10 Slovak

David Short

1 Introduction

Slovak is the official language of Slovakia, or the Slovak Republic, the eastern part of former Czechoslovakia. It is spoken by about 4.5 million people in Slovakia and by another half million still living in the new Czech Republic. Thus westwards the Slovak-speaking area meets Czech; northwards it meets Polish, south-westwards German (in Austria), south-wards Hungarian and eastwards Ukrainian. There are considerable Hungarian and smaller Czech and Ukrainian (Ruthenian) minorities in Slovakia, and even fewer Poles, Russians and Germans, but a large Romany population (10 per cent of the population in East Slovakia). The Slovak-speaking area overspills into Poland, with a larger spread into Hungary and scattered pockets in Rumania and the former Yugoslavia (chiefly Vojvodina). Historical migrations gave rise to Slovak groups else-where in Europe and large colonies overseas (Canada, the United States and Argentina).

The basis of the contemporary standard language is Ľudovít Štúr's codi-fication of the 1840s, based mainly on Central-Slovak dialects; the modern orthography and some other refinements are due to revisions by Michal Hodža and Martin Hattala; the language was effectively consolidated by the mid-1850s. Earlier there had been a codification based on Western Slovak (1790), by Antonín Bernolák, which, though relatively short-lived, did produce some literature and Bernolák's large posthumous dictionary (*Slowár slowenski česko-laťinsko-ňemecko-uherskí*, 1825-7). In the east the Calvinists had also attempted to use consistently a Slovak based on the eastern dialect (the Lutherans used biblical Czech). Unlike these early local versions of a systematized written language (and even earlier, unsystem-atized, language patterns now known as 'cultured East/Central/West Slovak'), Štúr's codification eventually gained acceptance as the language of the newly consolidated Slovak nation. With the youth of the language go many problems in its development and stabilization – morphological vari-ation, the evaluation of regionalisms, the insidious penetration of Czech forms and the morphological and orthographic treatment of borrowings. Research on both the standard language and the dialects is conducted at

the Slovak Academy's Ľudovít Štúr Linguistics Institute in Bratislava, which publishes the periodicals *Slovenská reč* and *Kultúra slova*, and the foreign-language occasional papers *Recueil linguistique de Bratislava*.

2 Phonology

2.1 Segmental phoneme inventory
Practically speaking, Slovak has five **short vowels** organized triangularly:

/i/			/u/
	/e/	/o/	
	/a/		
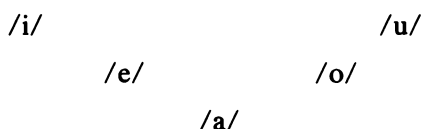
However, standard Slovak as codified has six short vowels organized in a plain front–back pattern:

/i/	/u/
/e/	/o/
/æ/	/a/

The anomaly is that /æ/ is observed only by about 5 per cent of speakers, and even when heard in formal contexts (high-style theatre, solemn proclamations) it is for the majority a quaint dialect feature, rather than a fine archaism. The substitute for /æ/, of which one informant working on its incidence says simply 'it has no future', is /e/.

The system of **long vowels** (vowels in long syllables) is much more complex. Five long vowels, /iː/, /eː/, /aː/, /oː/, /uː/, are supplemented by four (rising) **diphthongs**, /ie/, /ia/, /iu/, /uo/. The resulting pattern of short–long oppositions is asymmetrical: while /i/ and /æ/ have as their regular counterparts /iː/ and /ia/ respectively, /e/ has /aː/, but sometimes /ia/, /u/ has /uː/, but sometimes /iu/, and /o/ has /uo/, but sometimes (in borrowings only) /oː/. Orthographically, /æ/ is represented by ä (retained even when /æ/ is replaced by /e/, hence there are two symbols for /e/), /uo/ by ô, and long vowels by an acute accent. The retention of ä is historical, etymological, as is the distribution of i, y, í and ý as letters representing /i/ and /iː/. The sequence *ou* occurring in the instrumental case of feminine paradigms is not a true diphthong, but short /o/ + bilabial [w], indistinguishable from /o/ + post-vocalic /v/ (= [w]).

Restrictions on vowel distribution: /æ/ occurs only after labials, and /ia/, /ie/, /iu/ only after 'soft' consonants (/iu/ in just a few morphologically conditioned environments); /aː/, /eː/, /uː/ cannot occur after

soft consonants, where they are replaced by the matching diphthongs; /aː/ may, however, occur after /j/ under certain morphological conditions (*jama* 'pit', genitive plural *jám*) and in derivation, notably before suffixes *-ár*, *-áreň* (*lejár-eň* 'foundryman–foundry'). /eː/ occurs only in borrowings, the native *dcéra* 'daughter' and adjective endings. There are twenty-seven **consonantal phonemes** (table 10.1). The letters ť, ď, ň, ľ (upper case Ť, Ď, Ň, Ľ/Ĺ) are only used before back vowels or finally. Before front vowels, symbols without diacritics are used; thus before /i/, /iː/ spellings are ti, di etc.; by contrast non-palatal /t/, /d/ etc. before /i/, /iː/ appear as ty, dy etc. Exceptions to this spelling convention occur in borrowings and some morphologically conditioned environments (for example, nominative plural masculine animate endings of pronouns and adjectives). Exceptions where *te, de* and so on represent not /ťe/, /ďe/, but /te/, /de/ occur in similar conditions, and in forms of *ten* 'that' and *jeden* 'one'.

The main subclassification among consonants is the set of voiced-voiceless pairs: *b/p, d/t, ď/ť, dz/c, dž/č, z/s, ž/š, g/k, h/ch*, which are subject to patterns of assimilation – towards voicelessness before a voiceless consonant or pause, and voicedness before a voiced consonant, often even an unpaired one, or, at word boundaries, even a vowel. Examples:

stred = /stret/ 'middle', in which [t] represents the morphophoneme /d/, as distinct from the final /t/ in *stret* /stret/ 'encounter';
kde = /gďe/ 'where'; *hádka* = /hátka/ 'quarrel';
náš bol = /nážbol/ 'ours was', *had pil* = /hatpil/ 'snake drank'.

Before unpaired voiced: *vlak meška* = /vlagmeška/ 'train's late'; *viac ráz* = /viadzrás/ 'several times'; similarly with transparent internal morpheme boundary: *takmer* = /tagmer/ 'almost'; *viacnásobný* /viadznásobný/

Table 10.1   Slovak consonantal sounds (non-phonemic in square brackets)

	Labial	Labio-dental	Alveo-dental	Post-alveolar	Palatal	Velar	Laryngeal
Occlusive							
Oral	p b		t d		ť ď	k g	
Nasal		m	n		ň	[ŋ]	
Semi-occlusive			ts dz	tš dž			
Fricative		[w] f v	s z	š ž	j x		h
Lateral			l		ľ		
Roll			r				

Note: In IPA terms /ť/ = [c], /ď/ = [ɟ], /ň/ = [ɲ], /ľ/ = [ʎ], /š/ = [ʃ], /ž/ = [ʒ], /tš/ = [tʃ], [dž] = [dʒ].

'multiple'. Opaque boundaries reveal no assimilation: *vlákno* = /vlákno/ 'fibre'.

Inconsistencies occur with: (a) the prefix *s-*, which survives in spelling and pronunciation in some words (*sloh* 'composition', *svah* 'slope'), while in others voicing has led to orthographic revision (*zjednotiť* 'unite', *zmes* 'blend'); (b) the effect of *-m*, which sometimes causes regressive voicing: *nášmu, vášmu* = /nážmu, vážmu/ 'our, your (DAT SG M/N)', *nesme, kupme* = /nezme, kubme/ 'carry, buy (1 PL IMP)', and sometimes does not: *lesmi, vlakmi* 'forest, train (INST PL)', pronounced as written.

Regressive voice assimilation before vowels: *s otcom* = /zotsom/ 'with father'; *vlak ide* = /vlagiďe/ 'train's coming'; with prepositions *s* and *k* vocalized (that is *so, ku*), assimilation occurs in all circumstances: *ku koňu* = /gukoňu/ 'towards horse'; *so sestrou* = /zosestrou/ 'with sister'.

/v/–/f/ are an imperfect voiced–voiceless pair: while /v/ > [f] before a voiceless consonant (*vtip* = /fťip/ 'joke'), /v/ > [w] after a vowel (or equivalent), hence *pravda, krvný, polievka* = [prawda, krwni:, poliewka]; before unpaired voiced consonants there is free variation: *slávny* = [sla:wni] or [sla:vni]. This is all in part due to the historically peripheral nature of /f/ – once confined to loans and onomatopoeia, and to the late development of /v/ ‹ /w/.

Asymmetry also affects /h/ and /ch/: /h/ is devoiced before a voiceless consonant (*vrah pil* = /vrachpil/ 'murderer drank'), while if /ch/ occurs before a voiced consonant it voices to [ɣ] (*vzduch bol* = [vzduɣbol] 'air was'). Native /h/ arose from /g/, but a few items resisted the change, notably after /z/ (*miazga* 'sap'), and in onomatopoeia (*cengať* 'jangle'). For an appraisal of the phonological system with special regard to assimilation and neutralization see Sabol (1984).

Other factors: /l/ and /r/ can be syllabic and are fully integrated into patterns of syllable quantity and morpheme alternation, for example, *dlhý* 'long', *dĺžka* 'length'; *vrch* 'hill', *vŕšiť* 'pile up'.

The letters *q, w, x*, pronounced [kv], [v], and [ks] or [gz] occur only in loans, but are integrated into the above patterns of assimilation, for example, *prax* = /praks/, but *prax a teória* = /pragzateória/ 'practice and theory'.

Of the letters with diacritics, only *č, ô, š* and *ž* are subject to special alphabetical ordering, after *c, o, s* and *z*; *ch* follows *h*.

We shall now consider the most interesting factors in the history of the Slovak phonological system. The metathesis of liquids produced reflexes identical, *mutatis mutandis*, to those of Czech; hence for C*or*C *hrad* 'castle', C*ol*C *hlas* 'voice', C*er*C *breh* 'bank', C*el*C *mlieko* (where C is any consonant). However, Central-Slovak developments differed from those in the west, hence many syllable-quantity contrasts between standard Slovak and both Czech and the West-Slovak dialects, for example, *vrana* 'crow' (Czech *vrána*), *slama* 'straw' (*sláma*), *breza* 'birch' (*bříza*) and others with

short syllables for the old acute. In initial *or*C, *ol*C groups the Slovak reflexes, whatever the original intonation, are *ra*C, *la*C, for example, *rakyta* 'sallow', *laket'* 'elbow', *lákat'* 'lure', *ramä* 'shoulder'; many common exceptions (*robit'* 'do', *rozprávat'* 'talk', *rovný* 'level') still await explanation.

Slovak has lost both **nasal vowels**. Original *ǫ* > *u*, hence *ruka* 'hand', *nesú* 'they carry', *dušu* 'soul (ACC SG)'; by contrast *ę* > *ä*, which has survived post-labially (but see the earlier discussion of vowels): *hovädo* 'beast', *pät'* 'five', *žriebä* 'foal'; elsewhere *ę* > *a* in short syllables, *ia* in long: *často* 'often', *jazyk* 'tongue'; *chodia* 'they walk', *piaty* 'fifth'.

The *jers* were lost in general accordance with Havlík's rule: *dьnьsь* > *dnes* 'today', *sъbьrati* > *zobrat'* 'take', *vъ tьme* > *vo tme* 'in the dark', *vъ pętъkъ* > *v piatok* 'on Friday'. A striking feature is the variety of reflexes for the strong *jer*: while *e* predominates for *ь*, there is also *a* (*l'an* 'flax'), *á* (*chrbát* 'back') and *o* (*ovos* 'oats'), and while *o* predominates for *ъ*, there is also *e* (*sen* 'dream'), *a* (*daska* 'board', also *doska*) and *á* (*dážd'* 'rain'). Several explanations are offered for this, of which perhaps the most persuasive is regional variation within the central dialects.

The original distribution of lost and vocalized *jers*, that is Ø and *e/o/a* respectively, has been altered by later developments. The main trend has been towards morpheme consistency, hence *sъbьrati/sъberu* > *sebrati/ sberu* > Modern Slovak *zobrat'/zoberiem* ('take (INF/1 SG)'), a process most conspicuous in noun stems: the nominative form *domček* (< *domъčькъ*) replaces the oblique stem *domeček-* (< *domъčьk-*) to overcome the alternation in strong and weak *jers* which the forms represent, hence modern *domček* (NOM), *domčeka* (GEN) 'little house'. Some monosyllables preserve the alternation (*pes/psa* 'dog', *deň/dňa* 'day'), others do not (*lev/leva* 'lion', *l'an/l'anu* 'flax'). Another innovation are the fill vowels in other clusters that arose after the loss of the weak *jers*. Here too there is great variety in the vowels so functioning, most striking in genitive plurals, for example, *poviedok* 'stories', *okien* 'windows', *vojen* 'wars', *sestier/sestár* 'sisters', *kvapiek/kvapák/kvapôk* 'drops' (currently, *-ie-* is preferred here, even in contravention of the rhythmical law (see below), for example, *čisel/ čísiel* 'numbers'), and in vocalized non-syllabic prepositions, for example, *so synom* 'with his son', *ku mne* 'to me'. Other examples of fill vowels: *vietor* 'wind', *cukor* 'sugar', *viedol* 'he led', *pohol* 'he moved', *zmysel* 'sense', *mysel'* 'mind'.

Proto-Slavonic 'syllabic' liquids, that is, those accompanied by a *jer*-like element in the sequences CъrC, CъlC, CьrC and CьlC: in Central and standard Slovak that element has disappeared, the liquid consonants themselves becoming fully syllabic, and either long or short: *smrt'* 'death', *mŕtvy* 'dead'. Another point here is the random development of items with *črC-*, *žrC-*, for example, *čierny* 'black', *žarnov* 'grindstone', or unaltered *žrd'* 'mast', and *červik* 'maggot', dialectal *črviak*.

Prosodic phenomena: standard Slovak has fixed stress on the first syllable. A preceding preposition, especially if monosyllabic and ending in a vowel, attracts the stress, hence *'kôň* 'horse', but *'na koni* 'on horseback'. Several stressless word categories, chiefly the past auxiliary, atonic personal pronouns and some particles, are enclitic, and have fixed positions in the clause (see 4.1).

Slovak has no **tones**, but former tones have affected the distribution of long and short syllables. Suffice it here to note: (a) in syllables before a weak final *jer* in the genitive plural a circumflex metatonized to a new acute, marked now by a long syllable: *rúk* 'hands', *hláv* 'heads', a pattern since generalized to all nouns of the class, hence *síl* (‹ **síl*) 'forces', *briez* (‹ **brez*) 'birches'; (b) other originally circumflex syllables became (usually) short: *dub* 'oak', *vlas* 'hair'; (c) original acute syllables also usually shortened: *krava* 'cow' and so on (see the metathesis of liquids above); (d) new acute syllables usually lengthened, that is, not only in the cases under (a) above: *stôl* 'table', *rúčka* 'hand (DIMIN)', *niesol, nesieš* 'carry (PAST, 3 SG)', *koniec* 'end'.

The most striking feature in standard Slovak and the central dialects is the **law of rhythmical shortening**, which states that quantity is neutralized in a morphophonemically long syllable after a preceding long syllable. Hence such instances as *krásny* 'beautiful', but regular *pekný* 'nice' (adjectival endings are long), *trávam* 'grasses', but *ženám* 'women (DAT PL)', *miesta* 'places', but *mestá* 'towns (NOM PL N)', *chválim* 'praise', but *myslím* 'think (1 SG)'. Significantly, it also accounts for the final short syllable in *čítavam* 'read (1 SG FREQ)', since while the preceding *a* is short, it is in a morphophonemically long syllable, shortened after the first syllable – compare *volávam* 'call'. In a few inflectionally and derivationally specifiable cases the rhythmical law is 'broken', owing to different patterns of tension between phonological and morphological processes. The main types are *chvália* 'praise (3 PL *i*-theme)', *čísiel* 'numbers (preferred GEN PL)', *páví* 'peacock's' (adjectives from animal names), *tisícnásobný* 'thousandfold' (composition), and others.

2.2   Morphophonemic alternations inherited from Proto-Slavonic

Effects of the first palatalization of velars survive in derivation: *k* › *č* (*žiak* 'pupil', diminutive *žiačik*), (*g* ›) *h* › *ž* (*noha, nožička* 'leg'), *ch* › *š* (*orech* › *oriešok* 'nut') and in minor conjugational patterns (*piekol/pečie* 'baked/ bakes'; *luhať/luže* 'lie/s'; *páchať/páše* 'commit/s'). Of the second palatalization, *k* › *c* survives mainly in the nominative plural of animate nouns (*vojak/vojaci* 'soldier/s'); *ch* › *s* is of low incidence (*valach* › *valasi* 'shepherd/s'), while *h* › *z* has been eliminated. The paucity of such alternations is due to a strong trend towards morphemic consistency. The sole effect of the third palatalization is its interaction with the first in the alternation *c/č*, regular in nouns with the suffix *-ec* and their derivates, sporadic

elsewhere: *chlapec/chlapček* 'boy (and DIMIN)'; *ovca* ‹ **ovьka, ovči* 'sheep, ovine'.

As a product of *kt/gt* + front vowel, and of *t* + *j, c* also alternates with *č* in, for example, *noc/nočni* 'night/nocturnal', *piect'/pečie* 'bake/s', *svieca/ sviečka* 'candle (and DIMIN)'.

Products of other ancient alternations (the spelling conventions as laid out on page 535 should be borne in mind):

t/c (‹ *tj*) *trestat'/tresce* 'punish/es';
t'/c (‹ *tj*) *vrátit'/vracat'* 'return (PRFV/IMPFV)';
d'/dz (‹ *dj*) *hodit'/hádzat'* 'throw (PRFV/IMPFV)'; *hádže* (*dž* ‹ *dzj*) (3 SG);
s/š (‹ *sj*) *písat'/píše* 'write/s'; *z/ž* (‹ *zj*) *mazat'/maže* 'smear/s';
sl/šľ (‹ *slj*) *poslat'/pošle* 'send/will send'; *sľ/šľ myslieť/myšlienka* 'think/ idea'.

In addition to these limited alternations there are numerous regular morphological and derivational environments in which members of the opposition '−/+ palatal' occur with *t/t', d/d', n/ň, l/ľ*: *Slovan/Slovania* 'Slav (NOM SG/PL M)'; *hrad/hrade* 'castle (NOM/LOC SG M)'; *mesto/meste* 'town (NOM/LOC SG N)'; *žena/žene* 'woman (NOM/DAT−LOC SG F)'; *dievčatá/dievčaľa* 'girl (NOM PL/GEN SG N)'; *šelma/šeliem* 'beast-of-prey (NOM SG/GEN PL F)'; *sokol/sokolik* 'falcon (NOM SG/DIMIN)'; and others.

Vocalic alternations: irregular alternations survive from ancient patterns of vowel gradation, for example, *nesie/niesť/nosiť/-nášat'* 'carry (3 SG/DET INF/INDET INF/secondary IMPFV INF)', *kvet/kvitnúť* 'flower' (noun/verb), including cases of V/∅: *berie/brat'* 'take (3 SG/INF)' and others resulting from the loss of the *jers*, and from the fate of the front nasal:

e/∅ pes/psa 'dog';
á/∅ chrbát/chrbta 'back (NOM/GEN SG)';
o/∅ niesol/niesla 'carried (M/F)';
ie/∅ svetiel/svetlo 'light (GEN PL/NOM SG)';
ä/ia pät'/piaty 'five/fifth'.

Quantitative oppositions stem chiefly from the loss of tones and some regular patterns in morphology, especially feminine and neuter genitive plurals as against the prevailing stem form (see 3.1.2). Other non-systematic alternations include such types as *stôl/stola* 'table (NOM/GEN SG)', *hviezda* 'star', *hvezdár* 'astronomer', *kúrit'* 'heat', *kurič* 'stoker', and in diminutive formation: *hlas/hlások* 'voice'.

2.3   Morphophonemic alternations resulting from changes after Proto-Slavonic

Dissimilation of *šč* (that is, [štš] ‹ *sk* or *st+j* or front vowel) to *šť* has produced the following alternations:

sk/šť *poľský/poľština* 'Polish' (adjective/noun); *nebeský/nebešťan*
    'heavenly/heavenly being';
st/šť mesto/mešťan 'town/burgher'.

More systematic is *sk/č* in the formation of nouns denoting languages:
latinský/latinčina 'Latin', *slovenský/slovenčina* 'Slovak'; compare
nemecký/nemčina 'German', but contrast *anglický/angličtina* 'English'.
    The main development in the vowels has been the displacement for most
speakers of *ä* by *e*, producing an alternation *e/ia*: *päť* = [peť] 'five', *piaty*
'fifth'.

3   Morphology

3.1   Nominal morphology
In addition to the eventual merging of the *o*- and *u*-stems and considerable
attrition among minor paradigms, noun declension is marked by relatively
strong assertion of the gender principle (see masculine *a*-stems) and the
parallel sets brought about by the rhythmical law (see 2.1). Another feature
is the extent to which alternating stem forms have been eliminated in
favour of ʟɪorphemic consistency. By contrast, there is considerable
morphological variety in numerous sub- and sub-subclasses, especially in
the nouns.

3.1.1   Nominal categories
The **number** category has two members only, singular and plural; there are
isolated traces of the dual in forms of *dva* 'two' and *oba* 'both'.
    The **case** system has shrunk from seven members to six, the vocative
being replaced by the nominative. Some vocative forms survive, but are not
considered part of their respective paradigms. They occur in addressing
kin, close friends, the deity and high dignitaries and are essentially
formulaic, whether familiar, jocular or formal.
    The three **genders** are well represented in several main paradigms each.
The subcategory of **animacy** operates within the masculine only. In general
terms, any animate noun in the accusative singular shares the form of the
genitive (but inanimate accusative and nominative are identical), and there
are distinctive forms for *human* animate nominative plural and accusative–
genitive plural (shared by just three or four animal names); inanimates and
most animal names have nominative plural and accusative plural identical
and different from the genitive plural. In all these instances animacy is
expressed secondarily in adjective agreement.

3.1.2   Noun morphology
We shall first consider the **main declensional types**. The hard masculine
declension (table 10.2) unites all former *o*- and *u*-stems, with a systematic

Table 10.2   'Hard' masculine former *o*- and *u*-stems

	AN		INAN	
	SG	PL	SG	PL
NOM	chlap 'fellow'	chlapi	dub 'oak'	duby
ACC	chlapa	chlapov	dub	duby
GEN	chlapa	chlapov	duba	dubov
DAT	chlapovi	chlapom	dubu	dubom
INST	chlapom	chlapmi	dubom	dubmi
LOC	chlapovi	chlapoch	dube	duboch

redistribution of the two sets of available endings. The main factors are: (a) universalization of the *u*-declension dative singular marker -*ovi* for animate dative and locative, leaving the *o*-stem ending -*u* for inanimates; (b) the *o*-stem nominative plural ending -*i* reserved for human animates; a version of the *u*-stem ending, -*ovia*, occurring with some clearly defined subclasses (nouns in final -*ček*, -*čik*, -*h*, -*g*: *chlapčekovia* 'boys', *vrahovia* 'murderers', *filológovia* 'philologists', hence the disappearance of the alternation *g/h* > *z* which -*i* would induce, though analogous *k* > *c* and *ch* > *s* occur (see 2.2); some monosyllables also have -*ovia*: *členovia* 'members', *synovia* 'sons'); a third nominative plural animate ending is -*ia* (originally a singular collective marker as in *bratia* 'brothers', now also replacing -*é* in the consonantal declension), occurring with nouns in -(*č*)*an* and some isolates: *občania* 'citizens', *hostia* 'guests'; (c) *u*-stem locative ending -*u* for inanimate velar stems (*rohu* 'corner') as opposed to the preferred *o*-stem ending -*e*; (d) a loose distribution of the *o*- and *u*-stem genitive endings, -*a* and -*u*, between concrete and abstract nouns respectively (only native-speaker intuition or the dictionary can resolve the countless exceptions). A major innovation is the adoption of *i*- or *a*-stem instrumental plural endings; the former, -*mi*, is used after single stem-final consonants except -*m*, the latter, -*ami*, after -*m* or consonantal clusters (*domami* 'houses', *mostami* 'bridges'). A large subclass of mostly borrowed nouns with final -*r* and -*l* has -*i* in the locative singular and -*e* in the nominative–accusative plural (*mieri* 'peace', *hoteli/-e*, *revolveri/-e*); this irregularity is partly dependent on history (soft-declension endings surviving after depalatalization of the consonants), partly on the nature of the preceding vowel and partly on the native versus foreign origins of individual items. The nouns *raz* and *čas* show a rare survival of the *o*-stem genitive plural: *päť ráz* 'five times', *od tých čias* 'since those times'.

In the corresponding soft declension (table 10.3) the lack of the Czech umlauts and the strength of the animacy principle means that Slovak has no hard/soft split in the animates; in the inanimates the only difference is in the locative singular and nominative–accusative plural (in -*i* and -*e* respec-

Table 10.3   'Soft' masculines (former *jo*-stems)

	AN SG	AN PL	INAN SG	INAN PL
NOM	muž 'man'	muži	⎰stroj 'machine'	stroje⎱
ACC	muža⎱	mužov⎱	⎱stroj	stroje⎰
GEN	muža⎰	mužov⎰	stroja	strojov
DAT	mužovi	mužom	stroju	strojom
INST	mužom	mužmi	strojom	strojmi
LOC	mužovi	mužoch	stroji	strojoch

tively). The main deviations are animates in -*teľ* with nominative plural in -*ia* (*učitelia* 'teachers'), a few abstract or mass nouns with genitive in -*u* (*čaj-u* 'tea', *bôľ-u* 'grief'), and some anomalous genitive plurals in nouns originally from other classes (*ľudia-ľudí* 'people', *kôň-koni* 'horse', *peniaze-peňazí* 'money', *deň-dní* 'day').

Neuter *o*-stems (table 10.4) are conservative in the singular. The endings in the *ъjo*-stem variant are the main source for occurrences of the three 'soft' diphthongs. In the plural of *o*- and *jo*-stems a crucial innovation is the penetration of oblique-case *a*-stem endings, the effects of which include transfer of length to the original *o*-stem nominative–accusative form. Where the rhythmical law applies, length is lost from all endings, for example, *číslo*, plural *čísla*, dative plural *číslam* and so on. As with masculine velar stems, the original *u*-stem locative ending is used; *mlieko-mlieku* 'milk', *sucho-suchu* 'dry(ness)'; it also appears in loans ending in -V*um*: *múzeum-múzeu*, *individuum-individuu* (with paradigmatic alternation of Latin and native case morphemes). These loans, like a few native *jo*-stems, also have a divergent genitive plural in -*í*: *múzeí*, *more-morí* 'sea', *pole-polí* 'field'. The genitive plural is itself the most striking feature of this class, with the dominant ending -∅, accompanied by lengthening of the stem-final syllable, whether in disyllables, as in table 10.4, even those containing a liquid (*zrno-zŕn* 'grain'), polysyllables (*kladivo-kladív* 'hammer', *letisko-letísk* 'airport', *jablko-jabĺk* 'apple'), or loans (*auto-áut* 'car'), but not where the crucial vowel is -*e* or -*o*- (*kvinteto-kvintet*, *konto-kont* 'account'). Lengthening is inhibited by length in the penultimate syllable of the genitive plural, in accordance with the rhythmical law: *zámeno-zámen* 'pronoun'. The principle of syllable lengthening before -∅ extends to the fill vowel, unless inhibited by a previous long syllable: *jadro-jadier* 'nucleus', but *drievko-drievok* 'bit of wood'; the preferred fill vowel is -*ie*-, occurring often in defiance of the rhythmical law, hence *číslo-čísel* or *čísiel* 'number'.

The feminine *a*- and *ja*-stems (table 10.5) are highly conservative and differ only in the dative and locative singular and nominative–accusative plural. Like the neuters, the *a*-stems also have lengthening in a syllable

Table 10.4   *o*-stems neuter

	o-stems	*jo*-stems	*ьjo*-stems
SG			
NOM	mesto 'town'	srdce 'heart'	poučenie 'instruction'
ACC	mesto	srdce	poučenie
GEN	mesta	srdca	poučenia
DAT	mestu	srdcu	poučeniu
INST	mestom	srdcom	poučením
LOC	meste	srdci	poučení
PL			
NOM	mestá	srdcia	poučenia
ACC	mestá	srdcia	poučenia
GEN	miest	sŕdc	poučení
DAT	mestám	srdciam	poučeniam
INST	mestami	srdcami	poučeniami
LOC	mestách	srdciach	poučeniach

Table 10.5   *a*-stems

	SG	PL	SG	PL
Hard		F		M
NOM	žena	ženy 'woman'	sluha	sluhovia 'servant'
ACC	ženu	ženy	sluhu	sluhov
GEN	ženy	žien	sluhu	sluhov
DAT	žene	ženám	sluhovi	sluhom
INST	ženou	ženami	sluhom	sluhami
LOC	žene	ženách	sluhovi	sluhoch
Soft	*ja*-stems F		*ьja*-stems (one item only) F	
NOM	ulica	ulice 'street'	pani	panie 'lady, Mrs'
ACC	ulicu	ulice	paniu	panie
GEN	ulice	ulíc, duší*	panej	paní
DAT	ulici	uliciam	panej	paniam
INST	ulicou	ulicami	paňou	paniami
LOC	ulici	uliciach	panej	paniach

Note: *duši (duša* 'soul') represents the largish subclass with genitive plural in -*i*; they mostly end in -*ľa*, -*ča*, -*ňa*, -*ša*, though many with these same finals are regular.

before -Ø in the genitive plural: it may take the form of a diphthong (*stopa-stôp* 'trace', *žaba-žiab* 'frog'), it applies even to syllables with a liquid (*vlna-vĺn* 'wave'), and it is inhibited by length in the penultimate (*záhrada-záhrad* 'garden'). Also as with the neuters, a fill vowel will be long unless inhibited by a preceding long syllable (*hra-hier* 'game', *látka-*

látok 'material'); again, *-ie-* is increasingly preferred, irrespective of the rhythmical law (*výhra–výher/výhier* 'win'). The range of fill vowels is wide and can lead to much free variation (*kvapka–kvapôk/kvapiek/kvapák* 'drop'). Lengthening does not occur in many polysyllables with *-o-* in the penultimate (*budova–budov* 'building', *potvora–potvor* 'monster'), after *-j* (*spojka–spojok* 'conjunction', *vojna–vojen* 'war'), and in most borrowings with *-e-* or *-o-* in the critical syllable (*konzerva–konzerv* 'tin (of food)', *anekdota–anekdot*). The isolated ьja-stem noun *pani* 'lady' shares, in the singular oblique cases and nominative–accusative plural, forms of the soft adjectival declension, and its other plural forms with a variant soft declension (the *dlaň* 'palm' paradigm in Slovak grammars), except in the instrumental plural (*dlaňami*, but *paniami*); *pani* is uninflected in juxtaposition with another noun (*pani doktorka*, dative *pani doktorke* '*Frau Doktorin*'). The *dlaň* type behaves generally like the *ja*-stems, but resembles *kosť* (table 10.6) in lacking a case marker in the nominative and accusative singular and in having *-i* in the genitive plural. There are many nouns that are hybrids between *dlaň* and *kosť*, though the set of items involved differs from the similar set in Czech.

Masculine *a*-stems are conspicuous for four features: (a) there is no difference between hard- and soft-stem versions of the class, hence *sudca* 'judge' declines exactly like *sluha* 'servant'; (b) the gender principle has overruled the theme-vowel principle almost completely, hence the many forms shared with the *o*-stems, except that (c) the animacy principle whereby accusative singular = genitive is inverted, the genitive having adopted the accusative form; (d) the declension is shared by native surnames ending in *-o* (*Botto*, genitive *Bottu*); non-native surnames in *-o* and native forenames and hypocoristics decline as *o*-stems (*Hugo*, genitive *Huga*, *Janko–Janka*, *ujo–uja* 'uncle'), a pattern now spreading as a progressive variant to native surnames (genitive *Botta*). A masculine *a*-stem subclass containing the suffixes *-ista*, *-ita* has nominative plurals in *-i*: *huslista–huslisti* 'violinist', *bandita–banditi*.

A minor feminine class has long adjectival endings in the singular and nominative–accusative plural and forms like *žena* in the plural oblique cases; it includes *gazdiná* 'mistress, farmer's wife', *švagriná* 'sister-in-law' and *kráľovná* 'queen'.

The *i*-declension (table 10.6) is well preserved in the singular, but has shifted in the plural towards other soft feminine types. Increasingly, it is the preserve of abstracts in *-osť*, but still contains several dozen other common items (*nemoc* 'sickness', *hus* 'goose'), including former ьv-stems (*krv–krvi* 'blood', *cirkev–cirkvi* 'church').

With one exception, Slovak preserves little trace of the **consonantal stems**, most types having switched to the central declensions: *kameň* 'stone' and others have joined *stroj*; *kresťan* 'Christian' and others formerly with the infix *-in-* now follow *chlap*, while agent nouns in *-teľ*

Table 10.6   *i*-stems

	SG	PL
NOM	kosť 'bone'	kosti
ACC	kosť	kosti
GEN	kosti	kostí
DAT	kosti	kostiam
INST	kosťou	kosťami
LOC	kosti	kostiach

follow *muž* (nominative plural in both types is in *-ia*). Feminine *mať* 'mother' has largely been replaced by *matka*, a regular *a*-stem, though the consonantal-stem declension survives with the stem *mater-* (also as back-formed nominative); feminine *ъv*-stems contain the thematic consonant in back-formed nominatives (see above), though there has been some interaction with hard feminines in *-va*. Neuters: all the *n*-stems have passed in the extended-stem version to the hard *o*-stems (*bremeno–bremena* 'burden'), though short nominative–accusative forms (*bremä, semä* 'seed', etc.) survive as obsolescent high-style variants; *s*-stems have passed to the *o*-stems, with some neologizing separate lexicalization of alternative stems, shared with Czech (*slovo* 'word', *sloveso* 'verb'); only *nebo* 'heaven' retains the consonantal suffix, as the basis of its plural stem *nebes-*, which then has two declensions: like *srdce* (*nebesia* etc.) or, less often, like *mesto* (*nebesá* etc.). The great survivor among the consonantal types is the *nt*-class (table 10.7), which retains the consonantal suffix, as *-ať-* in the singular, *-at-* in the plural, and declines like *srdce* and *mestá* respectively. An alternative plural, with mostly soft masculine endings, is available with items denoting young living creatures. Non-living entities in the class include *dúpä* 'lair', *púpä* 'bud'; the main non-juvenile is *knieža* (M) 'prince'. Three items denoting animals (*prasa* 'pig', *teľa* 'calf', *šteňa* 'puppy') have short forms of the alternative plural, without the suffix *-en-*, hence *prase*, genitive singular *prasaťa*, nominative plural *prasatá/prasce*, genitive plural *prasiat/prasiec*.

Table 10.7   Neuter *nt*-stems (now *ť/t*-stems)

	SG	PL 1	PL 2
NOM	jahňa 'lamb'	jahňatá	jahnence
ACC	jahňa	jahňatá	jahnence
GEN	jahňaťa	jahniat	jahneniec
DAT	jahňaťu	jahňatám	jahnencom
INST	jahňaťom	jahňatami	jahnencami
LOC	jahňati	jahňatách	jahnencoch

3.1.3   Pronominal morphology

Of the **genderless personal pronouns** (table 10.8) *ty* is familiar singular and *vy* polite singular or plural. The unstressed forms *ma, ťa, sa, mi, ti, si* are enclitic; at points in the table where no alternatives are indicated, the sole form may be enclitic or not according to functional sentence perspective. Prepositions may govern only non-enclitic forms. The stressed–unstressed opposition also applies in the nominative, in which the unstressed version is represented by zero, person being adequately expressed by the verb.

The third-person pronouns are fully marked for gender in the singular and partly so in the plural (table 10.9). Their declension exhibits several peculiarities: (a) the forms *ho* and *mu* are enclitic and contrast with *jeho* and *jemu*; other non-nominative forms, except those with a hyphen, may occur in enclitic or non-enclitic positions according to function; (b) after prepositions all third-person pronouns attract initial *n-*; the locative forms and the accusative plural *ne* occur only after prepositions; instrumental forms have initial *n-* in all functions; (c) the hyphenated forms occur only after prepositions, with which they are written as one word (*doň, doňho* 'into it', *zaň* 'for/behind it/him', *uňho* 'at his house', etc.); original accusative or genitive forms are used indiscriminately here.

Table 10.8   Genderless pronouns

NOM	ja 'I'	ty 'you (SG)'	(REFL)	my 'we'	vy 'you (PL)'
ACC	mňa/ma	teba/ťa	seba/sa	nás	vás
GEN	mňa/ma	teba/ťa	seba/sa	nás	vás
DAT	mne/mi	tebe/ti	sebe/si	nám	vám
INST	mnou	tebou	sebou	nami	vami
LOC	mne	tebe	sebe	nás	vás

Table 10.9   Third-person pronouns

		SG			PL	
	M	N	F	M AN	*Other*	
NOM	on	ono	ona	oni	ony	
ACC	¹jeho/²ho/-ň/¹-ňho	ho/-ň	ju	ich	ich/ne	
GEN	¹jeho/ho/-ň/-ňho		jej	ich		
DAT	¹jemu/²mu		jej	im		
INST	ním		ňou	nimi		
LOC	ňom		nej	nich		

Notes: ¹animate stressed forms; ² inanimates use only these enclitic forms; if emphatic forms are required, these are generally taken from the demonstrative pronoun.

Demonstrative *ten* and possessive *náš* (table 10.10) represent other pronominal declensions. In its plural oblique cases and in the feminine singular *ten* overlaps with the adjectival declensions, and its declension is shared by *tento* 'this', *tamten* (and colloquial *henten*) 'that' and *tenže* 'the same' (the morphemes *-to, tam-, hen-* and *-že* remain constant), *kto* 'who' and *čo* 'what'. As with other non-substantival types the *t-* is not palatalized by any front-vowel case morphemes (hence, for example, nominative plural masculine animate [tiː]). The *náš* paradigm is shared by other possessives (*môj/moja/moje/moji* 'my', *tvoj* 'thy', *svoj* (REFL), *váš* 'your'), with long syllables in the same distribution, except in *tvoj* and *svoj.* Possessive *jeho* 'his', *jej* 'her' and *ich* 'their' are not declined.

Other pronouns: *sám/sama/samo/sami* '-self, the very' shares the mixed pronominal-adjectival declension of *jeden* (given in table 10.15 below); similarly *všetok/všetka/všetko/všetci*(!)/ *všetky* 'all'.

Interrogative *kto* and *čo* lie at the heart of a complex set of indefinite pronouns and pronoun–adverbs. Table 10.11 lists those that may claim reasonable frequency in the system of reference, co-reference, quantification, etc. The rows are based on interrogatives, the columns on the many modifying prefixes and suffixes: *kto* 'who', *čo* 'what', *čí* 'whose', *kedy* 'when', *kde* 'where', *kam* 'whither' (a series increasingly replaced by the *kde* set), *odk(ad)iaľ, skadiaľ, odkade, skade* all 'whence', *kade* 'which way', *ako* 'how', *koľko* 'how much/many', *ktorý* 'which', *aký* 'what kind', *koľkoraký* 'how many kinds of', *koľký* 'how much/many/big' (see 4.10);

Table 10.10   The demonstrative pronoun *ten* ‹ *tъ, and possessive pronoun *náš* 'our'

	M	N	F	M	N	F
SG						
OM	ten	to	tá	náš	naše	naša
ACC	ten/toho*	to	tú	náš/nášho*	naše	našu
GEN	toho		tej	nášho		našej
DAT	tomu		tej	nášmu		našej
INST	tým		tou	naším		našou
LOC	tom		tej	našom		našej
PL						
NOM	tí*/tie	tie		naši*/naše	naše	
ACC	tých*/tie	tie		našich*/naše	naše	
GEN	tých			našich		
DAT	tým			našim		
INST	tými			našimi		
LOC	tých			našich		

Note: * Following words indicates animate forms only.

Table 10.11

	nie-	voľa-	da-	-si	hoc(i)-	-koľvek	bár(s)-
kto	niekto	voľakto	dakto	ktosi	hoc(i)kto	ktotoľvek	bár(s)kto
čo	niečo	voľačo	dačo	čosi	hoc(i)čo	čokoľvek	bár(s)čo
čí	niečí	voľačí	dačí	čísi	hocičí	číkoľvek	bár(s)čí
kedy	niekedy	voľakedy	dakedy	kedysi	hoc(i)kedy	kedykoľvek	bár(s)kedy
kde	niekde	voľakde	dakde	kdesi	hoc(i)kde	kdekoľvek	bár(s)kde
kam/KDE	niekam/-KDE	voľaKDE	daKDE	KDE-/kamsi	hocikam/-KDE	kamkoľvek/KDE-	bár(s)kam
odk(ad)iaľ	odniek(ad)iaľ			odkiaľsi		odkiaľkoľvek	
skadiaľ	zniekadiaľ						
odkade	odniekade						
skade	zniekade		zdakade				
kadiaľ						kadiaľkoľvek	
kade	niekade	voľakade	dakade	kadesi	hoc(i)kade	kadekoľvek/ KAM-	bár(s)kade
ako	NEJako	voľaJako/ voľáko	daJako/ dáko	akosi	hoc(i)Jako	akokoľvek	bár(s)ako
koľko	niekoľko	voľakoľko	dakoľko	koľkosi	hoc(i)koľko		bár(s)koľko
ktorý	niektorý	voľaktorý	daktorý	ktorýsi	hoc(i)ktorý	ktorýkoľvek	bár(s)ktorý
aký	NEJaký	voľaJaký/ voľáky	daJaký/ dáky	akýsi	hoc(i)Jaký	akýkoľvek	bár(s)aký
koľkoraký	niekoľkoraký						
koľký	niekoľký				hoc(i)koľký		

nie-, voľa-, da- 'some-', *-si* 'some- or other', *hoc(i)-, -koľvek, bar(s)-voľa-,* 'any-; -ever', *poda-* 'some (DISTR)', *kade-, kde-, leda-* 'many a, all kinds of, sundry', *ni-* 'no-', *in(o)-* 'other, else', *všeli-* 'all manner of' (usually pejorative), *vš-* 'all, every-'. It is particularly difficult to specify exact English meanings of the various morphemes concerned since there is some overlapping (compare *voľa-*), much interference between sets denoting place, goal and direction, much idiolectal squabbling among native speakers on the relative stylistic markedness of quasi-synonyms (for example, between *nie-* and *da-*) and some genuine stylistic constraints.

3.1.4   Adjectival morphology

The three basic adjectival declensions are 'hard', 'soft' and possessive, a hybrid with elements of several non-substantival paradigms. The hard and soft types are historically 'long', but the long endings of many items shorten in consequence of the rhythmical law. Few true short (predicative) adjectives survive, except for *rád* (feminine *rada,* neuter *rado,* masculine animate plural *radi,* other plural *rady*) 'glad' and obsolescent *dlžen* (from *dlžný* 'owing'), *hoden* (*hodný* 'worthy') and *vinen* (*vinný* 'guilty').

The hard declension (table 10.12) conceals several systematic exceptions to the orthographic conventions involving dentals and front

poda-	kade-	kde-	leda-	ni-	in(o)-	všeli-	vš-
podakto	kadekto	kdekto	ledakto	nik(to)	NIEKTO iný	všelikto	VŠETCI
	kadečo	kdečo	ledačo	nič	NIEČO iné	všeličo	VŠETKO
	kadečí						
				nikdy	inokedy		vždycky
	kadekde	KDEKADE		nikde	inde	všelikde	všade
	KADEKDE			nikam/-KDE	inam/INDE	všelikam/-KDE	VŠADE
				odnikiaľ	odinAkiaľ		
					zinokadiaľ		
				odnikade			
				znikade	zinakade		
	kdekade			nikade	inokade		všade
	kadejako			niJako	inak(SIE)/		
					inAČ	všeliJako	
podaktorý		kdektorý		ŽIADEN	iný	všeliktorý	VŠETCI
	kadeJaký	kdeJaký	ledaJaký	nijaký/	inakší	všeliJaký	
				ŽIADEN			

Note: parentheses indicate optional morphemes; small capitals indicate morphological or lexical departures from the form predictable for the given field.

vowels: the feminine endings *-ej* and the masculine animate nominative plural *-i*, for example, *peknej* 'nice', *mladej* 'young' or *pekni, mladi* contain alveo-dental, not palatal, consonants; no change occurs in velar consonants either, hence *drahý, drahej, drahi* 'dear', *veľký, veľkej, veľki* 'big' (here the trend towards stem-morpheme consistency has overruled palatalization). In rhythmically shortened items, for example, *krásny* 'beautiful', with short vowels throughout the endings, a deficiency of the orthography is seen in such forms as *krásne*, which as [krásne] is adjectival, but as [krásňe] is the adverb.

The 'soft' adjectival declension (table 10.13) is shared by a relatively small number of basic items; its strength lies in derived classes: comparatives and superlatives, adjectives based on the infinitive (*testovací* 'for testing'), on past participles (*porozumevší* 'having understood') and adverbs (*vtedajší* 'the then', ‹ *vtedy*). Present active participles follow the rhythmically shortened version of the paradigm (*volajúci* 'calling', compare *domáci* 'domestic'); if the stem vowel is long, however, the participial suffix does not undergo rhythmical shortening (*píšuci* 'writing'). Adjectives from animal names, while not necessarily having a 'soft' stem-final consonant, follow the soft paradigm and, again, if the stem vowel is long, the ending does not shorten (*páví* 'peacock's').

The possessive declension (table 10.14) is based on the suffix *-ov* for a male human possessor, *-in* for a female, whether expressed by a common noun or proper name. The feminine suffix does not pre-palatalize; nor do front-vowel endings in the declension affect the final *-n* of the feminine suffix, another exception to the spelling-pronunciation rule concerning the sequence *ne* and *ni*.

Table 10.12   'Hard' adjectival declension: *nový* 'new'

| | SG | | | PL | |
	M	N	F	M AN	*Other*
NOM	nový	nové	nová	noví	nové
ACC	nový/nového*	nové	novú	nových	nové
GEN		nového		novej	nových
DAT		novému		novej	novým
INST		novým		novou	novými
LOC		novom		novej	nových

Note: * animate form only.

Table 10.13   Soft adjectival declension: *cudzí* 'alien', 'someone else's'

	M	N	F	M AN	*Other*
NOM	cudzí	cudzie	cudzia	cudzí	cudzie
ACC	cudzí/cudzieho*	cudzie	cudziu	cudzích	cudzie
GEN		cudzieho		cudzej	cudzích
DAT		cudziemu		cudzej	cudzím
INST		cudzím		cudzou	cudzími
LOC		cudzom		cudzej	cudzích

Note: * animate form only.

Table 10.14   Declension of possessive adjectives

| | SG | | | PL | |
	M	N	F	M AN	*Other*
NOM	Petrov	Petrovo	Petrova	Petrovi	Petrove
ACC	Petrov/Petrovho*	Petrovo	Petrovu	Petrových	Petrove
GEN		Petrovho		Petrovej	Petrových
DAT		Petrovmu		Petrovej	Petrovým
INST		Petrovým		Petrovou	Petrovými
LOC		Petrovom		Petrovej	Petrových

Note: * animate form onlv.

The basic suffix in the **comparison of adjectives** is *-ejší* (*bežnejší* 'commoner', *cudzejší* 'more alien'), with *-ší* in several subclasses: (a) non-derived items ending in one stem-final consonant, except sibilants and some items in *-p*, *-m* or *-t* (*novší* 'newer', *bohatší* 'richer', but *krutejší* 'crueller'); (b) adjectives containing the suffixes *-k-*, *-ok-* or *-ek-*, which are deleted before the comparative suffix (*krátky–kratší* 'short-er', *hlboký–hlbší* 'deep-er'); (c) certain suppletive forms (*dobrý–lepší* 'good–better', *veľký–väčší* 'big–ger'). Points to note: pre-palatalization of velars before the basic suffix has been eliminated in favour of morphemic consistency (*mrzký–mrzkejší* 'base-r'), but it remains in the case of alveo-dentals (*hustý–hustejší*, pronounced [husťejší] 'dense-r'); the basic suffix *-ejší* can be attached to fully adjectivalized participles, including the present active (*prekvapujúci–prekvapujúcejší* 'surprising–more surprising').

The **superlative** is formed by prefixing *naj-* to the comparative. A subsidiary, analytical, method of forming comparatives and superlatives is based on the comparative and superlative of *veľa* 'much, very', namely *viac* or *väčšmi* 'more' and *najviac/najväčšmi* 'most' (*najviac vyvinutý* 'most developed' – also *najvyvinutejší*). Analytical forms based on *málo–menej–najmenej* 'little–less–least' are the only possibility for negative comparison. The conjunctions etc. of comparison are: *ako* 'as/like; than'; *než* 'than'; *z* 'from', *medzi* 'among', *spomedzi* 'from among': *starý ako ja* 'as old as I', *starší ako/než ja* 'older than I', *najstarší z/spomedzi nás/medzi nami* 'the oldest of us'.

Adverbs derived from adjectives are marked by largely morpho-phonologically conditioned suffixes *-e*, *-o*, *-y*. Adjectives in *-ský* form adverbs in *-sky*; for the rest there is considerable variation: *-e* is preferred for adjectives with the suffixes *-ovitý*, *-itý* and *-ný*, while *-o*, increasingly prevalent, is preferred with adjectives ending in *-tý*, *-lý* and velar, sibilant and labial stems. Exceptions abound on both sides and free variation is common.

Comparative and superlative adverbs coincide formally with the neuter singular forms of adjectives (*hustejšie–najhustejšie* 'more–most densely', *prekvapujúcejšie* 'more surprisingly'). Adjectives that have suppletive comparative–superlative forms, and some other minor types, also have distinctive comparative adverbs, for example:

dobre–lepšie–najlepšie 'well–better–best';
zle–horšie–najhoršie 'badly–worse–worst';
ďaleko–ďalej–najďalej 'far–further–furthest';
skoro–skôr/skorej–najskôr/najskorej 'soon–sooner–soonest' (here the
   shorter comparative and superlative also means 'rather' and 'more/most
   likely').

3.1.5 Numeral morphology

The numeral '1' (table 10.15) preserves the morphology of gender and case and functions adjectivally. The numeral '2' (table 10.16) retains a distinction between masculine and feminine–neuter in the nominative and accusative only, with the refinement of separate (human) animate masculine forms. The animacy distinction carries over as the sole gender category in '3' and '4', also optionally in '5' and above. In the latter (table 10.17)

Table 10.15 The numeral '1'

| | | SG | | PL | |
	M	N	F	M AN	*Other*
NOM	jeden	jedno	jedna	jedni	jedny
ACC	jeden/jedného*	jedno	jednu	jedných	jedny
GEN	jedného		jednej	jedných	
DAT	jednému		jednej	jedným	
INST	jedným		jednou	jednými	
LOC	jednom		jednej	jedných	

Note: * animate form only.

Table 10.16 The numeral '2'

	M AN	M INAN	F/N
NOM	dvaja	dva	dve
ACC	dvoch	dva	dve
GEN		dvoch	
DAT		dvom	
INST		dvoma	
LOC		dvoch	

Table 10.17 The numeral '5'

	M AN	*Other*
NOM	päť/piati*	päť
ACC	päť/piatich*	päť
GEN	piatich	
DAT	piatim	
INST	piatimi	
LOC	piatich	

Note: * optional explicitly animate forms.

Slovak has evolved a fully declining system relatable to the pronominal declensions. Thus all numerals potentially approximate to the status of adjectives.

Additional remarks on tables 10.15–10.17: the plural of '1' is used of each of two or more contrasted groups (*jedni* ..., *jedni* ... 'some ... others ...', or of *pluralia tantum*: *jedny nohavice* 'one pair of trousers', *jedny ústa* 'one mouth'. The declension of *dva* is shared by *oba* and *obidva* (*obidvaja*, *obidve*, *obidvoch* and so on) 'both', with similar forms of '3' (*traja, tri, troch*, instrumental *troma* or *tromi*) and '4' (masculine animate *štyria*, others *štyri, štyroch, štyrmi*). The forms *dvoma, oboma*, and through them *troma*, and the nominatives *dva, dve* are the sole remnants of the dual number. The declension of *päť* is shared by all numerals up to '99' (table 10.18), but in noun phrases after prepositions these numerals are often left undeclined. In the same circumstances *sto* '100' and the higher hundreds are also undeclined. *Sto* in isolation declines like *mesto*, but has suppletive genitive plural forms, *päť stoviek/stovák*, from the noun *stovka*. Similarly, *tisíc* '1,000' declines like *stroj*, but with variants *tisícami/tisícmi* (INST PL).

Table 10.18   Cardinal numerals

jeden	'1'	trinásť	'13'	šesťdesiat	'60'
dva	'2'	štrnásť	'14'	deväťdesiat	'90'
tri	'3'	pätnásť	'15'	sto	'100'
štyri	'4'	šestnásť	'16'	dvesto	'200'
päť	'5'	sedemnásť	'17'	tristo	'300'
šesť	'6'	osemnásť	'18'	päťsto	'500'
sedem	'7'	devätnásť	'19'	tisíc	'1,000'
osem	'8'	dvadsať	'20'	dvatisíc	'2,000'
deväť	'9'	dvadsaťjeden	'21'	päťtisíc	'5,000'
desať	'10'	tridsať	'30'	milión	'million'
jedenasť	'11'	štyridsať	'40'	dva milióny	'2 million'
dvanásť	'12'	päťdesiat	'50'	päť miliónov	'5 million'
				miliarda	'1000 million'

Table 10.19   Ordinal numerals

prvý	'1st'	jedenásty	'11th'	dvojtisíci	'2,000th'
druhý	'2nd'	pätnásty	'15th'	miliónty	'millionth'
tretí	'3rd'	dvadsiaty	'20th'	päťmiliónty	'5 millionth'
štvrtý	'4th'	dvadsiaty prvý	'21st'	stomiliónty	'100 millionth'
piaty	'5th'	päťdesiaty	'50th'		
šiesty	'6th'	deväťdesiaty	'90th'	nultý ‹ nula	'zero'
siedmy	'7th'	stý	'100th'	n-tý	'n-th'
ôsmy	'8th'	dvojstý	'200th'		
deviaty	'9th'	deväťstý	'900th'		
desiaty	'10th'	tisíci	'1,000th'		

Milión and *miliarda* decline like *hrad* (but genitive singular *-a*) and *žena* respectively.

Ordinal numerals (table 10.18): 'third' and 'thousandth' follow the soft adjectival declension, the latter rhythmically shortened, like many of the hard-stems.

Other numerals: *dvoje, troje* 'two of a kind', etc. for use with *pluralia tantum*, decline like *piati*, that is, *dvojich* etc. *Jednaký, dvojaký, štvoraký* 'of one, two, four etc. kinds', also *mnohoraký* 'multifarious', decline as hard adjectives, as do *dvoj-, troj-, štvornásobný* and so on, 'double', 'triple', 'quadruple', and *viacnásobný* 'multiple'.

3.2   Verbal morphology

3.2.1   Verbal categories

Three **persons** are expressed primarily in inflections and secondarily, for emphasis and in colloquial registers, by insertion of subject pronouns. Third persons are marked by vocalic endings, different in singular and plural. The other persons always carry consistent markers, namely: *-m* (1 SG), *-š* (2 SG) (except for *byť* 'be', which has *si*), *-me* (1 PL), *-te* (2 PL). In the past tense and conditional only first and second persons are marked, on the auxiliaries. **Gender** is marked in all persons *singular* in the past and conditional, in contrast to non-gender-specific plural forms. The respective gender–number morphemes, carried by the *l*-participle, are *-Ø* (M), *-a* (F), *-o* (N), *-i* (PL).

Four **tenses** are recognized, a superficially simple system refined by the normal Slavonic aspects. Present-tense forms of the imperfective are used for all present, including generic, time reference and to express simultaneity in subordinate clauses after 'verbs of saying' and 'verbs of perception'. Futurity (and posteriority in analogous subordinate clauses) is expressed by present-tense forms of the perfective aspect and by the analytical imperfective future, consisting of the future of *byť* as auxiliary and the imperfective infinitive. Past-tense forms of either aspect, based on the *l*-participle, with auxiliaries (present-tense forms of *byť*) in first and second persons only, also express anteriority in subordinate clauses as above, that is, they express part of the range of west-European pluperfects; while not very frequent, the pluperfect, the fourth tense in Slovak, is still used in some contexts and is formed from the *l*-participle with the past tense of *byť* as auxiliary (*bol som prečítal* 'I had read'). Present-tense forms are widely used, even conversationally, in an 'historic present' function, and perfective present forms can also express habitual actions, with or without the support of explicit time expressions. Imminent events, that is, 'close future' in the present (and similar in the past) can be expressed by auxiliary *ísť* 'go': *idem sa ženiť* 'I'm going to get married', *išlo mi srdce puknúť* 'my heart was about to burst'.

The normal Slavonic **aspects** survive in the standard imperfective–perfective opposition; the unmarked member is the imperfective. Aspectual pairs are of two main types: (a) the imperfective is formed from the perfective by suffixation, whether the source perfective is a primary verb (a minority pattern), thus *dať* 'give', *kúpiť* 'buy', or a prefixed verb such as *vymyslieť* 'think up' or *rozťať* 'cleave'; several of the individual patterns of suffixation are illustrated by the respective imperfectives of these verbs: *dávať, kupovať, vymýšľať, roztínať.* (b) The perfective member is formed from the imperfective (usually a primary item) by prefixation: *u-variť* 'cook', *na-písať* 'write', *vy-prať* 'wash (garments)'. A prefix which may perfectivize with one verb may be a lexical prefix elsewhere, compare *prať–vyprať* 'wash', but *dediť* 'inherit', *vydediť* 'disinherit'. Two sets of prefixes are used only lexically: (a) those with a concrete, often spatial meaning: *pred-* 'pre-', *nad-* 'super-', *pod-* 'sub-', *v-* 'in', *roz-* 'dis-', which perfectivize: *platiť* 'pay', *podplatiť* 'bribe', secondary imperfective *podplácať*; (b) prefixes containing a long vowel: *závidieť* 'envy', *nenávidieť* 'hate', *súvisieť* 'be connected', which do not perfectivize.

Suppletive aspectual pairings are rare: *brať/vziať* 'take', *hovoriť/povedať* 'tell', *klásť/položiť* 'put' and its compounds like *nakladať/naložiť*, 'load' and compounds of *ísť* 'go' such as *prichádzať/prísť* 'arrive'.

Slovak has numerous *perfectiva tantum*: inchoatives of the type *rozpršať sa* 'start to rain'; verbs denoting an excessive measure of an action: *ubehať sa* 'be run off one's feet', *naplakať sa* 'have cried and cried' (and other prefixed reflexive types); transitive non-reflexives with *na-* with the 'object' in the genitive: *navariť* (*polievky*) 'have made (lots of soup)', *nasekať* (*dreva*) 'have chopped (lots of wood)'; some verbs having, or perhaps having once had, the modality of potentiality: *pristať* 'suit', *vydržať* '(with-) stand', *vmestiť sa* 'fit', *obísť sa* '(can/will have to) do without', *dokázať* 'be capable of, know how'.

Some items belonging semantically to the last-named are among the language's many *imperfectiva tantum*: *vládať* 'be able; can manage', *vedieť* 'know how', and the basic modal verbs: *môcť* 'can', *smieť* 'may', *musieť* 'must', *mať* 'be (supposed) to', *chcieť* 'want, will'. The interesting member of the group is the former perfective *dať sa*, denoting passive potential: *to sa dá/bude dať urobiť* 'that can be done', that is, '(he/we etc.) can/will be able to do it'. Frequentatives like *chodievať* 'go fairly regularly', *čítavať* 'read occasionally' are also *imperfectiva tantum*; they are quite widely used.

Few native verbs are bi-aspectual; they include *pomstiť* 'avenge', *počuť* 'hear', *venovať* 'donate, dedicate' and *obetovať* 'dedicate, sacrifice'. The last two, like their perfective close synonym *darovať*, have acquired imperfective counterparts: *venúvať, obetúvať* (*darúvať*). The two aspects of 'reply', with different conjugations (perfective *odpovedám*, perfective *odpoviem*), share the same infinitive, hence dictionaries misleadingly show

odpovedať as bi-aspectual. Numerous loan-neologisms, all in *-ovať*, are also bi-aspectual.

A subcategory within the imperfective are the **verbs of motion**, which exist in determinate–indeterminate pairs (table 10.20). Original *honiť* has been replaced by a secondary formation *naháňať*. A former member of the group, *jazdiť*, now means 'drive' or 'ride', not simple 'go', and has no determinate partner; vehicles themselves and their passengers usually require *isť/chodiť*.

The determinate members express single, linear, goal-oriented actions, the non-determinates are frequentative and goal-oriented for regularly repeated events, for example, *chodí do školy* 'he goes to school', or lack any goal, as in *chodili sme po meste* 'we walked around the town'. An irregularly repeated event, however, will use the determinate, especially if supported by suitable adverbs: *niekedy ta ideme autom* 'sometimes we go there by car'. A single round trip is expressed using *byť*: *boli sme vlani v Bratislave* 'we went to Bratislava last year'.

The morphology of the determinates exhibits certain peculiarities:

1   The future – imperfective only, or aspectually neutral – is formed either by the prefix *po-*, *pobežím* 'I will run', or in some contexts with *byť* as auxiliary (*budem bežať*); *isť* has only one future paradigm, *pôjdem*.
2   There is only one past-tense form and only one infinitive, for example, *šiel* 'went' and *isť*, that is, there are no *po*-prefixed forms.
3   The imperatives reveal some disparities; for example, *iď* is practically confined to idioms, the everyday 'come–go' opposition being expressed by *poď-choď*. In other members the relations differ: *bež*, *nes* are imperative in any determinate sense, *behaj*, *nos* in indeterminate uses. In negation *isť* uses *nechoď*, while others generally negate either member of the pairs according to (in-)determinacy. On the evi-

Table 10.20   Verbs of motion

Determinate   Indeterminate

Determinate	Indeterminate	
ísť	chodiť	'go'
bežať	behať	'run'
letieť	lietať	'fly'
niesť	nosiť	'carry'
viesť	vodiť	'lead'
viezť	voziť	'convey'
vliecť	vláčiť	'drag'
liezť	loziť (colloquial)	'crawl, climb'
hnať	naháňať	'chase, drive'

dence of informants, Slovak actually prefers directionally unambiguous prefixed imperatives (with *do-*, *pri-*, and *od-*) over the primary verbs.

Prefixation of the verbs of motion in Slovak produces perfective verbs from the determinates and imperfectives from the indeterminates, with a second, now dominant set of imperfectives derived from the latter (table 10.21). These pairings are analogous to other aspect pairs. Some gaps on the imperfective side (like *vyvodiť*, *vyvoziť*) cannot now be filled, since these forms have become new lexical perfectives: *vyvodiť* 'deduce' (imperfective *vyvodzovať*), distributive *vyvoziť* 'have conveyed up or out piecemeal' (*vyvoziť sneh z mesta* 'have removed all the snow from the town (by repeated journeys)'). Distributive meanings (*perfectiva tantum*) are more commonly expressed by secondary prefixation, for example, *povyvážať* to *vyvoziť*.

Table 10.21   Prefixed verbs of motion (specimens with *vy-*)

Perfective	Imperfective
výjsť	vychodiť, vychádzať
vybehnúť (!)	vybiehať (!), vybehávať, vybehovať, vybehúvať
vyletieť	vylietať, vylietávať, vyletovať, vyletúvať
vyniesť	vynosiť, vynášať
vyviesť	vyvádzať
vyviezť	vyvážať
vyvliecť	vyvliekať
vyliezť	vyliezať
vyhnať	vyháňať

Mood: the **imperative** is expressed morphologically in the second persons and first person plural, and analytically in others. For the morphological imperative the endings are -∅, -*me*, -*te* (with palatalization of stem-final -*d*, -*t*, -*n* or -*l*), or -*i*, -*ime*, -*ite*; the choice depends on whether there are one or two stem-final consonants in the third person plural after removal of the final vowel: *ber*/-*me*/-*te* 'take', *miň*/-*me*/-*te* 'pass', *chváľ*/ -*me*/-*te* 'praise', *dávaj*/-*me*/-*te* 'give'; *padn-i*/-*ime*/-*ite* 'fall', *mysl-i*/-*ime*/ -*ite* 'think', *zájd-i*/-*ime*/-*ite* 'go, pop in'. Exceptions are few, but note the athematic verbs *jesť* 'eat' and *vedieť* 'know' and their derivates: *jedz*/-*me*/ -*te*, *odpovedz*/-*me*/-*te* 'reply', and sporadic instances of free variation: *vrešti*/*vrešť* ‹ *vrešťať* 'shriek'.

The **conditional** is expressed by past-tense forms combined with the conditional particle *by*: *povedal by som, že* ... 'I would say that ...'. This, the unmarked 'present' conditional, may also express past conditionality if accompanied by appropriate adverbs: *včera by neprišiel, ale dnes* ... 'yesterday he wouldn't have come, but today ...'. However, the 'true' past

conditional is extremely resilient; it is formed from the present conditional by the addition of the *l*-participle of *byť*: *bol by som povedal* 'I would have said'; it is often reinforced by the redundant addition of the *l*-participle of frequentative *bývať*; *boli by sme si to (bývali) kúpili* 'we would have bought it'. The conjunction which introduces counterfactual conditions is *keby*, incorporating the conditional particle: *ponúkol by som ti kávičku, keby som dáku mal* 'I'd offer you some coffee if I had some', *keby ste nás boli (bývali) poslúchli, neboli by ste teraz v takejto situácii* 'if you'd listened to us, you wouldn't be in this predicament now'.

Voice is a two-member category, active and passive. Passive is the marked member, with two means of expressing it:

1   the passive participle of any transitive verb with auxiliary *byť*; in this case the agent may, but need not be expressed: active *hostia vypili všetok čaj* 'the guests drank all the tea' transposes into *všetok čaj bol vypitý (hosťami)* 'all the tea was drunk (by the guests)'. Aspect operates as in other verb phrases: *nemčina nebola nikdy ohrozovaná iným jazykom* 'German has never been imperilled by another language' (IMPFV);

2   using a reflexive form: *všetok čaj sa vypil,* in which case the agent is completely suppressed (rare exceptions do occur: *pesnička sa zaspievala všetkými prítomnými* 'the song was sung by all present'). Effectively, the 'reflexive passive' is restricted to third persons and to contexts where the patient is inanimate; with an animate subject any other available interpretation will take precedence (reflexivity: *Peter sa zastrelil* 'Peter shot himself'; intransitivity: *Peter sa vrátil* 'Peter returned'). Verbs with non-accusative complementation generally permit only reflexive (that is, not participial) forms, but these are interpreted as impersonal, not passive, since the complement retains its case attributes: *nerozumeli tomu* 'they didn't understand it' › *nerozumelo sa tomu* 'it wasn't understood', *vedeli sme o vás* 'we knew about you' › *vedelo sa o vás* 'you were known about'. The principle extends to all intransitives, compare Hečko's

V povstaní   sa   bojovalo,   padalo a   umieralo spoločne.
in uprising-LOC.SG REFL fought-N.SG fell-N.SG and died-N.SG together
'In the Uprising people fought, fell and died together.' (note: one *sa* to all
    three verbs)

The verb is always third person singular and neuter in this stylistically neutral clause-type, widely used in all manner of generalizations, instructions, injunctions and as a device specifically to exclude agency, as in:

Išlo   sa   domov až   po   polnoci.
went-3.SG.N REFL home   INTNS after midnight-LOC.SG
'We/they/one didn't go home until after midnight.'

By contrast, impersonal passive constructions using participles are rare and 'un-Slovak': *?*bolo zaklopané na dvere* 'there was a knock (it was knocked) on the door'.

Slovak also has an *active* impersonal construction based on the neuter third person singular of transitive verbs; semantically, the type is always connected with loss or natural disaster, with no responsibility imputed:

Odnieslo   nám   strechu.
carried away-N.SG us-DAT roof-ACC
'Our roof got blown away.'

Cez   vojnu   ho   ranilo   do hlavy.
during war-ACC him-ACC wounded-N.SG into head-GEN
'He was wounded in the head during the war.'

Non-finite forms: all **infinitives** are marked by *-ť*, both post-vocalically (*volať* 'call', *vypäť* 'switch off', *stáť* 'stand', *kliať* 'curse', *plieť* 'weed', *žiť* 'live', *vyť* 'howl', *žuť* 'chew', *hnúť* 'move'), and post-consonantally (*pásť* 'graze', *hrýzť* 'bite', *môcť* 'can'). Monosyllabic infinitives generally contain short vowels unless the vowel is the product of contraction (*stáť* < **stojati*), or *-ť* is preceded by a consonant, or the present-tense stem ends in *-aj-* or *-ej-*; the infinitive suffix *-núť* is also morphonologically long, that is, subject to rhythmical shortening, hence *lipnúť* 'cling', *kývnuť* 'nod'. In use the infinitive shares the typical European range of functions, but note its use in verbs of perception in copular sentences (see 4.3).

Active participial forms: the so-called *l*-participle, used in past-tense formation by the addition of *-l* to a version of the infinitive stem, should not be called a participle in the modern language. However, in the singular at least it betrays its participial origins through gender markers and the need for auxiliaries in the first and second persons. The final vowel of the infinitive usually shortens (*trieť–trel* 'rub-bed', *minúť–minul* 'pass-ed'), though not if produced by contraction (*kliať–klial* 'curse–d', *stáť–stál* 'stand-stood'). Consonantal stems require a fill vowel, always *-o-*, in the masculine (*niesť–niesol/niesla* 'carry', *padnúť–padol/padla* 'fall').

The **gerund** is formed from the third person plural by addition of *-c* (*nesú-c* 'carrying', *píšuc* 'writing', *chváliac* 'praising'), to verbs of either aspect (*na-píšuc* 'having written'); imperfectives denote actions/states simultaneous with those of the main clause, perfectives usually anteriority, rarely posteriority, of the subordinate action.

The (present) **active participle** is based on the present-tense stem of imperfective verbs only; the endings are those of the third person plural (morphologically *-ú*, *-ia*), with the addition of *-ci*, *-ca*, *-ce* and so on, that is adjectival endings rhythmically shortened. Unlike the *ú* version of the gerund, this vowel is *not* shortened in the participle, hence *píšuc*, but *píšúci*. Participles are a common substitute for relative clauses, many have become

fully adjectivalized (*prekvapujúci* 'surprising'), and some even sub-
stantivized (*vedúci/-ca* 'manager/-ess').

Passive participles are based on the formants *-n-* or *-t-*, with long adjec-
tival endings. The subclasses which use *-t-* are mainly monosyllables (and
their prefixed derivates) without a stem marker in the past tense (*biť–bitý*
'strike', *najať–najatý* 'hire') and verbs in *-núť* (*spomenúť–spomenutý*
'mention', *zasiahnúť–zasiahnutý* 'hit (target)'). Forms in *-ený* occur in
most verbs with present-tense themes in *-e, -ie* or *-i* (*viesť–vedený* 'lead',
prosiť–prosený 'request', *rozumieť–porozumený* 'understand'), but those
with infinitives in *-ať* have *-aný* (*držať–držaný* 'hold'), like other classes
with *-ať*, including *-ovať* (*zavolať–zavolaný* 'call', *háčkovať–háčkovaný*
'crochet'). Some free variation exists, in the *brať* subclass (*vybrať–
vybraný/vybratý* 'select', *zodrať–zodraný/zodratý* 'scuff, skin'), and
minimal lexical variation (*vydať–vydaný* 'publish', *vydať sa–vydatá* 'marry
(of woman)').

Adjectivalized *l*-participles from intransitives in *-núť* (*zbohatnúť–
zbohatlý* 'grow rich') are of limited incidence, having been replaced by
forms reminiscent of *passive* participles (*spadnúť–spadnutý* 'fall-en',
zvyknúť si–zvyknutý 'grow accustomed'); *-lý* types occur in other classes
(*dôjsť–došlý* 'arrive–incoming', but *vyhladovieť–vyhladovený* 'starve-d').

3.2.2   Conjugation

The Slovak conjugations are illustrated in tables 10.22 to 10.26. Table
10.22 gives a breakdown of conjugational types and subtypes, organized so
as to permit confrontation with their Old Slavonic antecedents. The layout
on table 10.23 summarizes the routes by which most of the reorganization
since early times has gone on. Table 10.24 stays with the synchronic theme,
being a survey of the Slovak reflexes of the original 'athematic' verbs.
Three core conjugations are set out in table 10.25, from which others can
be deduced, while table 10.26 gives the full present, future and past con-
jugation of *byť* 'to be', which also serves to show in particular how any
other verb behaves in the past tense.

Table 10.22   Survey of conjugations, including the various subclasses

INF	PAST	3 SG	3 PL
Themes in *-ie*, including -V*nie*[1]			
niesť 'carry'	niesol	nesie	nesú
viesť 'lead'	viedol	vedie	vedú
piecť 'bake'	piekol	pečie	pečú
zomrieť 'die'	zomrel	zomrie	zomrú
brať 'take'	bral	berie	berú
mlieť 'grind'	mlel	melie	melú
minúť 'spend; pass'	minul	minie	minú

INF	PAST	3 SG	3 PL
Themes in -e, including -Cne[1]			
íst 'go'	išiel	ide	idú
po-zvať 'invite'	-zval	-zve	-zvú
mazať 'smear'	mazal	maže	mažú
písať 'write'	písal	píše	píšu
zdvihnúť 'lift'	zdvihol	zdvihne	zdvihnú
ziabnuť 'freeze'	ziabol	ziabne	ziabnu
za-čať 'begin'	začal	začne	začnú
napäť/napnúť 'tense'	napäl/napol	napne	napnú
Theme in -je			
po-čuť 'hear'	počul	počuje	počujú
kryť 'cover'	kryl	kryje	kryjú
biť 'strike'	bil	bije	bijú
vy-zuť 'remove shoes'	vyzul	vyzuje	vyzujú
priať 'wish'	prial	praje	prajú
siať 'sow'	sial	seje	sejú
sať 'suck, absorb'	sal	saje	sajú
chvieť sa 'tremble'	chvel sa	chveje sa	chvejú sa
darovať 'donate'	daroval	daruje	darujú
Theme in -i			
modliť sa 'pray'	modlil sa	modlí sa	modlia sa
chodiť 'walk, go'	chodil	chodí	chodia
vidieť 'see'	videl	vidí	vidia
držať 'hold'	držal	drží	držia
trpieť 'suffer'	trpel	trpí	trpia
spať 'sleep'	spal	spí	spia
chváliť 'praise'	chválil	chváli	chvália[2]
báť sa 'fear'	bál sa	bojí sa	boja sa[3]
Theme in -á/-ie			
volať 'call'	volal	volá	volajú
dávať 'give'	dával	dáva	dávajú[4]
roz-umieť 'understand'	rozumel	rozumie	rozumejú
vracať 'return'	vracal	vracia	vracajú[5]
sádzať '(type-)set'	sádzal	sádza	sádzajú[6]

Notes: [1]obviously missing from these groups are 'read', 'go by vehicle' and 'say'. The last-named, *riecť*, now conjugates like *piecť* (and is obsolescent), 'go by vehicle' has been lost to be replaced by *isť* (or by *cestovať* 'travel' or *jazdiť* 'ride' (an animal) or 'drive'), while 'read' has been replaced by its frequentative *čítať* (*a*-theme);
[2]included to show effect of rhythmical law in 3rd singular;
[3]included to show effect of *j*-stem in 3rd plural;
[4] and [6] show the effect of the rhythmical law in 3rd singular; [5] and [6] show the *-ia*-alternant for *-á-* after a 'soft' consonant.

Table 10.23   Evolution of Slovak verb classes and subclasses

Old Church Slavonic (1 SG + INF)   *Modern Slovak* (3 SG + INF)*

	OCS		Modern Slovak	
I	vedǫ	vesti	vedie	viesť
	pekǫ	pešti	berie	brať
	mьrǫ	mrěti	pečie	piecť
	pьnǫ	pęti	zo-mrie	zo-mrieť
			minie	minúť
			sádže	sádzať
	plovǫ	pluti	pláče	plakať
	berǫ	bьrati	zve	zvať
	zovǫ	zъvati	kole	klať
II	dvignǫ	dvignǫti	dvihne	dvihnúť
	minǫ	minǫti	na-pne	na-pnúť/na-päť
			(začne	začať)
III	znajǫ	znati	kryje	kryť
	kryjǫ	kryti	pluje	pluť (archaic)
	saždajǫ	saždati		
	vraštajǫ	vraštati		
	umějǫ	uměti	veje	viať
	koljǫ	klati	kupuje	kupovať
	kupujǫ	kupovati		
	plačǫ	plakati		
IV	prošǫ	prositi	prosí	prosiť
	trьpljǫ	trьpěti	trpí	trpieť
	sъpljǫ	sъpati	spí	spať
V			po-zná	po-znať
			vracia	vracať
			roz-umie	roz-umieť (3 PL -ejú)

Note: * For reasons of space the Table does not record changes in meaning.

Table 10.24   The former athematic verbs and 'want'

INF	PAST	1 SG	3 SG	3 PL
byť 'be'	bol	som	je	sú
mať 'have'	mal	mám	má	majú
dať 'give'	dal	dám	dá	dajú
jesť 'eat'	jedol	jem	je	jedia
vedieť 'know'	vedel	viem	vie	vedia
chcieť 'want'	chcel	chcem	chce	chcú

Note: Apart from some anomalies in the relationship between infinitive and present-tense stem, and the anomalous third person plural of *jesť* and *vedieť*, all these verbs except *byť* have become fully integrated into the main conjugations. Compounds of *vedieť* take the form *-vedať*, past *-vedal*, with the above conjugation in the perfective, and as *á*-stems in the imperfective: *odpovedať* 'reply': third person plural imperfective *odpovedajú*, third person plural perfective *odpovedia*.

Table 10.25   Specimen conjugations

(a) *ie*-theme	(b) *i*-theme	(c) *á*-theme
vediem	prosím	volám
vedieš	prosíš	voláš
vedie	prosí	volá
vedieme	prosíme	voláme
vediete	prosíte	voláte
vedú	prosia	volajú

Note: Given the consistency of the person markers, all other conjugation variants can be inferred from the above and the items in table 10.22.

Table 10.26   *byť*

PRS	FUT	PAST
som	budem	bol/-a som
si	budeš	bol/-a si
je	bude	bol/-a/-o
sme	budeme	boli sme
ste	budete	boli ste
sú	budú	boli

3.3   Derivational morphology

Derivation by suffixation is still dominant in word formation, a lesser role being played by prefixation, and even lesser roles by other procedures, though composition is slowly increasing.

3.3.1   Major patterns of noun derivation

Twenty-three different suffixes occur in deriving nouns denoting male humans, of which -*teľ*, -*č*, -*ník*, -*ik*, -*ár* and -*ák* are highly productive, while others, often expressive, like -*áň*, -*oš*, -*áľ*, occur in relatively few items. Some suffixes are associated with one particular source, for example, -*teľ* or -*č* with verbal stems, as in *prekladateľ* 'translator', *nosič* 'porter'. Others, such as -*ník* or -*ár*, may be formed from a wide range of sources: *bojovník* 'warrior' (‹ *bojovať* 'fight'), *hudobník* 'musician' (‹ *hudba* 'music'), *fajčiar* 'smoker' (‹ *fajčiť* 'smoke'), *kvetinár* 'florist' (‹ *kvety* 'flowers'). A further group uses loan-suffixes, usually combined with other borrowings: *traktor/-ista* 'tractor/-driver', *huslista* 'violinist' (‹ *husle*), *historik* 'historian', *simulant* 'malingerer'. Prefixes used in masculine animate-noun derivation, mostly in calques, are confined to the items *pra-*, 'proto-': *praotec* 'progenitor'; *nad-* 'super-': *nadčlovek* 'superman'; *pod-* 'sub-': *podnájomník* 'sub-tenant'; *pred-* 'pre-': *predrečník* 'the previous speaker'; *proti-* 'counter-': *protikandidát* 'opposing candidate'; *ne-* 'un-':

nefajčiar 'non-smoker'; and *spolu-* 'co-': *spolumajiteľ* 'co-owner'.

Other, more limited, sources of masculine animate nouns are substantivization of adjectives, like *hlavný* '(head-)waiter', *predstavená* 'mother-superior', and compositions, consisting usually of a noun element, a verbal element and a suffix: *divotvorca* 'wonder-worker' (‹ *div* 'wonder' + *tvoriť* 'create'), *zverolekár* 'vet' (‹ *zviera* 'animal' + *liečiť* 'cure') – in both of these the second element is a noun in its own right; *rukojemník* 'hostage' (‹ *ruka* 'hand' + *jať* 'take'), *knihožrút* 'bookworm' (‹ *kniha* 'book' + *žrať* 'eat'). Productive in the technical sphere, and based on such borrowings as *rádiotechnik*, are compositions denoting modern professions: *zvukotechnik* 'sound technician', and, using native elements: *vodohospodár* 'water engineer or expert'.

Human feminine appelatives are derived by comparatively few suffixes, primarily *-ka*, but also *-ička*, *-yňa*, *-ica*, *-iná*, each associated with different ranges of masculines: *študent-ka*, *súdruh–súdružka* 'comrade', *Nemec–Nemka* 'German', *chirurg-ička* 'surgeon', *prorok-yňa* 'prophetess', *švagor–švagriná* 'brother-in-law/'s wife'.

Generally similar principles apply to the formation of names for inanimate objects, with twenty-one different suffixes in use across all three genders, some associated with particular semantic classes.

Diminutives, lexical or expressive, are extremely common, with a good repertoire of suffixes based on *-k-*, *-čk-* and *-nk-*.

3.3.2   Major patterns of adjective derivation

Here too suffixation predominates. Depending on the class of source word and particular choice of suffix there are some twenty-seven broadly distinctive types (Horecký 1971: 169–206). Many have counterparts in other Slavonic languages, but *-ní* is conspicuous by its absence. The most frequent suffixes are *-ný* (from verbal and substantival sources), *-ový* and *-ský*, while those in *-ací/-iaci* based on infinitives and denoting 'intended for -ing' or 'capable of being -ed' are a productive source of neologisms: *smerovacie číslo* 'post-code' (literally: directing number). Compounding is productive and frequent in calquing, and various types occur: from adverb + participle: *dlhotrvajúci* 'long-lasting', *znovuzrodený* 'born-again'; adjective + noun: *krátkozraký* 'short-sighted' (‹ *krátky* + *zrak*); numeral + noun: *dvojhrbý* 'two-humped' (‹ *dva/dvoje* + *hrb*); preposition + noun: *bezhlavý* 'headless' (‹ *bez* 'without' + *hlava*); noun + verb: *mäsožravý* 'carnivorous' (‹ *mäso* 'meat' + *žrať* 'eat'), and others. A third source is adjectivalization of participles (*rozčuľujúci* 'annoying', *nečakaný* 'unexpected'), while many neologisms look like participles of the most productive verb class, in *-ovať*, where no actual verb exists, for example, *zúbkovaný* 'serrated'.

A few adjectives are derived by prefixation of existing items. The distribution of the main prefixes (*polo-* 'semi-', *pre-* 'very', *pri-* 'too' and *ne-*

'un-') is restricted, but fairly predictable. In addition there are several minor types of simultaneous prefixation and suffixation of existing items: *podlhovastý* 'longish' (‹ *dlhý*), *nahluchlý* 'fairly deaf' (‹ *hluchý*, via *hluchnúť* 'go deaf').

3.3.3 Major patterns of verb derivation

'From the derivational point of view, the verb is a stable word-class' (Horecký 1971: 24), being poor in innovatory derivational processes. Verbs are readily formed from nouns and adjectives, with *-ovať* and *-iť* the main suffixes. Change-of-state verbs generally adopt the suffixes *-núť* and, more productively, *-ieť*, and many are formed, as perfectives in the first instance, by simultaneous prefixation–suffixation: *s-pohodln-ieť* 'become idle/lax', *o-ťarchav-ieť* 'become pregnant'. Many transitive *i*-conjugation verbs become intransitive by reflexivization: *po-nemč-iť* 'Germanize', *ponemčiť sa* 'become Germanized'.

Verbs are derived from other verbs by prefixation, each available prefix often having several distinct semantic possibilities. A prefix added to a basic imperfective verb produces a new perfective, to which a secondary imperfective is formed by suffixation – the general Slavonic pattern. Noteworthy Slovak factors include: (a) a measure of free variation among secondary imperfective forms: *vy-chládz-ať* or *vy-chladz-ovať* 'cool' (‹ *vychladiť* TR), *vy-chlád-ať* or *vy-chlad-úvať* 'cool' (‹ *vychladnúť* ITR); (b) vitality of stem-vowel alternation: *ponárať* ‹ *ponoriť* 'immerse', semi-colloquial *odbáčať* (for *odbočovať*) ‹ *odbočiť* 'turn off', a process which extends to secondary imperfectives of *-ovať* verbs: *prerokovať* › *prerokúvať* 'discuss', and to Ø/*ý* alternations before *-núť*/*-nať*: *nahnúť* › *nahýnať* 'bend', *odomknúť* › *odomkýnať* 'unlock', imitating the 'true' Ø/V gradation of, say, *vybrať*/*vyberať* 'select'.

Suffixation also produces the quite widely used frequentatives: *mávať* ‹ *mať* 'have', *chodievať* ‹ *chodiť* 'go often'.

Double prefixation is practically confined to the prefixes *s-*/*z-* and *po-*, which add a distributive dimension: *s-prehádzať* 'jumble up', *po-vyzliekať* 'undress one by one'; they may also have this function as sole prefix: *zhádzať* 'cast off piecemeal', *postrieľať* 'shoot one by one'.

4 Syntax

4.1 Element order in declarative sentences

Modern Slovak sources decline to refer to any unmarked order of constituents in terms of basic word order; this approach, which would indeed see Slovak as an SVO language, is viewed as an application of alien parameters. 'In Slovak the principle of functional sentence perspective (FSP, i.e., in a nutshell, the unfolding of a sentence from the 'known' or

'general' – the 'theme', to the 'new' or 'specific' – the 'rheme') is the basic word-order factor, other factors in an utterance being subordinated to it' (Mistrík 1966: 249). Thus, despite the attractive simplicity of exemplar sentences such as *pes pohrýzol poštára* (SVO) 'the dog bit the postman', they are deemed no more or less neutral than OVS versions: *poštára pohrýzol pes*, best translated as 'the postman was bitten by the dog'. Both are unmarked; the difference is merely occupancy of the thematic ('dog' and 'postman') and rhematic ('postman' and 'dog', respectively) parts of the clause. Mistrík goes on: 'The greater the resistance offered by such secondary factors, the more conspicuous is the change induced.' Such factors include spontaneity, expressiveness, deprecation or situations where the verb, generally regarded as a transit element between theme and rheme, needs to be incorporated within one or other of these two clause slots. Hence *poštára pes pohrýzol* 'the postman was *bitten* by the dog'. In *pes poštára pohrýzol*, with a marked high–low intonation contour between *pes* and *poš-*, 'it was a dog that bit the postman', rheme and theme are effectively inverted – a possibility common in speech. Freedom of word order centring on the verb and its arguments is the main instrument of 'dynamism, expressiveness and stylistic symptomatization' (Mistrík 1966: 249).

As clause constituents, the clitics have a fairly rigid position; adverbs, unless affecting the whole clause, or for FSP reasons being specifically thematic, or, especially, rhematic elements, tend to stand close to the item they qualify (usually before an adjective or other adverb, after a verb), and the position of adjectives and determiners within noun phrases is fairly rigid.

A basic rule places all enclitics in the second constituent slot in the clause, in the order: conditional particle, past auxiliary, reflexive pronoun–particle, dative pronoun, accusative pronoun:

¹Dnes ²by som sa   mu   to   ³bál   povedať.
today COND AUX REFL him-DAT it-ACC feared-M tell-INF
'I would be afraid to tell him (it) today.'

Dependent infinitives are commonly treated alternatively as embedded 'first slots' with their own enclitic complements attached after them:

¹Dnes ²by som sa ³bál (¹povedať ²mu to).

or, less artificially:

¹Bál ²by som sa ³(¹povedať ²mu to ³dnes).

The first constituent may vary in length and syntactic status; all subordinating conjunctions qualify, as do disyllabic coordinating conjunctions.

This essentially disqualifies *a*, *i* and *aj* 'and', but, in spontaneous colloquial usage, at least *sa* may follow them immediately: *aj sa najem* 'and I *will* eat'; longer enclitic chains also occur: *a som sa ho spýtal* 'and I (duly) asked him'. Of all the clitics *sa* is most prone to movement, another common position being directly after the verb:

Z   iniciatívy Jozefa Kohúta   založil   sa v Martine... hasičský zbor.
from initiative Jozef Kohút-GEN founded self in Martin... fire   brigade
'A fire brigade was founded in Martin on the initiative of J.K.'

Within noun phrases the unmarked order is adjective–noun, with other attributes following:

veľký dom na konci   ulice.
big   house at end-LOC street-GEN
'The big house at end of the street.'

Adjective–noun inversion occurs in a limited set of circumstances: (a) emphasis: *prvá hodina* 'first lesson' › *hodina prvá* '*first* (not second) lesson'; (b) affectionate address: *zlato moje!* 'my dear' (literally: gold my); (c) abuse: *líška prešibaná* 'crafty devil (= fox)'; (d) taxonomies, modelled on Latin: *drop veľký* 'great bustard', *kyselina octová* 'acetic acid'.

Strings of noun phrase determiners or qualifiers have a fairly fixed sequence:

toto/každé/prvé moje/dedkovo   dobré domáce   víno.
this/each/first   my/grandfather's good home-made wine
'This good home-made wine of mine/grandfather's.'
'Each good home-made wine of mine/grandfather's.'
'My/grandfather's first good home-made wine.'

where the first two positions (determiners and possessives) are fixed; aberrations further along are due to emotional colouring, afterthought or other more or less random influences. Cardinal numerals are mobile:

tie		naše		staré		parné	rušne
	↑		↑		↑		
	dva		dva		dva		
those		our		old		steam	engines
	↑		↑		↑		
	two		two		two		

4.2   Non-declarative sentence types

Yes–no questions are subject to the same 'freedom' of word order as applies to declarative sentences, for example, *poštára pohryzol pes?* 'was it a dog that bit the postman?', *poštára pes pohryzol?* 'did the dog *bite* the

postman?', and in speech by a distinctive anti-cadence (rising or rising–falling). Questions may be progressively toned down by being formulated in the negative, conditional, or negative conditional. Some yes–no questions may be introduced by the 'empty' particle *či,* or modal *azda, hádam* and others, largely 'untranslatable'. Deliberative and disjunctive questions have the second alternative introduced by *či* and *a či* respectively. Examples:

Počul Peter tú reláciu?
'Did Peter hear that programme?'
Pôjdete zajtra do divadla?
'Will you go to the theatre tomorrow?'
Nešli by ste zajtra s nami?
'Would you care to go with us tomorrow?'
Či ste tam?
'Are you there?'
Hádam to nemyslíš vážne?
'You don't mean that, do you?' (approximately 'Surely you don't think it
    seriously?')
Či mu mám napísať, či sa ho opýtať osobne?
'Should I write to him or ask him in person?'
Či sa mám na tú zkúšku prihlásiť, a či pôjdem s tebou do Viedne?
'Should I enter for the exam, or shall I go to Vienna with you?'

Answers to yes–no questions include *áno* (colloquial *hej*) 'yes' and its close equivalents (*pravdaže, veru, iste* 'indeed'), several particles indicating 'possibly' or 'probably' (*asi, hádam, azda, možno*) and *nie* 'no' or the more dogmatic *kdeže, čoby.* The use of *áno* and *nie* is not conditioned by the positive or negative formulation of the question, but by the truth-value of the reply, though contradiction may be supported by *ale*:

(Nie) ste chorý? 'Are(n't) you ill?'	Nie, som zdravý. 'No, I'm well.' Áno, som chorý. 'Yes, I am ill.'
(Ne-)volali ste ma? 'Did(n't) you ring me?'	Nie, nevolal. 'No, I didn't.' (Ále) áno, volal. 'Yes, I did.'
(Ne-)kúpia si to? 'Are(n't) they going to buy it?'	Nie, nekúpia. 'No, they aren't.' Áno, kúpia. 'Yes, they are.'

Áno and *nie* are often omitted, the positive or negative form of the relevant verb being an adequate response; this type is apparently preferred if the question was non-neutral (spoken in reproof or irony):

Naozaj si ma nevolal?	– *Nevolal*
'You really didn't call me?'	= 'not called'
Bude mu ešte pomáhať?	– *Bude*
'Will he still help him?'	= 'will'

In all responses consisting of just the verb, past (and conditional) auxiliaries and any dependent infinitives are dropped.

The main feature of WH **questions** is a falling cadence similar to that of declarative sentences. Most interrogative items are given in Table 10.11, to which may be added *dokedy* 'by/until when' and *prečo* 'why'. Types of answers are comparable to those in other languages.

Indirect WH questions are exact replicas of their direct counterparts, except for adjustments to person in noun phrases and verb phrases; tense forms need no adjustment, though word order may:

Direct: Kto nás bude zastupovať?
       'Who will represent us?'
Indirect: Opýtali sa, kto ich bude zastupovať.
       'They asked who would represent them.'

Similar adjustments apply to yes–no questions, introduced by *či* 'whether':

Direct: Vedia už o tom?
       'Do they know about it yet?'
Indirect: Zavolám, či o tom už vedia.
       'I'll phone (to ask) if they know about it yet.'

Clauses following a verb of speaking are introduced by *že* 'that'; this feature has spread redundantly to indirect questions, hence, in defiance of codification, such expressions as: *opýtali sa ho, že kto ich bude zastupovať* or *Zavolám, že či o tom už vedia.*

Commands are expressed primarily by the imperative, from a perfective verb for a positive and imperfective for a negative command. A perfective negative imperative generally contains a warning rather than an injunction (*neudri sa!* 'mind you don't bang yourself'), while an imperfective positive imperative implies a general principle, or that the addressee should commence and continue an action (*čítaj* 'read', *prac sa!* 'clear off!'), or adopt and/or sustain a given state – uses typical of the imperfective generally. Aspect-selection rules apply equally to uses of the non-morphological imperative, that is, the indicative introduced by the particle *nech* 'let': *nech pride* 'let him come', or of volitive constructions based on *aby*: *aby som ťa tu už nevidel!* 'don't let me see you here again!' (literally: that I not see you here anymore). Other imperative devices are shared with many languages, for example: indicative: *ten kľúč mi dáš!* 'you will give me that key!'; interrogative: *dáš mi ten kľúč?!* 'will you give me that key?'; conditional: *keby ste sa tak nerozčuľovali!* 'don't get so excited!' (literally: if you would not get so excited); infinitive: *stáť!* 'halt!'; sundry clause constituents with the verb deleted: *ten kľúč!* 'that key!'; *tu hore!* 'up here!'

4.3   Copular sentences

The main copula is *byť*: *naši študenti sú lenivi* 'our students are lazy'; one
difference between copular and existential *byť* is in the negative: copular
and circumstantial sentences have the negative particle: *naši študenti nie sú
lenivi*, while existential sentences have an optional impersonal negative
form *niet* (-*o*) (past *nebolo*, future *nebude*) with a genitive subject, hence
na to peniaze (NOM) *sú/boli* 'there is/was the money for it', but *na to
peňazí* (GEN) *niet/nebolo* 'there isn't/wasn't ...'. The construction may
also apply to persons: *už ho* (GEN) *tu niet* 'he's no longer here'. Negation
with *nie* is, however, increasingly preferred, hence *na to peniaze nie sú/
neboli*, *už nie je tu.*

In many registers the negative particle may follow the copula, a feature
of folk speech, without implying negation of any following constituent: *už
je nie tu* 'he/she/it is no longer there'.

Sentences having verbs of perception in the infinitive, and evaluated as
copular, omit the copula in the present. Such verbs include: *badať* 'see,
notice', *čuť* 'hear, smell', *počuť* 'hear', *vidieť* 'see', *zazrieť* 'see, spot', *citiť*
'feel, smell', *rozumieť* 'understand' and *poznať* 'know, see, tell':

Všade   (bolo/bude)   počuť,   že vláda   odstúpi.
everywhere (was/will-3.SG.N) hear-INF that government resign-3.SG.PRFV
'Everywhere you (could/will) hear that the government will resign.'
Nevidieť   im   na tvári,   že majú   strach.
not-see-INF them-DAT on face-LOC that have-3.PL fear
'You can't see from their faces that they're afraid.'

In the past and future the inserted copula attracts any negation:

Nebolo im vidieť na tvári, že majú strach.
'You couldn't see from their faces that they were afraid.'

The same construction also applies to *dostať* 'get': *zemiaky nedostať*
'you can't get potatoes'.

Several **modal adverbs** also dispense with the copula in the present, but
attract the past and future auxiliaries as above: (*ne*)*treba* and *načim* (only
positive) '(it is) (un-)necessary', *možno* 'possible (feasible)', *nemožné*
'impossible', (*ne*-)*slobodno* '(im-)possible (permissible)', *vidno* 'apparent',
radno 'advisable':

Treba   ísť   tam a   opýtať sa.
necessary go-INF there and ask
'You/we/one ought to go there and ask.'
Nebolo možno zohnať lístky. (*or* bolo nemožné ...)
wasn't   possible get-INF tickets
'It was impossible to get tickets.'
Vidno, že   sa usiluje.
visible that try-3.SG

'You can tell he's trying.'
Štefan sedí   v chládku,   tak mu   načim.
Štefan sit-3.SG in cooler-LOC, so   him-DAT necessary
'Stephen's in the cooler, serve him right.'

Modal copular constructions used only in the past and conditional also employ impersonal *byť* + infinitive:

Bolo mi   zájsť   na VB
was   me-DAT go-INF to police
'I should have gone to the police.'
Máte   dlhé vlasy, bolo by   vám   ich   pristrihnúť.
have-2.PL long hair,   was COND you-DAT them-ACC trim-INF
'Your hair's long, it ought to be trimmed.' (approximately: it would be desirable to trim it + possessive dative)

A noun predicate after the copula may be nominative or instrumental; the nominative dominates in the expression of general or permanent qualities: *byť Slovák* 'be a Slovak', while the instrumental is strongly preferred in more concrete, topical, relativized contexts and hence commonly expresses professions, titles and functions: *byť dôstojníkom/kniežaťom/ svedkom* 'be an officer/prince/witness'; blood and social relationships: *byť dcérou/vdovcom/cudzincom* 'be daughter/widower (of someone)/a foreigner'; various qualities expressed as nouns: *byť pätolizačom/silákom* 'be a sycophant/strongman', in which case the attribute may be expressed adjectivally with a generic noun: *byť dobrým človekom/váženým občanom* 'be a good man/respected citizen'. With inanimates the instrumental relativizes a particular quality to a given object or event, person or other abstract: *jeho obľúbeným nápojom je pivo* 'his favourite drink is beer', *pravidelná dochádzka je povinnosťou* 'regular attendance is a duty'. Specialized uses include such types as *keby som bol ja tebou* 'if I were you', *čaj nie je čajom, keď ...* 'tea isn't tea if ...'

The predicative instrumental is obligatory after copular *stať sa* 'become', (*z*)*ostať* 'remain': *stal sa učiteľom a do konca života ním ostal* 'he became a teacher and he remained one to the end of his life'.

4.4   Coordination and comitativity

The main coordinating conjunction is *a*, at all constituent levels. More than two conjoined items in unmarked sequences have *a* between the last two only; deletion of *a* or its insertion elsewhere in a list produces marked versions, almost individualizing the items. Only between clauses with strongly overlapping content is explicit coordination sometimes omitted; in such cases there is likely to be some other implicit element present, such as gradation or explanation:

Nemohol sa zbaviť dojmu blížiacej sa katastrofy, čoraz väčšmi ho tá predstava trápila.
'He couldn't rid himself of a sense of impending catastrophe, the thought worried him more and more.'

More emphatic coordination is by *aj* or *i* 'and (also/even)' '(emphatic) and', which unlike *a* are preceded by a comma when joining clauses:

To ho štvalo, i radovala sa v duchu.
'That riled him – and she rejoiced at heart.'

'Emphatic' coordination is particularly common between noun phrases, and is often hard to convey in translation without overemphasis:

z týchto i ďalších závažných dôvodov ... (press)
'for these and other important reasons ...'

Some hierarchization among conjoined noun phrases can be achieved by varying the conjunctions:

... český i zahraničný kapitál, ktorý nám priniesol biedu a vysťahovalectvo i súčasnú hrozbu (press)
'... Czech and foreign capital that brought us poverty and emigration and the current threat'

'Poverty and emigration' form a closer unit conjoined as a whole to the third woe. The *i* in the first phrase is the weakest rendering of 'both – and', but in a single member; stronger versions are reduplicated *i – i* or *aj – aj*:

Aj dom má od železnice, aj uhlie mu dáva železnica. (Šikula)
'He both has his house from the railway, and the railway gives him coal.'

Negative conjunction employs (*ani*) – *ani* 'neither – nor', omitting the first member for weaker variants:

(Ani) nič nemal, ani na nič neašpiroval.
'He neither had anything, nor did he aspire to anything.'

Conjoined subject noun phrases raise questions of agreement in the verb. Logical plurality is *supported* if: the verb follows the noun phrases; the latter are *concrete*; or the subjects are jointly, as opposed to individually, involved in the action or state. Logical plurality tends to be *overruled*, the verb being singular, if: the latter precedes the subject; the noun phrases are quasi-synonyms; the noun phrases are joined by *s* 'with'. These tendencies combine variously, though noun phrase–verb phrase as opposed to verb phrase–noun phrase ordering is the main factor. The following examples are drawn from Oravec and Bajzíková (1982: 88):

Hmla a dym *snovali* sa nad červenými strechami.
'Mist and smoke wove (PL) together above the red roofs.'
Štefan s Dorou ich *vyprevadili* až na dvor.
'Štefan and (with) Dora saw (PL) them all the way out to the yard.'
Bývajú v nej Paľo Stieranka, Jerguš a Zuzka Kosaľkuľa.
'(There) live (PL) in it P.S., J. and Z.K.'
Bola odvaha i úvaha.
'There was (SG) courage and deliberation.'
Radosť a veselosť *uletela* ako vtáča.
'Joy and gaiety flew off (SG) like a little bird.'

The *Štefan s Dorou* example illustrates the rare comitative construction. Most occurrences where the noun phrase precedes the verb phrase show plural agreement in the verb:

Veď vie, ako *mať s otcom* nažívali ...
'After all he knows how mother and (= with) father got on ... (PL)'

but singular agreement also occurs, suppressing the comitative function:

Keď sa *Joachim s Janom* vrátil k ohňu, starec sa modlil.
'When Joachim and (with) Jano returned (SG) to the fire, the old man was praying.'

Explicit reciprocity with comitativity, co-occurring with the order verb phrase–noun phrase may produce plural agreement:

'Len by sme sa obrobili, zájdeme si do kúpeľov!' potešovali jeden druhého *starý otec s materou.*
'"We'd just work ourselves to death, we'll go to a spa!" grandfather and (with) grandmother consoled (PL) each other.'

4.5   Subordination

Object clauses are introduced by the conjunction *že* 'that'; it never competes with the neuter interrogative or relative pronoun *čo.*

   Purpose clauses, and many clause types denoting wishes, admonitions, etc., are introduced by *aby,* which includes the conditional particle *by;* it combines with past-tense forms and is equivalent to European subjunctives. Examples:

Pracoval rýchlo, aby mohol ísť domov skôr.
'He worked fast so that he could go home earlier.'
Chceme, aby si sa skoro uzdravil.
'We want you to get well soon.'

Many *aby*-clauses are anticipated by *preto* 'for that' (in various places in the preceding clause):

```
Preto   to urobil,   aby z    neho    mala    radosť.
for-that it did-M.SG that from him-GEN had-F.SG joy-ACC
```
'The reason he did it was to please her.'

Alternative expressions of purpose include (*nato ...,*) *žeby* and (*zato ...,*) *aby*.
   The primary causal conjunction is *lebo* 'because':

```
Idem      neskoro, lebo    nechodili      trolejbusy.
come-1.SG late      because not-go-PAST.PL trolleybuses
```
'I'm late because the trolleybuses weren't running.'

The synonymous *pretože* is common in all, including spoken, registers (Czech influence?), though deemed acceptable only in non-literary written styles. A hybrid form has anticipatory *preto* as, to adapt the previous example, in:

```
Idem neskoro preto, lebo nechodili trolejbusy.
Zato    som      ti        to povedal, lebo   sa   to aj    tak dozvieš.
for-that AUX-1.SG you-DAT it told       because REFL it even so find out-2.SG
```
'The reason I told you is that you're bound to find out anyway.'

If the causal clause precedes the main clause the conjunction is *keďže*:

```
Keďže všetko už      vedel,      utiekol naspäť do redakcie.
since  all     already knew-M.SG ran     back   to newspaper-office
```
'Since he now knew everything, he ran back to the office.'

   Real conditions are introduced by *ak* 'if', but also by some conjunctions whose primary function lies elsewhere (*keď*, *až* 'when', *pokiaľ* 'in so far as'); it may have a coordinate in a following main clause, for example, (*ak/keď ...,*) *tak/potom/nuž/teda* '(if ...,) then', or, in a preceding main clause, usually (*len*) *vtedy*:

```
Ísť    ta     má len  vtedy zmysel, ak vieš,      že  tam bude.
go-INF thither has only then  sense   if know-2.SG that there will be-3.SG
```
'It only makes sense to go there if you know he'll be there.'

   Unreal conditions use *keby* + past-tense forms, that is, *keby* incorporates the conditional particle:

```
Keby sme      ich        mohli    zakúpiť, veľmi by   nám    uľahčili
if   AUX-1.PL them-ACC could-PL buy-INF very  COND us-DAT lightened-PL
                                                          robotu.
                                                          work-ACC
```
'If we could buy them they would make our work a lot easier.'

Alternatives include *ak by* and *čo by*.

Concessive clauses evince a great variety of devices, from basic *hoci* 'although', for clauses placed second in the sentence, to numerous alternatives including *akoko ľvek, nech, a čo, hoc aj, čo aj/i, čo priam, čo hneď, čo ako.* If the concessive clause stands first, the conjunction is yoked to another (*predsa, jednako, aj tak, ešte, už* 'yet', 'however', etc.) at the head of the main clause. Examples:

Stále to ešte nevie, hoci sme mu to povedali už viac ráz.
'He still doesn't know it, though we have told him several times already.'

Akokoľvek sa	o dobrý výkon	usiloval,	jednako sa	mu	to
however REFL	at good performance	tried-M.SG	anyway REFL	him-DAT	it-NOM

nepodarilo.
not-succeeded-N.SG
'Although he tried to perform well, he failed none the less.'

Time clauses: 'when' is most frequently *keď*; consistent co-occurrence of two events is introduced by *kedykoľvek, čo raz,* or *čo* 'whenever', while parallel processes or states require *ako, ako tak, kým, medzitým čo* or *zatiaľ čo* 'while'. Anteriority of the main-clause event is indicated by *skôr ako, prv ako* or *kým* 'before', more immediate sequences of events by *ako, len čo, iba, len, len toľko čo, lenže, sotva, ledva, sotva čo* or *sotvaže* 'the moment, hardly'. 'Since' is expressed by *ako, od toho času/tých čias/tej doby, čo* or *odkedy ...,* (*odvtedy*), and 'until' by (*do-)kým, dokiaľ* or *pokiaľ,* followed by the verb in the negative, or *až* with a positive verb. *Pokiaľ, dokiaľ* and *dokedy* with a positive verb usually translate 'as long as'.

Relative clauses: the relative pronoun is *ktorý*, frequently replaced by the absolute *čo* in subject or object positions:

Stál pred chorým kráľom, ktorý/čo už bol len koža a kosť.
'He stood before the sick king, who now was just skin and bone.'

or, in colloquial usage, by *čo* and an appropriate oblique case of the personal pronoun:

Pomohol jej	sused,	čo	mu	bola vysvetlila	situáciu.
helped her.DAT	neighbour,	what	him.DAT	was explained.F	situation

'She was helped by the neighbour to whom she had explained the situation.'

Čo is required when the antecedent is an entire clause:

Nesmeli ísť von, čo sa im veľmi nepáčilo.
'They weren't allowed to go out, which didn't please them greatly.'

It is also required for any neuter pronominal antecedent (*niečo, čo* 'something that'); *kto* (or *čo*) serves for a referentially opaque or general

animate antecedent (*ten, kto* 'he/anyone who'). For relative 'whose' Slovak uses only genitives of *ktorý* (*sused, ktorého pes sa stratil* 'the neighbour whose dog got lost').

Gerundial and participial clauses: participial clauses are practically confined to written registers. Unlike relative clauses proper, which they replace and which, as subordinate, must be separated by commas, participial relative clauses permit the distinction between non-defining (with commas) and defining types (without), a distinction widely ignored in practice. Short defining participial constructions may acquire the status of attributives and thus stand in front of their noun:

rozhodnutie, ktoré bolo prijaté včera › rozhodnutie prijaté včera › včera prijaté rozhodnutie
'the decision which was adopted yesterday › the decision adopted yesterday › (literally) the yesterday adopted decision'

Imperfective gerunds denote events simultaneous with those of the main clause, irrespective of tense; perfective gerunds usually denote anteriority:

'Dobrý deň,' povedal neodkladajúc noviny.
'"Good morning," he said, not putting down his newspaper.'
... antilopy, stratiac vodcov, podľahli ... panike
'the antelopes, having lost their leaders, gave in to panic'

As a condensing device, however, a perfective gerund may simply express perfectivity:

... povedal Jerguš, šklbnúc Rudka za šticu
'... said Jerguš, tugging (PRFV) Rudko by the forelock'

Passive gerundial phrases do not occur, being replaced by participial phrases:

Posmelený jeho stanoviskom, rozhodol som sa prehovoriť.
'Emboldened by his attitude, I decided to speak out.'

Constraints against extraction out of a subordinate clause are strong; sentences of the type 'the man that I think that you saw' are heard, but are viewed as nonce-forms and distortions; even the following grammatically almost tolerable occurrence still amounts to an anacoluthon:

muž, o   ktorom   si   myslím,   že ste   ho   videli
man about whom-LOC REFL.DAT think-1.SG that AUX-2.PL him-ACC saw-PL
'the man I thought you saw'

Occurrences of these types are rare in print, but:

... veršovaná tragédia Oulanen, ktorú   Marx považoval, že   sa
verse(-d)   tragedy Oulanen which-ACC Marx thought   that REFL

                            stane   Faustom   jeho doby
                            become-3.SG Faust-INST his   age-GEN
'... the verse tragedy O. which M. thought would become the Faust of his age'
                        (*Večerník*, 3 April 1990, p. 3 – a translation from English!)

4.6   Negation

Sentence negation is expressed by simple negation of the verb (or equi-
valent), by means of the prefix *ne-*, which attracts word stress; in the past
and conditional it attaches to the *l*-participle, and in the future to the
auxiliary: *nemyslím, nemyslel som, nebudem myslieť* 'I do/did/will not
think', *netreba* 'it is not necessary'. Exceptions: (a) present-tense forms of
byť in all functions use the free-standing negator *nie*: *sekretárka už nie je
chorá* 'the secretary is no longer ill', *nie sme odborníci* 'we aren't special-
ists', *jeho pracovňa nie je uprataná* 'his study hasn't been cleaned'. Future
and past forms are regular: *nebol som, nebudem.* Increasingly rarely, cases
are found where *nie* gravitates, irrespective of tense, away from its neutral
position left of the copula to a position left of a nominal predicate: *tie
hrušky sú/boli veru nie tvrdé* 'those pears are/were indeed not hard'; (b) in
abbreviated repetition, in the negative, of a previous verb: *príde Peter, či
nie?* 'is Peter coming or not?'; (c) as an alternative to existential *nie je, nie
sú* there is a formal *niet(-o)* (matching *jest(-o)* in positive sentences):
celkom zlých ľudí niet 'there are no totally bad people', *času niet* 'there's
no time'; here the genitive subject is obligatory.

In clauses containing a negative item (pronoun subject, object, pronoun–
adverb and so on) the verb carries secondary negation obligatorily: *nik
neprišiel* 'no-one came', *nič si nekúpili* 'they bought nothing', *nikdy som
nič také nevidel* 'I never saw anything like that anywhere'. Two negatives
producing a positive occur with the separate parts of a complex verb:
nemôže neprísť 'he cannot not come', or where one item is a lexical nega-
tive: *nie je to nepríjemné* 'it's not unpleasant'.

Constituent negation is rendered by the particle *nie*: *prídete dnes, nie
inokedy* 'you'll come today, not some other time'; *nie alkohol, ale káva mu
zničila zdravie* 'not alcohol, but coffee ruined his health'. In association
with total quantifiers constituent negation may have the form of sentence
negation: *oslava sa celkom nevydarila = oslava sa nie celkom vydarila* 'the
celebration wasn't entirely successful'; *všetci ho nemajú radi* (all him NEG-
have glad) = *nie všetci ho majú radi* (not all him have glad) 'they don't all
like him', equivalent to *niektorí ho nemajú radi* 'some don't like him'.

4.7   Anaphora and pronouns

Zero anaphora applies in the case of common subjects of successive
clauses:

Peter si išiel umyť ruky, ale nemohol nájsť mydlo.
'Peter went to wash his hands, but couldn't find the soap.'

However, comparable to the oblique-case opposition between emphatic (non-enclitic) and non-emphatic (enclitic) forms or uses of personal pronouns, in the subject there is an opposition between pronoun insertion and zero. Insertion is always marked, usually for contrast:

Ferko si tiež chcel umyť ruky a on mydlo našiel.
'Ferko also wanted to wash his hand and he did find the soap.'

Assertive emphasis likewise calls for insertion:

Ferko všetkým rozprával, že mydlo našiel iba on.
'Ferko kept telling everyone that only he found the soap.'

When an anaphoric relationship is to be established between the subject of one clause and a denotate other than the subject in the preceding clause, it is usual to insert not the personal pronoun, but demonstrative *ten*:

Ferko sa Petrovi$_i$ vysmial, ale ten$_i$ ostal pokojný.
'Ferko mocked Peter$_i$, but he$_i$ remained calm.'

The same applies if the new main-clause subject last appeared in subject position, but at subordinate-clause level:

Ferko čakal, či sa Peter$_i$ neohlási, ale ten$_i$ iba mlčal.
'Ferko waited (to see) whether Peter$_i$ would respond, but he$_i$ just kept silent.'

Such uses of the demonstrative are not confined to the nominative:

Ferko čakal, či sa Peter$_i$ neohlási, ale tomu$_i$ už bolo všetko jedno.
'F. waited (to see) whether P.$_i$ would respond, but it was all one to him$_i$ now.'

Similar conditions may apply even where no ambiguity as to denotate arises:

Vedľa chodníka ležal veľký kameň$_i$. Na ten$_i$ si sadol a . . .
'Beside the path lay a large stone$_i$. He sat down on it$_i$ and . . .'

Semantic constraints exclude the possibility that *kameň* (M) could be the subject of *sadol* (M). Here the anaphoric personal pronoun (-*ň*, in *naň* 'on it') could have been used instead of *ten* if a proper name or a common noun such as *pútnik* 'the pilgrim' or *náš hrdina* 'our hero' were inserted as subject, hence:

Vedľa chodníka ležal veľký kameň. Ferko si sadol naň a . . .

However, even here, if for reasons of functional sentence perspective the stone had to be in the theme position proper at the head of the clause, one might find: ... *na ten si Ferko sadol a* ...

4.8 Reflexives and reciprocals
Reflexivity and reciprocity share the reflexive pronoun–particle *sa* as the main means of expression, normally only in co-reference ('reference' is problematical in many formally reflexive verbs) with the nominative subject of the same clause. Interpretation of *sa* as reflexive or reciprocal depends chiefly on the semantics of the predicate and the number of the subject. Oravec (1982) has observed that the position of *sa* as reflexive object is weakening, and that of reflexive indirect object *si* even more so, while reciprocal uses prosper, after verbs of volition and communication and transitive verbs with plural subjects. Thus while *má sa rád* has only one interpretation, 'he loves himself', the plural *majú sa radi* is almost guaranteed reciprocal, 'they love each other'. Disambiguating explicit reciprocal devices (*vzájomne* 'mutually', *jeden druhého* 'one another') are consequently rarer than expressions like *sám seba* ('self-EMPH.NOM self-REFL. ACC'), *sám sebe* (DAT) and so on, especially in the plural – *sami seba/sebe* etc. Thus *nerozumejú si* is adequate to convey 'they do not understand each other', any extra *jeden druhému* being possible, but redundant; the sense 'they do not understand themselves' requires explicit rendering of the reflexivity: *nerozumejú sami sebe.*

A reciprocal *sa* may refer to a grammatically singular subject only when a reciprocal act is portrayed from the perspective of one participant, whether or not the other party is equally involved in the action:

Pozdravila sa   s   profesorom.
greeted-F.SG REFL with professor-INST
'She greeted the professor.'
Stretne sa   s   ňou   na námestí.
meet-3.SG REFL with her-INST on square-LOC
'He'll meet her on the square.'

While reflexivity cannot extend beyond the clause, there are circumstances when it crosses infinitival phrase boundaries, most commonly with *dať* 'have, let':

Nedá sa podplatiť
'He can't (won't let himself) be bribed.'
Nedala sa chytiť.
'She didn't let herself get caught.'
Dala sa   ostrihať.
let-F REFL crop-INF
'She had her hair cut.'

That the reflexive pronoun–particle is an argument of the infinitives, not of *dať*, transpires from paradigmatic comparison with verbs complemented by other cases:

Dali si   predstaviť   nových zamestnancov.
let-PL REFL.DAT introduce-INF new   employees-ACC
'They had the new employees introduced to them.'
Prekvapenie nedalo   na seba   dlho čakať.
surprise   not-let-N.SG for self-ACC long wait-INF
'The surprise was not long in coming.' (that is, did not let itself be waited for too long)

Other, rarer, types of cross-infinitival reflexivization also occur, e.g.:

Žiadali   ste   sa   preložiť.
requested-PL AUX-2.PL REFL transfer-INF
'You applied to be transferred.'

a condensation of

Žiadali ste, aby *vás* preložili.
'You applied that they (IMPRS) transfer you.'

4.9 Possession
Possession is expressed primarily by *mať* 'to have'. It competes with more formal *vlastniť* 'possess', and with *byť* and a possessive pronoun. English 'her eyes were blue' and 'she had blue eyes' are both more likely to contain 'have': *oči mala modré, mala modré oči* respectively, than *jej oči boli modré*, with 'be'. Secondary expression of possession in *mať* sentences, by means of the reflexive possessive pronoun, applies only in emphasis, to exclude ambiguity, etc.: *má svoje auto* 'he has his own car' (for example, 'with him'). A different matter is *má vlastné auto* 'he has a car of his own', that is, not borrowed.

Otherwise, all the possessive pronouns are used where no predictions as to ownership could be made: *ich rozhodnutie ho rozčúlilo* 'their decision upset him'; *predáva náš dom* 'he's selling our house'; *môj pes má blchy* 'my dog has fleas'. Where high-probability ownership predictions can be made, possession need not be expressed overtly: *predáva dom* even out of context probably means he is selling his own house; similarly: *stratili sme psa* 'we've lost *our* dog'. With intimate possessions, clothing, body parts, etc. ownership is often expressed by the dative, though the borderline between plain possession and various *dativi (in-)commodi* is a fine one. Examples will suggest the range of possibilities:

Item possessed in nominative:

Vlasy   mu   vypadali.
hair-NOM him-DAT fell out-PL
'His hair fell out.'

where *mu* is in the enclitic slot, only coincidentally after the subject, compare *vypadali mu vlasy* with a different word order, or *Petrovi vypadali vlasy* 'Peter's hair fell out'.

Záhrada   im/susedom   pekne kvitne.
garden-NOM them/neighbours-DAT nicely blooms-3.SG
'Their/the neighbours' garden is flowering nicely.'
Stratili sa   nám   kľúče
lost-PL REFL us-DAT keys-NOM.PL
'Our keys have gone missing.'
Petruške   zomrela matka
Petruška-DAT died-F   mother-NOM
'Petruška's mother has died.'

Item possessed in non-nominative:

Chalani   rozbili   učiteľovi   okno.
lads-NOM.PL broke-PL teacher-DAT window-ACC
'Some lads broke the teacher's window.'
Syn   mu   prerástol   cez hlavu.
son-NOM him-DAT over-grew-SG over head-ACC
'His son has outgrown him.' (that is, 'over his head')
Umyl   jej/mu/si   vlasy
washed-M.SG$_a$ her/him$_b$/self$_a$ hair-ACC.PL
'He$_a$ washed her/his$_b$/his$_a$ hair.' (note: obligatory *si* in reflexive sense)

Possessive adjectives are widely used, based on any masculine or feminine one-word animate nouns except female surnames (in *-ová*) and other adjectival forms. The unmarked position is before the head noun: *otcov klobúk* 'father's hat', *s Verinou matkou* 'with Vera's mother'. If the possessor phrase consists of more than one word it will be in the genitive, usually post-positioned: *diela Františka Miku*, rarely *Františka Miku diela* 'the works of František Miko'. In the ante-position, an obsolete construction had the first constituent in the genitive and the second converted to the possessive adjective: *Františka Mikove diela.* A survival of this occurs in the press when the first constituent is an initial: *rozhodnutie G. Bushovho kabinetu* 'the decision of G. Bush's cabinet'.

4.10   Quantification

The adjectival syntax of numerals (see 3.1.5) is most marked in '1'–'4', and in the masculine animate forms of '5' upwards, hence the agreement in *jeden muž, dva stoly, dvaja muži, piati muži, dve ženy, dve oklná, tri oklná* 'one man, two tables, two men, five men, two women, two windows, three windows (all NOM)'; *jedným mužom, dvoma stolmi, dvoma mužmi, piatimi mužmi, dvoma ženami, dvoma oknami, tromi oknami* (all INST). With '5'

upwards there are three patterns to note: (a) in any nominative or accusative noun phrase the numeral is the head and the quantified entity is in the genitive plural – also possible with animates: *päť mužov/žien/okien*. Verb agreement is with the numeral, treated as neuter singular: *prišlo sedem cudzincov* 'seven foreigners came'. Genitive agreement usually extends into the predicate: *šesť stromov* (GEN) *bolo vyrubaných* (GEN) 'six trees were felled'. (b) In oblique cases there is usually agreement between both parts of the phrase: *piatim študentom* 'five students (DAT)', *siedmimi moriami* 'seven seas (INST)'. (c) The exception to (b) is prepositional phrases, when the numeral often does not inflect: *v sedem (siedmich) prípadoch* 'in seven instances', *s päťdesiat spolužiakmi* 'with fifty school-fellows', *pred sto rokmi* 'a hundred years ago'. As quantifiers *sto* and *tisíc* and, often, inverted numerals from '21' to '99' (*jedenadvadsať* 'one-and-twenty', *päťatridsať* 'five-and-thirty') do not inflect, they have the dependent noun in the genitive plural in any nominative or accusative functions of the whole phrase and neuter third person singular agreement in the verb. Non-inverted numerals ending in '1' (*dvadsaťjeden*) behave similarly; those ending in other digits may be non-inflecting, or they may inflect in both parts: *pred dvadsaťdva rokmi* or *pred dvadsiatimi dvoma rokmi* 'twenty-two years ago'.

The above patterns are unaffected by expressions of approximation, namely the particles *zo* 'about' and *vyše* 'more than': *prišlo ich zo/vyše dvadsať* 'about/more than twenty of them came'.

Indefinite quantifiers behave much as the numerals. They include *niekoľko (dakoľko, voľakoľko)* 'several', *trocha* or *trochu* 'a little', *toľko* 'so much/many' and *koľko* 'how much/many', *mnoho* and *veľa* 'much, many', *priveľa* 'too much, many', *pár* and *zopár* 'a couple, a few' and *málo* 'little, few', and are generally uninflected. Inflecting, adjectival forms do exist, especially with animates and mass nouns: *niekoľkí/mnohí (ľudia) si myslia, že ...* 'several/many people think that ...', *keby mal toľký srd, koľký robí škrek ...* 'if he had the (that is, so much) guts to match the noise (that is, as much as the noise) he makes ...', *čo budeme robiť s toľkým časom?* 'what shall we do with so much time?'

Partitive expressions use primarily the preposition *z* 'out of': *traja/niektorí/dakoľkí z nás* 'three/some/several of us', except for non-countables, when genitive alone suffices: *trocha/časť/polovica múky* 'a bit/some/half of the flour'. Neuter indefinite pronouns may also take a genitive, especially of adjectives: *čo (je) nového?* 'what's new?', *dačo modrého* 'something blue', but the standard codifies agreement in all cases, that is, not only *dačím modrým* (INST), but also *dačo modré* (NOM/ACC).

Collective numerals end in *-oro*: *pätoro, sedmoro* 'a fivesome, sevensome', and are uninflected even in conjunction with *pluralia tantum*: *pätoro šiat/detí* 'five dresses/children', *desatoro božích prikázani* 'the ten commandments', *o pätoro dverách* 'concerning five doors' (*šaty* and *dvere*

are *pluralia tantum*); the same applies to *dvoje* 'two', *troje* 'three', unless accompanying *pluralia tantum*, when they decline in full, like *piati.*

Fractions: 'half' is the non-inflected *pol*: *pol siedmej* (GEN) 'half past six', *o pol siedmej* (LOC) 'at six-thirty'. *Štvrť* 'quarter' is also non-inflecting. Both also exist as nouns, *polovica, štvrtina,* which like other fractional expressions, *tretina, dvadsatina, stotina* 'third, twentieth, hundredth' and so on, are followed in all circumstances by the noun in the genitive. *Väčšina* 'most' behaves likewise.

5   Lexis

5.1   General composition of the word-stock

Slovak is said to preserve the greatest number of Proto-Slavonic lexical items and to have built steadily on that core by derivation, expansion or reduction of original meanings; some of the wealth may survive in just one of the often quite distinctive dialects. Exact statistics cannot be given, owing to uneven tolerance of regionalisms even within the standard lexis, differing assessments of individual items among users and authoritative sources, the relative frequency of items, and the attrition in the native word-stock that accompanies developments in society. There are said to be some 500 new entrants to the word-stock annually, of which the highest proportion are 'international' loans. Currently, every sixth word in the press is a loan. In everyday speech the proportion is lower, while in literature, which draws freely on a vast stock of regionalisms, it is lower still, though pre-twentieth-century loans, and even more so those from before the seventeenth century, are ever-present; despite its 'Slavonic' strength, Slovak was always receptive to incomers, from Slavonic and non-Slavonic sources.

5.2   Patterns of borrowing

Slovak is not only hospitable to loans, but adapts them to native patterns with relative ease. The main sources of loans have been (Old High) German, Czech, Hungarian, Rumanian, Latin, Polish and Russian, French and English. The list is only approximately chronological, and says nothing quantitative.

Many of the first wave of borrowings from German were the early Christian internationalisms in Great Moravia, ultimately of Latin origin, for example, *krstiť* 'baptise' (< *kristenen*), *žehnať* 'bless' (< *seganen, signare*), but some secular items, like *chvíľa* 'moment', *ďakovať* 'thank' or *musieť* 'must', also date from then. The second wave of German loans came with the twelfth–fourteenth-century German colonization of the region. The colonists opened up mines, engaged in viticulture and crafts and in local commerce and administration, leaving in all these fields a permanent mark

on all forms of the language. Examples: *garbiar* 'tanner', *šuster* 'cobbler', *handlovať sa* 'barter', *funt* 'pound', *pančucha* 'stocking'. Slovak retains more of the range (4,000 items in a recent analysis: see Rudolf 1991) than Czech, which confines many Germanisms to slangs and jargons.

Loans from Hungarian have entered Slovak ever since the twelfth century, but not with the same intensity as those from German. They also belong to more everyday life: *gazda* 'farmer', *gombík* 'button' (originally Slavonic loans in Hungarian), *ťarcha* 'burden', also *ťava* 'camel' (from further afield). Slovak and Hungarian opinion is sharply divided on the precise direction of borrowing within the shared stock; such arguments have concerned, for example, *driek* 'trunk', *guľáš* 'goulash' and *sihoť* 'island'.

The Rumanian input is in the terminology of upland sheep-farming, brought in by Wallachian migrants in the thirteenth to fifteenth centuries. Recognizably similar items occur in languages throughout the Carpathian and north Balkan area and include: *bača* 'head-shepherd', *bryndza* 'Liptauer cheese', *strunga* 'sheep-pen', *redikať sa* 'move to a new pasture'.

Latin has given not just the early, general European core of religious and some secular items (*diabol* 'devil', *omša* 'mass', *cintorín* 'cemetery', *kapusta* 'cabbage'), but also many words adopted at the height of Hungarian feudalism and later, when Latin was the language of the church, education, law and administration. The date of entry of individual items cannot be stated with certainty, but many were established by the seventeenth century: *dežma* 'tithe', *kúria* 'mansion', *protokol, kreditor, kalendár*.

Some items here are also disputed, Czech authors claiming the last example as mediated through Czech. Indeed, words from Czech are often impossible to date, or even identify, since they can be minimally modified to give an authentically Slovak appearance. Early borrowings whose Czech origins are not generally disputed include: *prozreteľnosť* 'providence', *otázka* 'question', *cisár* 'emperor', *Ježiš* 'Jesus' and *koleda* 'carol'. From the early fourteenth-century Czech–Slovak cultural contacts formed a strong tradition, associated with the founding of Prague University (1348), the Hussite campaigns (1423–31) and the spread in the use of the Kralice Bible (last quarter of the sixteenth century onwards); for many Slovaks a variously Slovakicized Czech was the literary language (see Ďurovič 1980). Undatable Czech loans include adjectives in *-itý* (*dôležitý* 'important', Czech *důležitý*) and *-teľný* (*znesiteľný* 'tolerable', Czech *snesitelný*), phonologically adapted. From the nineteenth century the picture is clearer: Czech was consciously modernized during the National Revival and many items passed rapidly into Slovak (*udalosť* 'event', *predmet* 'object', *totožný* 'identical' – again with Slovakicizing adjustments); indeed, large areas of terminology became common property, in grammar, the natural sciences and physical education. Twentieth-century purism expunged some Czech loans, but since the war neologizing has largely run parallel. Until quite

recent times Czech influence remained strong in non-standard Slovak as spoken by conscripts or migrant workers, while informal speech in general contained, and may continue to contain, even conscious Czechisms, as part of a given register (*dík* 'thanks', for the stiffer native *vďaka*), or to supply a perceived gap (*všeho všudy* 'all told'). This merely extends the process whereby Czech terms are readily (re-)absorbed if there is no particularly strong motivation for the retention of a distinctive Slovak item (*diaľnica* ‹ *dálnice*, replacing *autostráda* 'motorway').

Czech was also the mediator of many Polish and Russian loans which penetrated various taxonomies and terminologies. Most Polish influence, however, affects only the East-Slovak dialects. Russian items unmediated by Czech include *iskrenný* 'sincere' and *jestvovať* 'exist', while many transparent Russianisms have to do with post-war sociopolitical developments.

The French and English input is in their largely international contribution in the arts (*žáner* 'genre', *rola* 'rôle'), sport (*bodiček, faul, derby*) and technology (*radar, laser, komputer*); computer jargon is one area that goes particularly far in its non-codified use of borrowings, hence such gems as /sejvnúť/ 'save' (on disk). For a good summary on borrowings see Ondruš, Horecký and Furdík (1980: 192–9).

5.3   Incorporation of borrowings

Borrowings are generally assigned to genders and paradigms according to their final sound. Very few fail to be assigned, because of their un-Slovak termination: uninflected *alibi, menu, defilé* (N), *revue, kanoe* (F). 'Classical' items ending in -*us*, -*um*, -*on*, etc. drop the alien case marker before native inflections: *komunizmus/-izmu, kozmos–kozmu, plénum–pléna*, though some are integrated whole: *cirkus–cirkusu, dátum–dátumu* (M!); even fewer exhibit variation: *týfus–týfusu/týfu*. Greek neuters in -*ma* become feminine *a*-stems, as do, with some morphological peculiarities, loans in -*ea*: *drama–dramy*; *idea–idey* (but *idei* (DAT/LOC.SG), *idei* (GEN.PL)).

Adjectival loans are adapted by addition of one or other productive suffix, especially -*ný*, -*ický* and -*ový*; *termálny, computerový, blonďavý*; few survive as non-inflecting: *khaki, gama* (*lúče*) 'gamma (rays)'.

Almost all verbal borrowings attract the -*ovať* suffix; every fourth verb now conjugates like this (Mistrík 1983: 72). They are frequently biaspectual, but the earlier they appeared, the greater the likelihood that a prefixed perfective will have emerged. Such 'new perfectivity' is a transparent feature of the dynamics of contemporary Slovak and affects many quite new arrivals. The prefixes used match those in semantically analogous native words: *za-protokolovať* 'put on record' as in *za-písať* 'note down', *o-xeroxovať* as in *o-písať* 'copy'. Borrowings may occur with an appropriate range of distinct prefixes: *montovať–zamontovať* 'instal', *zmontovať* 'assemble', *rozmontovať* 'dismantle', *primontovať* 'attach'.

5.4   Lexical fields

5.4.1   Colour terms

white	biela[1]	(primary noun) beľ (poetic)
black	čierna	čerň (bookish)
red	červená	červeň
green	zelená	zeleň (also 'greenery')
yellow	žltá	žlť
blue	modrá, belasá[2]; siná (pale blue)	
brown	hnedá, kávová (‹ *káva* 'coffee')[3]	hneď
purple	fialová (‹ *fialka* 'violet')[4]	
pink	ružová (‹ *ruža* 'rose')	
orange	oranžová (loan-word)	oranž (rare)
grey	sivá, popolavá (‹ *popol* 'ash'), šedivá, šedá[5]	

1   The adjectival forms here are feminine, by the normal association of colour terms with *farba* (F) 'colour'. The less widely used noun forms tend to be 'poetic' or 'bookish'; some appear in the names of paints or dyes (*tlačiarenská čerň* 'printing ink'), while others are replaced by adjectival forms (*berlínska modrá* 'Prussian blue').

2   *Modrá* and *belasá* are largely interchangeable and many dictionary examples are the same (sky, forget-me-not, lips in the cold, eyes). 'Blue stockings', 'blue foxes' and 'blue blood' can only be *modrá*.

3   *Hnedá* is the native word, but *kávová* is also widespread; in the standard Czech–Slovak dictionary the two share the load of Czech *hnědá*; *kávová* is fully integrated in the derivational system of colour terms, as in *maľovať na kávovo*, 'to paint something brown'.

4   *Fialová* covers 'purple', 'violet', 'lilac' (also *lilavá*), 'deep mauve' and so on. The colour term *purpurová* is more like crimson and is the colour of kings and cardinals. Another reddish-purple term is *nachová*.

5   The basic colour term here is *sivá*, the colour of, for example, pigeons, eyes, hair, grey cells and *éminences grises*; *šedá* is the grey of ash, dust, glaucoma and mediocrity, while *šedivá* is 'silvery grey', but also the grey of hair, an overcast sky, eyes, smoke and dust, an 'indefinite pale shade'. *Popolavá*, though descriptive in origin, is in wider use as a true colour term than Czech *popelavá*. Preference for any one 'grey' term in a given context type appears to be a matter of idiolect *par excellence*; all informants left it last, or omitted it, on being asked to list the main colour terms.

5.4.2   Body parts

head	hlava
eye	oko (anomalous plural, ex-dual, *oči*)
nose	nos

ear	ucho (anomalous plural, ex-dual *uši*)
mouth	ústa (N *plurale tantum*), pery (lips)
hair	vlasy (collective plural; SG *vlas* on head, otherwise *chlp* or *chlpok* (DIMIN))
neck	krk (*šija* 'back of the neck'; *tylo, zátylok* 'back of the head', 'back of the neck')
arm/hand	ruka (*predlaktie* 'forearm'; *dlaň* 'palm'; *chrbát ruky* 'back of the hand')
finger	prst (*palec* 'thumb')
leg/foot	noha (*chodidlo* 'sole', rarely 'foot')
toe	prst na nohe (*palec* 'big toe')
chest/breast	prsia (*plurale tantum*, also 'breasts'); hruď 'chest, thorax'; prsník-y 'breast-s'
heart	srdce

Body terms are widely used in transferred senses, much as in other languages. However, the Slovak predilection for diminutives, lexical as well as expressive, is used widely to spread the metaphorical loading, hence, for example, a watch has *ručičky*, a pin has a *hlavička*, a jug has a *pyštek* (diminutive of *pysk* 'maw', colloquially also for 'mouth') 'spout', pigs' trotters as a comestible are *nôžky*, and delphinium is *stračia nôžka*.

5.4.3   Kinship terms

mother	mať, matka (plus *mama* and over a dozen other hypocoristic forms based on *mam-*)
father	otec (plus *tata* and about two dozen other hypocoristics based on *ot-, oc-* and *tat-*)
parents	rodičia (*rodič* 'sire'; *rodička* 'woman during or after parturition')
sister	sestra
brother	brat
aunt	teta (parent's sister)
	stryná (wife of paternal uncle)
	ujčiná (wife of maternal uncle; dial. also mother's sister)
uncle	strýko, strýc (father's brother)
	ujec, ujo (mother's brother; dialectal also mother's sister's husband)
	svák, sváko (parent's sister's husband)
niece	neter*
nephew	synovec

*While the distinctions between various uncles and aunts are still largely observed, attrition has greatly reduced the terms (often multiword expressions) for cousins and nieces/nephews (see Habovštiaková 1978).

cousin (female)	sesternica
cousin (male)	bratanec
grandmother	stará mama/mať, starká
grandfather	starý otec, dedko
wife	manželka (also *žena* 'woman' if accompanied by possessive pronoun)
husband	manžel (also *muž*, see above; *manželia* 'husband and wife', 'Mr and Mrs')
daughter	dcéra
son	syn

6 Dialects

The dialects of Slovak are remarkably well preserved in considerable variety, although the effects of a standard language and the pressure for uniformity it brings are strongly felt. The dialects themselves are so resilient that many regional features, especially lexical, are accorded the status of alternatives within the standard. The three main dialect groups are Central, the basis of the standard language, Western, which shares some features with adjacent Moravian dialects of Czech, and Eastern, the most striking both lexically and phonologically. In part because of physical geography, in part because of the relatively late start of major demographic changes, each area has many important surviving subdialects, too varied to describe here in detail, but regularly identified by the names of the old counties concerned.

The main distinctive features of **Western Slovak** are as follows (in broadly phonetic transcription):

1 *ort, *olt › *rot-*, *lot-* over much of the area, if not for every instance: for example, *rokita* 'sallow', (*v*)*loňi* 'last year';
2 almost all strong *jers* › *e*: *rež* 'rye', *len* 'flax', *déšč* 'rain';
3 front nasal *ę* › *a/á*: *maso* 'meat', *páti* 'fifth', *nosá* 'carry (3 PL *i*-conjugation)';
4 no rhythmical shortening;
5 no diphthongs, hence: *kóň/kúň* 'horse', *ňésť/ňisť* 'carry', *vázať* 'tie';
6 *v/f* fully integrated into set of voiced–voiceless consonant pairs;
7 only one, middle, *l* phoneme;
8 gemination of certain consonants: *srcco*, *masso*, *kašša*, *stojjá* (for *srdce* 'heart', *maso* 'meat', *kaša* 'gruel', *stoja* 'they stand');
9 soft nouns nominative neuter singular in *-o*: *srcco*, *plecco* 'shoulder', *vajco* 'egg';
10 masculine animate neuter plural nouns in *-é* or *-ié* where standard has *-ia*: *luďé/ludé/ludié*, *sinovié* 'sons';
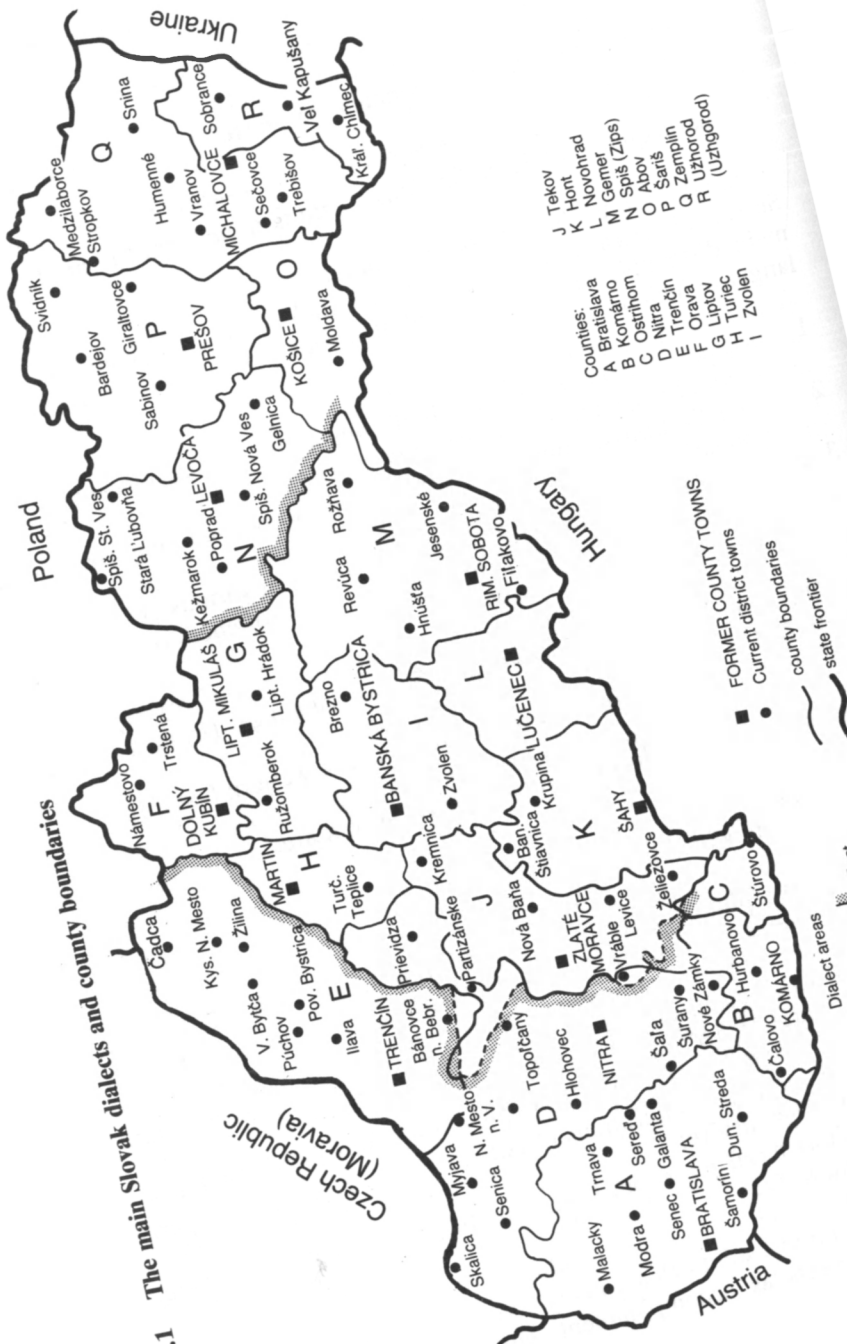
11 feminine instrumental singular in -ú or -u: s tú dobrú ženú 'with that good woman';
12 neuter nominative singular ьjo-stems in -é or -i: znameňé/-i;
13 soft adjectival declension closer to hard type: cudzého: dobrého;
14 certain infinitives and conjugations have short -e- to standard -ie-: ňesem, veďeť;
15 negative conjugation of byť: ňeňi som, ňeňi si, ňeňi je ... ňeňi sú, the parts quite mobile in the clause: ešče sú tu ňeňi 'they're not here yet'.

In addition to the **Central-Slovak** dialect area shown on map 10.1, the Slovak diaspora in Hungary and the Balkans also originated here. The main distinctive features of Central Slovak not present in the standard language include:

1 original -tl-, -dl- › -l-: salo 'lard', omelo 'flue-brush' (accepted in the standard language as alternative to ometlo);
2 bilabialization of final -l in l-participle masculine singular: mislew 'thought';
3 widespread incidence of ä of various origins in various environments; of particular interest is its appearance after softened velars (kämeň 'stone'), another local feature;
4 adjectives nominative singular neuter in -uo (or -o if rhythmical law applies): náreč̌je slovenskuo 'the Slovak language' (from a title by Štúr);
5 third person plural of byť: sa (standard sú is a western feature);

The main features distinguishing **Eastern Slovak** are:

1 loss of quantity;
2 penultimate word stress;
3 *orT, *olT › roT-, loT-: rokita, loňi;
4 nominative plural masculine animate in -e where standard has -ia: ľudze, sinove; this is one of many similarities to the western dialects, allowing for the loss of quantity. Others include the types znameňe, ňe-šem (1 SG), adjectival cudze: dobre, soft neuters vajco, pľeco, third person plural of byť: su;
5 ie › i, uo › u over most of the area, hence mira 'measure', kuň 'horse', with other monophthongizations elsewhere: mera, koň; in some parts the diphthongs survive;
6 original short nasal ę › e, but long › ia after labials and a elsewhere: meso, piati, noša;
7 ť, ď › ts, dz: dzeci, isc (for deti 'children', isť 'go');
8 no syllabic liquids; solutions are many and various, including almost all available vowels as accompaniment, either preceding or following.

Map 10.1 The main Slovak dialects and county boundaries

Czech Republic (Moravia)

Poland

Ukraine

Hungary

Austria

Counties:
A Bratislava
B Komárno
C Nitra
D Nitra
E Trenčín
F Orava
G Liptov
H Turiec
I Zvolen
J Tekov
K Hont
L Novohrad
M Gemer
N Spiš (Zips)
O Abov
P Šariš
Q Zemplín
R Užhorod (Uzngorod)

FORMER COUNTY TOWNS

■ FORMER COUNTY TOWNS
● Current district towns
county boundaries
state frontier

Dialect areas

West Slovak | Central Slovak | East Slovak

Based on a map by Jozef Štolc in J. Bělič et al.: 1980.

Towns (as labelled on map):
Snina, Medzilaborce, Stropkov, Humenné, Vranov, Sobrance, Sečovce, MICHALOVCE, Trebišov, Kráľ. Chlmec, Veľ Kapušany, Svidník, Bardejov, Giraltovce, PREŠOV, Sabinov, Spiš. Nová Ves, Gelnica, KOŠICE, Moldava, Spiš. St. Ves, Stará Ľubovňa, Kežmarok, Poprad, LEVOČA, Rožňava, Revúca, Jesenské, Hnúšťa, RIM. SOBOTA, Fiľakovo, Trstená, Námestovo, DOLNÝ KUBÍN, LIPT. MIKULÁŠ, Lipt. Hrádok, Ružomberok, Brezno, BANSKÁ BYSTRICA, Zvolen, Kremnica, LUČENEC, Krupina, Ban. Štiavnica, Čadca, Kys. N. Mesto, Žilina, MARTIN, Turč. Teplice, Prievidza, Partizánske, Nová Baňa, ZLATÉ MORAVCE, Vráble, Levice, Želiezovce, ŠAHY, Štúrovo, v. Bytča, Púchov, Pov. Bystrica, Ilava, TRENČÍN, Bánovce n. Bebr., Topoľčany, Hlohovec, NITRA, Šaľa, Suraný, Nové Zámky, Hurbanovo, KOMÁRNO, Čalovo, Skalica, Myjava, N. Mesto n.V., Senica, Malacky, Trnava, Modra, Sered, Galanta, Senec, Šamorín, Dun. Streda, BRATISLAVA

Almost as mixed are the various exceptions to the basic reflex of the *jers* as *e*;

9 genitive and locative plural of all genders in *-och* or *-of*, and all dative plural in *-om*;
10 instrumental singular feminine in *-u*: *s tu dobru ženu*;
11 possessive pronouns and adjectives in nominative plural end in *-o*, irrespective of gender: *mojo dzeci* 'my children', *bratovo chlapci* 'my brother's boys'; moreover, even a feminine possessor may use the suffix *-ovo* instead of *-in-*: *Haňkovo dzeci* 'Hana's children'.

Acknowledgement

References

Bartoš, J. and Gagnaire, J. (1972) *Grammaire de la langue slovaque*, Bratislava: Matica slovenská, Paris: Institut d'Etudes Slaves.
Bělič, J., Jedlička, A., Jóna, E., Pauliny, E., Ružička, J. and Štolc, J. (1980) *Slovenština* (6th edn), Prague: Státní pedagogické nakladatelství, 159.
Ďurovič, Ľ. (1980) 'Slovak', in A.M. Schenker and E. Stankiewicz (eds) *The Slavic Literary Languages: Formation and Development*, New Haven, Conn.: Yale Concilium on International and Area Studies, 212–28, (bibliog.) 278–80.
Dvonč, L. (1968) 'On the formation of the passive participle in literary Slovak', *Recueil linguistique de Bratislava* 2: 124–7.
—— (1978) 'Words of English origin in Slovak', *Recueil linguistique de Bratislava* 5: 181–7.
—— (1989) 'Stability and dynamism in the declension of nouns in literary Slovak', *Recueil linguistique de Bratislava* 9: 97–106.
Habovštiaková, K. (1972) 'Le rôle de la langue tchèque dans la formation de la langue culturelle de la nationalité slovaque', *Recueil linquistique de Bratislava* 3: 127–34.
—— (1978) 'L'évolution de la microstructure sémantique des noms des membres de familles et des parents éloignés dans la langue slovaque', *Recueil linguistique de Bratislava* 5: 199–213.
Horecký, J. (1971) *Slovenská lexikológia*, vol. I: *Tvorenie slov*, Bratislava: SPN.
—— (1972) 'The phonological system of literary Slovak', *Recueil linguistique de Bratislava* 3: 37–49.
—— (1978) 'On semantic features of derivational meaning', *Recueil linguistique de Bratislava* 5: 93–7.
Horecký, J., Buzássyová, K. and Bosák, J. (1989) 'The dynamism of the word-stock of contemporary Slovak', in *Dynamika slovnej zásoby súčasnej slovenčiny*, Bratislava: Veda, 387–404.
Miko, F. (1972) 'Passive transformation in the Slovak language', *Recueil linguistique de Bratislava* 3: 73–7.

Mistrík, J. (1966) *Slovosled a vetosled v slovenčine*, Bratislava; Vydavateľstvo SAV, English résumé 245–50.

—— (1983) *A Grammar of Contemporary Slovak*, Bratislava, SPN.

—— (1985) 'The modernization of contemporary Slovak', in G. Stone and D. Worth (eds) *The Formation of the Slavonic Literary Languages*, Columbus, Ohio: Slavica, 72–6.

Ondruš, P., Horecký, J. and Furdík, J. (1980) *Súčasný slovenský spisovný jazyk: Lexikológia*, Bratislava: Slovenské pedagogické nakladateľstvo.

Oravec, J. (1982) 'The objective reflexive pronoun in Slovak', *Recueil linguistique de Bratislava* 6: 205–14.

—— (1984) 'Variant suffixes in Slovak genitive singular of pattern "dub"', *Recueil linguistique de Bratislava* 7: 97–102.

Oravec, J. and Bajzíková, E. (1982) *Súčasný slovenský spisovný jazyk: syntax*, Bratislava: SPN.

Oravec, J., Bajzíková, E. and Furdík, J. (1984) *Súčasný slovenský spisovný jazyk: morfológia*, Bratislava: SPN.

Rudolf, R. (1991) *Die deutschen Lehn- und Fremdwörter in der slowakischen Sprache*, Vienna: Verband der wissenschaftlichen Gesellschaften Österreichs.

Sabol, J. (1978) 'On the morphology of Slovak substantives', *Recueil linguistique de Bratislava* 5: 61–70.

—— (1984) 'A synthetic phonological theory', *Recueil linguistique de Bratislava* 8: 25–9.