1. Inflectional morphology

One of the roles which morphology plays is to allow speakers to select from a number of choices which their language provides them. These choices can involve selecting the right tense for a verb, or the right agreement endings for an adjective, or many others. We refer to morphological operations which make a choice of this type as “inflection”.

In order to understand inflection, it is necessary to understand what the range of inflectional “choices” includes. In other words, we need to learn what types of inflectional categories there are. We will look at a number of different inflectional categories, first those which typically affect inflection on nouns, and then those which often appear in verbal inflection.

1.1. Inflection on nouns

1.2. Number

Number inflections indicate a contrast involving countable quantities. English distinguishes singular nouns from plural nouns.

truck vs. trucks

Other languages may make more or fewer contrasts with number inflections.

Inuktitut
Section 1: Inflectional morphology

iglu       igluk       iglut
‘a house’  ‘two houses’  ‘3 or more houses’

Inuktitut uses *dual* forms of nouns, as well as singular and plural forms

Nancowry

(1)    sak    not    ?in    ci?ehy.
spear pig the we
‘We speared the pig(s).’

Nancowry uses no number inflections, so that the same noun may refer
to either singular or plural objects.

1.3. Noun class

In many languages, nouns are divided into separate classes. Noun classes
may be associated with semantic distinctions, historical origins, sound pat-
terns, or all or none of these.

**SiSwati**

<table>
<thead>
<tr>
<th>um-</th>
<th>um-fana</th>
<th>‘boy’</th>
<th>persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>li-</td>
<td>li-dvolo</td>
<td>‘knee’</td>
<td>body parts, fruit</td>
</tr>
<tr>
<td>si-</td>
<td>si-tja</td>
<td>‘plate’</td>
<td>instruments, tools</td>
</tr>
<tr>
<td>in-</td>
<td>in-ja</td>
<td>‘dog’</td>
<td>animals</td>
</tr>
<tr>
<td>bu-</td>
<td>bu-bi</td>
<td>‘evil’</td>
<td>abstract properties</td>
</tr>
<tr>
<td>pha-</td>
<td>pha-nde</td>
<td>‘outside’</td>
<td>locations</td>
</tr>
</tbody>
</table>
The traditional term for noun class distinctions in many languages is *gender*. (SiSwati uses the same noun class for masculine and feminine objects.)

<table>
<thead>
<tr>
<th>Russian</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dom</td>
<td>ulic-a</td>
</tr>
<tr>
<td>‘house’</td>
<td>‘street’</td>
</tr>
<tr>
<td>muzh</td>
<td>zhen-a</td>
</tr>
<tr>
<td>‘husband’</td>
<td>‘wife’</td>
</tr>
</tbody>
</table>

Russian distinguishes 3 noun classes: masculine, feminine, and neuter.

### 1.4. Portemanteau morphemes

Sometimes a single morpheme expresses more than one inflectional idea. In Innu-aimôn nouns, for example, there is a noun class distinction between ‘animate’ and ‘inanimate’ nouns, as well as a number distinction between singular and plural nouns. As the following examples show, however, there is no single morpheme which indicates that a noun is either plural or animate. Instead, the suffix *-at* simultaneously signals the noun class and number for the animate plural noun it attaches to. We call this type of multi-functional morpheme a “portemanteau” morpheme.

**Innu-aimôn**
ishkueu “woman” ishkueuat “women”
napeu “man” napeuat “men”
asham “snowshoe” ashamat “snowshoes”
uapush “rabbit” uapushat “rabbits”
mukuman “knife” mukumana “knives”
mitshuap “house” mitshuapa “houses”
passikan “rifle” passikana “rifles”

1.5. Case

Case inflection matches the grammatical function of a noun with its morphological form.

Puella venit. (Latin)
girl-NOM arrives

‘The girl comes.’

Puella puer-um audit.
girl-NOM boy-ACC hears

‘The girl hears the boy.’

Puer-um puella audit.
boy-ACC girl-NOM hears

‘The girl hears the boy.’
German

Der gross-e Hund knurrte.
the-NOM big-NOM dog growled

Der gross-e Hund biss den klein-en Mann.
the-NOM big-NOM dog bit the-ACC small-ACC man

- Case can be marked on the determiner and/or adjective instead of a noun

Turkish

Adam ev-i Ahmed-e göster-di.
Adam house-ACC Ahmed-DAT showed

‘Adam showed the house to Ahmed.’

Ev-in rengi mavidir.
house-GEN colour blue

‘The house’s color is blue.’

Adam ev-de kaldı.
Adam house-LOC stayed
Section 1: Inflectional morphology

‘Adam stayed in the house.’

Adam ev-den cikti.
Adam house-ABL went

‘Adam went from the house.’

Linguists use the following terminology to refer to the specific case inflections which correspond to each grammatical functions:

<table>
<thead>
<tr>
<th>Grammatical function</th>
<th>Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>subject</td>
<td>nominative</td>
</tr>
<tr>
<td>(direct) object</td>
<td>accusative</td>
</tr>
<tr>
<td>indirect object</td>
<td>dative</td>
</tr>
<tr>
<td>possessor</td>
<td>genitive</td>
</tr>
<tr>
<td>‘location’</td>
<td>locative</td>
</tr>
<tr>
<td>‘origin’</td>
<td>ablative</td>
</tr>
<tr>
<td>‘instrument’</td>
<td>instrumental</td>
</tr>
<tr>
<td>‘hey you’</td>
<td>vocative</td>
</tr>
</tbody>
</table>

Case in English

Case inflection appears in English pronouns, and in possessor nouns.

<table>
<thead>
<tr>
<th>Nominative</th>
<th>Accusative</th>
<th>Genitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, she, they, we</td>
<td>me, her, them, us</td>
<td>my, her, their, our</td>
</tr>
</tbody>
</table>
(2) I introduced them to her sister.

(3) Peter’s work, the neighbour’s dog, the Queen of England’s hats

1.6. Ergative case systems

In some languages, the case of a direct object is identical to the case for the subject of an intransitive verb. We call these languages “ergative” languages.

**Yidiny**

Yidiny

Wagudya-ngu dyugi gundal.
man-ERG tree cut
Section 1: Inflectional morphology

‘The man is cutting the tree.’

Wagudya gundal.
man cut

‘The man is cutting.’

1.7. Verbal categories

Verbs may be inflected with:

- tense
- aspect
- mood
- agreement:

1.8. Tense

Tense inflection

Tense inflection signals the relationship between the time an utterance is spoken and the time of the situation/action which it describes.

In many languages, there is a 3-way tense distinction between past, present, and future.
### Section 1: Inflectional morphology

| **past** | situation time precedes utterance time | ‘I swept the floor’ |
| **present** | situation time coincides with utterance time | ‘I sweep the floor’ |
| **future** | situation time follows utterance time | ‘I will sweep the floor’ |

In English, present and past tense are marked with inflection; future tense is absent in English inflection, although it can be indicated with a modal auxiliary verb.

#### Spanish tense inflection

(4)

<table>
<thead>
<tr>
<th>Juan habl-ó bien.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan speak-PAST well</td>
</tr>
<tr>
<td>‘Juan spoke well.’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>a. Juan habl-a bien</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan speak-PRESENT well</td>
</tr>
<tr>
<td>‘Juan speaks well’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Juan habl-ará bien</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan speak-FUTURE well</td>
</tr>
<tr>
<td>‘Juan will speak well.’</td>
</tr>
</tbody>
</table>

Spanish uses inflection to mark past, present, and future. Other languages may distinguish fewer or more tenses grammatically.
Dyirbal

(5) bani-ũ vs. bani-ũu
will come came, is coming

ChiBemba

(6) ba-àlí-bomba. ‘They worked (before yesterday).’ ba-àlí-bomba. ‘They worked (yesterday).’ ba-àcí-bomba. ‘They worked (earlier today).’ ba-á-bomba. ‘They worked (just now).’

(7) ba-ká-bomba. ‘They’ll work (after tomorrow).’ ba-kà-bomba. ‘They’ll work (tomorrow).’ ba-léé-bomba. ‘They’ll work (later today).’ ba-áláá-bomba. ‘They’ll work (very soon).’

1.9. Aspect

Aspect inflection relates the internal structure of an event to the situation time.

English inflection provides two marked aspectual options: imperfective (progressive) and perfective.

Imperfective aspect indicates that the situation time is located internal to an ongoing event.

(8) Peter is making a soufflé.
Aspectual inflection normally co-occurs with tense inflection.

(9) Peter was making a soufflé. (past progressive) Peter will be making a soufflé. (future progressive)

In English, progressive aspect is used in place of the unmarked tense form for any event which ‘progresses’.

(10) John is swimming. (present progressive) John loves opera. (present, unmarked for aspect)

In many European languages, past tense and progressive aspect are expressed simultaneously with a single morpheme.

(11) Claire nage-ait.
Claire swim-IMPERFECTIVE
‘Claire was swimming.’

When a single morpheme indicates multiple meanings, it is called a *portmanteau* morpheme.

**Perfective aspect**
Perfective aspect indicates that the situation time is after the end of an event.
Perfective aspect is distinct from past tense in form and meaning. Tense and perfective aspect can be combined.

(13) John had baked a soufflé. (past perfective) John will have baked a soufflé. (future perfective)

In English, progressive and perfective aspect can be used together.

(14) John will have been baking a soufflé.

Other languages include inflections for:

• habitual aspect,
• inchoative aspect,
• seriative aspect,
• semelfactive aspect,
• and many others.

1.10. Mood

Languages can use inflection to indicate the degree of reality of a situation. The common mood inflections include:
Section 1: Inflectional morphology

- indicative, e.g. John is happy.
- subjunctive/irrealis, e.g. I require that John be happy.
- imperative, e.g. Be happy!

1.11. Agreement

Agreement is a linguistic phenomenon in which the form of a verb (or adjective, preposition, noun, etc.) is selected to match some inflectional properties of a related noun. The most common form of agreement is between a verb and its grammatical subject. Agreement often involves inflectional categories of number and person.

Person in inflection

Person inflection distinguishes between nouns based on their roles in a speech act.

<table>
<thead>
<tr>
<th>Person</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>me</td>
<td>1st speaker</td>
</tr>
<tr>
<td>you</td>
<td>2nd addressee/listener</td>
</tr>
<tr>
<td>she, he, it</td>
<td>3rd outside the speech act</td>
</tr>
</tbody>
</table>
**Person agreement - Italian**

parlare “to speak”

- io parlo “I speak”
- tu parli “you speak”
- Gianni parla “John speaks”

- noi parliamo “we speak”
- voi parlate “you speak”
- Maria e Gianni parlano “Mary and John speak”

**English subject-verb agreement**

In English, subject verb agreement is found only with singular irregular verbs (be, have) and with regular verbs in the present tense with 3rd persons

- “be”
  - I am we are
  - you are you are
  - she is they are

- “laugh”
  - I laugh we laugh
  - you laugh you laugh
  - she laughs they laugh

**Agreement in Cree**
Section 1: Inflectional morphology

ninipan  “I sleep”
kinipan  “you sleep”
nipaw    “she sleeps”
ninipanan “we sleep” (exclusive)
kinipanan “we sleep” (inclusive)
kinipawaw “you sleep”
nipawak   “they sleep”

Agreement in Navaho

yishcha  “I cry”
nicha     “you cry”
yicha     “he cries”
jicha     “he cries”
yiilcha   “we cry”
wołcha    “you cry”
diicha    “they cry”

hòtaał    “he sings”