# Is lexical insertion regulated by the subset or the superset principle?

Pavel Caha

Masaryk University (Brno)

Linguistic Flashmob 18 February 2021

- Syncretism
- ► Portmenteau morphemes

## Syncretism

Portmanteau

The Subset Principle

The Superset principle

	war	servant
NOM	bell- <b>um</b>	serv-us
ACC	bell- <b>um</b>	serv- <b>um</b>

		war	servant
NOM	[A]	bell- <b>um</b>	serv-us
ACC	[A,B]	bell- <b>um</b>	serv-um

		war	servant
NOM	[A]	bell- <b>um</b>	serv-us
ACC	[A,B]	bell- <b>um</b>	serv-um

(1) Lexical entries can match multiple feature structures

		war	servant
NOM	[A]	bell- <b>um</b>	
ACC	[A,B]	bell- <b>um</b>	

- (1) Lexical entries can match multiple feature structures
  - a. Subset: um = [A]

		war	servant
NOM	[A]	bell- <b>um</b>	serv-us
ACC	[A,B]	bell- <b>um</b>	serv-um

- (1) Lexical entries can match multiple feature structures
  - a. Subset: um = [A]
  - b. Superset: um = [A,B]

## **Syncretism**

#### Portmanteau

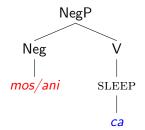
The Subset Principle

The Superset principle

(2) ca -n -ta sleep -pres -decl 'is sleeping'

- (2) ca -n -ta sleep -pres -decl 'is sleeping'
- (3) mos/an(i) ca -n -ta neg sleep -pres -decl 'can't sleep / isn't sleeping'

- (2) ca -n -ta sleep -pres -decl 'is sleeping'
- (3) mos/an(i) ca -n -ta neg sleep -pres -decl 'can't sleep / isn't sleeping'



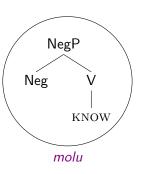
(4) al -n -ta know -pres -decl 'knows'

- (4) al -n -ta know -pres -decl 'knows'
- (5) \*mos/an(i) al -n -ta neg know -pres -decl 'cannot / does not know'

- (4) al -n -ta know -pres -decl 'knows'
- (5) \*mos/an(i) al -n -ta neg know -pres -decl 'cannot / does not know'
- (6) molu -n -ta neg.know -pres -decl 'cannot / does not know'

- (4) al -n -ta know -pres -decl 'knows'
- (5) \*mos/an(i) al -n -ta neg know -pres -decl 'cannot / does not know'
- (6) molu -n -ta neg.know -pres -decl 'cannot / does not know'
- (7) molu = [NEG KNOW]

- (4) al -n -ta know -pres -decl 'knows'
- (5) \*mos/an(i) al -n -ta neg know -pres -decl 'cannot / does not know'
- (6) molu -n -ta neg.know -pres -decl 'cannot / does not know'
- (7) molu = [NEG KNOW]



## Syncretism

Portmanteau

The Subset Principle

The Superset principle

## The Subset Principle

(8) The Subset Principle (Halle 1997)
The phonological exponent of a Vocabulary Item is inserted into a morpheme of the terminal string if the item matches all or only a subset of the grammatical features specified in the terminal morpheme.

## The Subset Principle

(8) The Subset Principle (Halle 1997)
The phonological exponent of a Vocabulary Item is inserted into a morpheme of the terminal string if the item matches all or only a subset of the grammatical features specified in the terminal morpheme.

(9) The Modified Subset Principle (would fail, if proposed)
The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.

- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEG KNOW]$

(10) The Modified Subset Principle
The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.

- (11)  $molu \Leftrightarrow [NEGKNOW]$
- (12) al-liknow-caus 'let know, inform'

- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEGKNOW]$
- (12) al-li- CausP know-caus 'let know, inform' V Caus | | KNOW -li

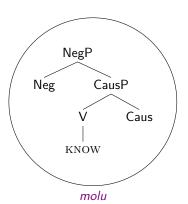
- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEGKNOW]$
- (12) al-liknow-caus
  'let know, inform'

  Neg CausP

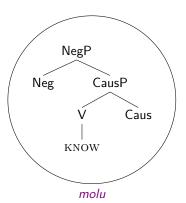
  V Caus

  |
  KNOW -li

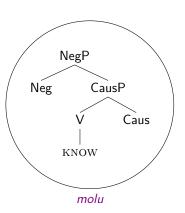
- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEG KNOW]$
- (12) al-liknow-caus 'let know, inform'



- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEG KNOW]$
- (12) al-liknow-caus 'let know, inform'
- (13) \*molu (-li) -ess -ta neg+know -caus -past -decl 'did not /could not inform'



- (10) The Modified Subset Principle
  The phonological exponent of a Vocabulary Item is inserted into a **node** if the item matches all or only a subset of the grammatical features specified in the **node**.
- (11)  $molu \Leftrightarrow [NEG KNOW]$
- (12) al-liknow-caus 'let know, inform'
- (14) mos al-li-ess-ta neg know-caus-past-decl 'did not /could not inform'



Syncretism

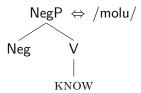
Portmanteau

The Subset Principle

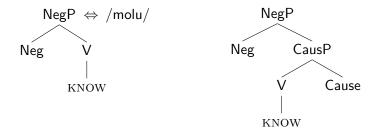
The Superset principle

(15) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.

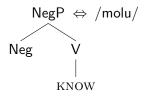
(15) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L
contains the syntactic tree dominated by S as a subtree.

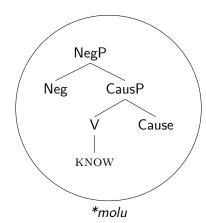


(15) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L
contains the syntactic tree dominated by S as a subtree.

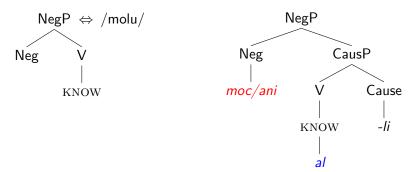


(15) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L contains the syntactic tree dominated by S as a subtree.





(15) The Superset Principle
A lexically stored tree L matches a syntactic node S iff L
contains the syntactic tree dominated by S as a subtree.



Syncretism

Portmanteau

The Subset Principle

The Superset principle

- Both principles can give an account of syncretism
- ► The Superset Principle can also inform us when portmanteau morphemes are possible and when they are impossible

#### References I

Chung, Inkie. 2007. Suppletive negation in Korean and distributed morphology. *Lingua* 117. 95–148.

Halle, Morris. 1997. Impoverishment and fission. In Benjamin Bruening, Y. Kang & Martha McGinnis (eds.), Papers at the interface, vol. 30 MIT Working Papers in Linguistics. 425 – 449. Cambridge, Mass.