




An Animated and Narrated Glossary of  
Terms used in Linguistics  
*presents*

# Complementary distribution



## Definition

- Two forms **A** and **B** are in complementary distribution if they **never occur** in the **same environment**.

E.g.	Sun 	Stars 
When can they be seen?	Only at daytime	Only at night

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[http://www.nasa.gov/centers/goddard/images/content/137159main\\_FirstStars\\_top\\_annel\\_lg.jpg](http://www.nasa.gov/centers/goddard/images/content/137159main_FirstStars_top_annel_lg.jpg)

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## Basic Idea

- The **distribution** of the two forms **do not overlap**.

Example

*Distributions*

Spiderman

When there is danger and crime

Peter Parker

Elsewhere

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## Complementarity and Identity

If an entity X has multiple manifestations, then all manifestations of X would be in complementary distribution.

Thus, when two forms are in complementary distribution,

- One suspects that underlyingly they are really the same thing with different manifestations
- But this is not necessarily so.

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## Example from English

“pet”	[p <sup>h</sup> et]	*[pet]
“map”	[mæp]	*[mæp <sup>h</sup> ]
“spin”	[spɪn]	*[sp <sup>h</sup> ɪn]
“rapid”	[ˈræpɪd]	*[ˈræp <sup>h</sup> ɪd]
“rapidity”	[rəˈp <sup>h</sup> ɪdɪti]	*[rəpɪdɪti]

- [p<sup>h</sup>] occurs as the onset of a stressed syllable.
- [p] occurs elsewhere.
- In English, [p<sup>h</sup>] and [p] are in complementary distribution.

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## Example from German

<i>der</i>	“the” [+ masculine]
<i>den</i>	

*Der* Tisch ist gut.

“The table is good.”

\**Den* Tisch ist gut.

Ich mag *den* Tisch.

“I like the table.”

\*Ich mag *der* Tisch.

Why *der* and *den* are in complementary distribution?

- *Der* only occurs in the subject position whereas
- *Den* only occurs in the object position.

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## Further reading

- Davenport, Mike and S. J. Hannahs (2005) *Introducing Phonetics and Phonology*, 2<sup>nd</sup> edition, Chapter 8.2.2. New York: Hodder Arnold Publication.
- Gussenhoven, Carlos and Haike Jacobs (2005) *Understanding Phonology*, 2<sup>nd</sup> edition, Chapter 4.2. New York: Hodder Arnold.
- Hawkins, Peter (1992) *Introducing Phonology*. London: Routledge.
- Odden, David (2005) *Introducing Phonology*, Chapter 3.1. Cambridge University Press.
- Tserdanelis, Georgios and Wai Yi Peggy Wong (eds.) (2004) *Language Files: Materials for an Introduction of Language and Linguistics*, 9<sup>th</sup> edition, File 4.2. The Ohio State University Press.

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## The End

Wee, Lian-Hee and Winnie H.Y. Cheung (2009)  
*An animated and narrated glossary of terms used in Linguistics.*  
Hong Kong Baptist University.