

## Syntactic marker: Definition

**Syntactic markers** are serial graphemic elements that encode syntactic information. They indicate coherence within phrases and between words or word groups on the clause level. Syntactic markers are word-related orthographically, but link larger entities of a sentence. In many languages, syntactic markers are identical with inflection affixes. Syntactic markers are either unrelated to phonology or cannot be recoded clearly.

The correct detection or production of a syntactic marker is not a result of the lexical identification of a word, but of structural relations within a group of words (Bock & Ferreira, 2014).

## Syntactic processing in spelling and reading

**Syntactic spelling** refers not only to the correct spelling of a syntactic marker but to its correct application within a given syntactical context.

**Syntactic reading** takes place in cases of doubt or whenever the information cannot be extracted from the semantic context. In these cases, readers use the syntactic marker as probabilistic cue to grammatical category (Arciuli & Monaghan, 2009; Funke & Sieger, 2012).  
*the friends drink vs. the friend's drink.*

## Morphology subsumes syntax in existing spelling models

**Existing spelling models** distinguish between phonologic, orthographic, and morphological spellings. So-called “morphological spellings” (Pacton & Deacon, 2008; Bahr et al., 2012) refer to morphologically complex words with stem (e.g., *sing*) and one or more affixes, and enclose derivational (e.g., *singer*) and inflectional (e.g., *sings*) morphology.

## Instruction of syntactic markers

Les grands ogres gentils mangent une bonne pizza.

Neben dem großen, schönen Schneesee lebte eine große, schöne Fee.

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## Syntactic markers across orthographies: Examples + grapheme + morpheme <sup>1</sup>

<sup>1</sup> the + refers to morpheme and grapheme boundary

### English

**past tense marker <ed>** on regular verbs (Nunes et al., 1997b).

- > The marker clearly indicates a verb form in contrast to nouns or adjectives.
- > The phonological word form varies, according to the phonological context, between [t] or [d].
- > Confusion in spelling might be possible between the ending of a (one-morpheme) noun such as *bird* [bɜrd] or *belt* [bɛlt].

kiss+ed

### French

**plural marker <s>** on nouns, adjectives; <nt> on verbs (3.PI).

- > In oral French, the singular and plural sound identical, except of the article.
- > Plural is conveyed by all the elements within a noun phrase and within subject-verb agreement (Dubois, 1965).
- > The singular form is not marked orthographically.

NP [iLe grand chat noir] mange  
[lɛ ɡʁɑ̃ʃa mɑ̃ʒ]

vs.

NP [Le+s grand+s chat+s noir+s] mange+nt  
[lɛ ɡʁɑ̃ʃa mɑ̃ʒ]  
(‘The big cat/s black eat/s’).

### Dutch

**Present tense 2<sup>nd</sup> and 3<sup>rd</sup> person singular <t>**

- > Present tense, the 1<sup>st</sup> person singular keeps the stem form, the 2<sup>nd</sup> and 3<sup>rd</sup> person singular add the suffix <t>.
- > In most cases, both verb forms are phonologically transparent.
- > They become homophonous, when the stem ends on <d>.
- > Congruity errors on the lower-frequency form (Sandra and Van Abbenyen, 2009).

ver+moord (‘to murder’)  
ver+moord (1. Sg. pres.)  
ver+moord+t (3. Sg. pres.)  
moord (‘murder’)  
> all pronounced [mo:rt]

## Syntactic markers across orthographies: Examples - grapheme - morpheme

### German

#### noun capitalization

- > ... contrasts upper and lower case
- > ... does not refer to a grapheme but to the first letter of a word (cf. Kohrt, 1985).
- > ... does not encode an additional morpheme

Sie mögen schwimmen. (‘They like to swim’)  
vs.  
Sie mögen Schwimmen (‘They like swimming’).

Schwimmen vs. \*SCHwimmen

#### noun phrase agreement in the German

- > includes gender, number, case and definiteness. They are encoded in a complex combination of the determiner’s form and adjective suffixes (Eisenberg, 2013).
- > The visually distinct element that highlights a given NP within a clause is the capitalized noun: While the noun closes the NP-unit, the capital letter highlights this demarcation visually (Maas, 1992; Funke, in press).

Ich hörte NP[sein schönes Singen]  
(‘I heard his beautiful singing’)

Ich hörte NP[ihren schönen Gesang]  
(‘I heard her beautiful song’)

#### noun in German

- > almost every word can become a noun without any morphological modification, although this is mainly applied to adjectives and verbs.

Ich hörte NP[sein schönes Singen]  
(‘I heard his singing’)

vs.

Ich hörte NP[ihn] schön singen  
(‘I heard him singing’)

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## Outlook

### Creation of an internet platform *Syntax meets orthography* (<https://syntaxmeetsorthography.uni.lu/>)

- > *Syntax meets orthography* seeks to be a platform to discuss syntactic markers across languages and writing systems. The platform embraces linguistic modelling of the markers itself as well as studies on their production (spelling) and their use in reading including learning development and instruction.
- > Discussion of papers in bi-annual mini-conferences à 60 minutes (2 paper presentations à 5-10 minutes plus discussion)