłem do szkoły, kiedy tam mieszkałem. ‘I always went to school when I lived there.’
2. Wczoraj spotkałem go, kiedy szedłem do szkoły. ‘Yesterday I met him when I was going to school.’
3. Wczoraj poszedłem do szkoły o ósmej godzinie. ‘Yesterday I went to school at 8:00.’

Notice that the first example (indeterminate) indicates many trips to the school, while the second (determinate) is a specific trip, but not a completed one, and the third (perfective) is a completed past action.

In the above discussion of imperfectivization, it was noted that the addition of a prefix can either result in a perfective pair (if the prefix contributes little new meaning), or an entirely new aspectual pair (if the prefix substantially changes the lexical meaning). Polish has a very complex system of adding numerous prefixes to all of the cited verbs of motion, many of which change the meaning and then cause a new suffixed imperfective to be formed. While the addition of the prefix to create the new perfective is regularly performed by adding it to the determinate, the stem for the derived imperfective is less uniform. Sometimes it is identical to the indeterminate stem, but it also can be a modified version of the indeterminate stem. Importantly, the prefixed aspectual pairs of derived motion verbs observe only the usual opposition of perfective and imperfective. Prefixed verbs are not subdivided into determinate and indeterminate. The following list demonstrates how each of the above motion verb acts when its meaning is changed by the addition of a prefix, together with the creation of a secondary imperfective.

Prefixed Perfective	Secondary Imperfective	Gloss
zaj/d-	zachodzi-	‘reach’
zajad- (~zajecha-)	zajeżdżaj-	‘drive up’
zanos-	zanos-	‘deliver to’
zawioz-	zawozi-	‘deliver by vehicle’
wpłyną-	wpływaj-	‘swim into’
zalecie-	zalatywa-	‘arrive by flying’
zabieg-(n)-	zabiegaj-	‘reach by running’

Of course, this is only a small sample, mostly of derivatives with the same prefix, *za-*. Needless to say, the list could be expanded greatly. There are some noteworthy phonological differences in the prefixed stems as compared with the unprefixes; for example, the root *j/d-* (as in *zajd-*, *zajść*) appears in this non-syllabic form after a prefix, but when it occurs initially, it acquires the syllabic form *id-*, as in the infinitive *iść*.

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