

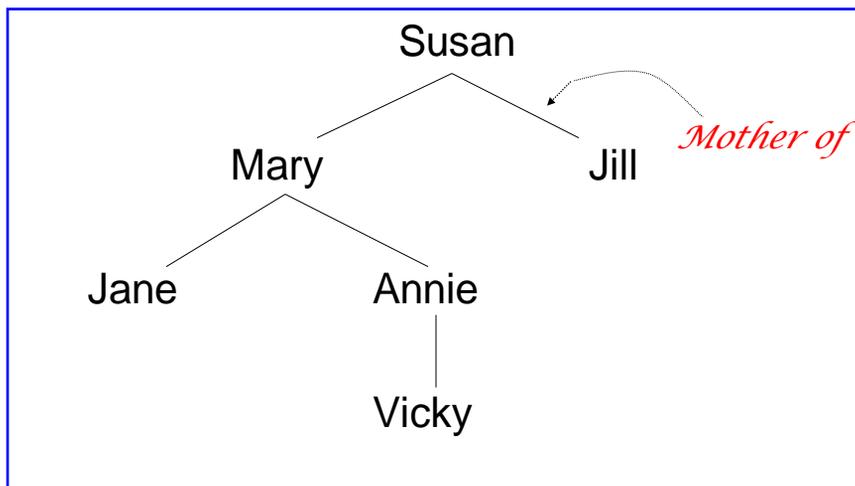


An Animated and Narrated Glossary of  
Terms used in Linguistics  
*presents*

# Dominance



## Example





## Intuition

- The above is an example of a tree, in fact, it is a **directed tree**.
- The top-to-bottom visual representation indicates directedness (in this case parenthood).
- Parenthood is **asymmetrical**, because if Mary is the mother of Jane, then Jane is not the mother of Mary.

Slide 3 



## Dominance

- We can describe the mother as dominating the daughters, which in turn **dominate** the granddaughters.
- Alternatively, we can say that the granddaughter is subordinate of the daughter, which is in turn **subordinate** of the mother.

Slide 4 



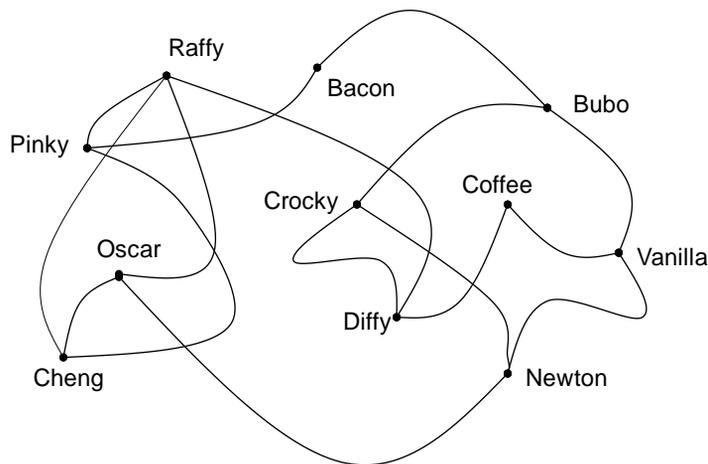
## *Symmetrical relations*

- Unlike parenthood, friendship is a relationship that is symmetrical. If Pinky is a friend of Raffy, then Raffy is a friend of Pinky.
- A diagram expressing friendship would not have the property of directedness.

Slide 5 



## *Network of friendships*



Slide 6 



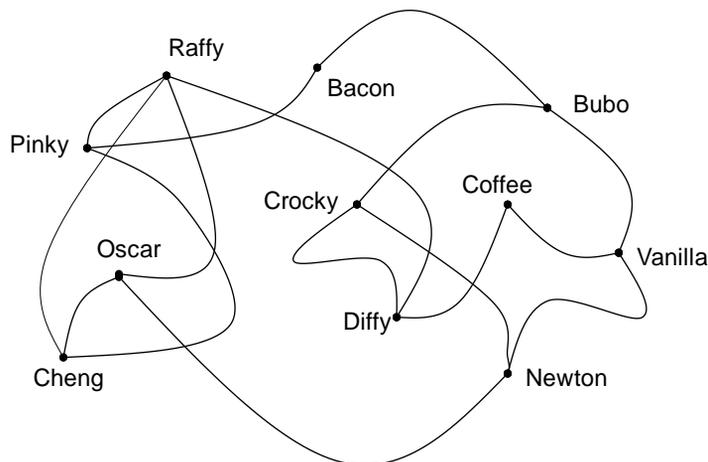
## *Network of relationships*

- With the above intuition in mind, let's take a slightly more abstract approach.
- How can one express a network of relationships?
- We can use nodes and arcs (branches) to connect them.

Slide 7 



## *Network of relationships*



Slide 8 



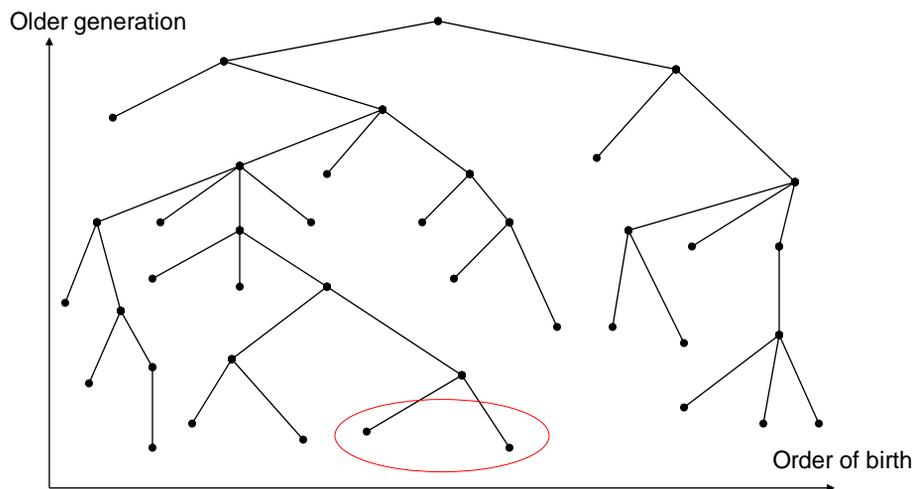
## Network of relationships

- If you think of a family, then it should be clear that the network we just saw would be inappropriate.
- Familial networks are highly organized in terms of:
  - Generation
  - Seniority

Slide 9



## Family relationship



Slide 10

## Directedness

- The picture we drew earlier encodes asymmetrical relationships (such as parenthood or older sibling of ... ).
- Such representations have the property of **directedness**.
- When two nodes are connected by a line which indicates an **asymmetrical relationship**, then there is directedness.

Slide 11 

## Asymmetrical relationship

- If an entity (represented as a node) A is related to entity B by a relationship R, but B does not relate to A by the same relationship R, then the relationship is **asymmetrical**.
- Such relationships include: boss-hood, taller than, heavier than, older than, parenthood, ...

Slide 12 



## Transitivity

- Dominance is transitive.
- If A dominates B, and B dominates C, then A also dominates C (through B).
- E.g.  
If Abel is the boss of Beth, and Beth is the boss of Celine, then Abel is also the boss of Celine.

Slide 13 



## Expressing directedness

- One of the ways used to express asymmetrical relationships (i.e. **directedness**) in the kind of nodes and arcs representations, we appeal to notions such as **dominance**.

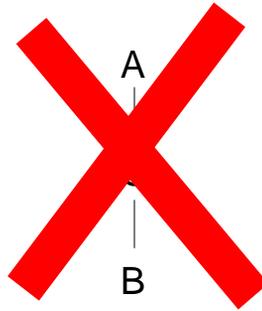
Slide 14 



## *Immediate dominance*

- If A dominates B and if there is no node C which is dominated by A that also dominates B, then A immediately dominates B.

A  
|  
B



Slide 15 

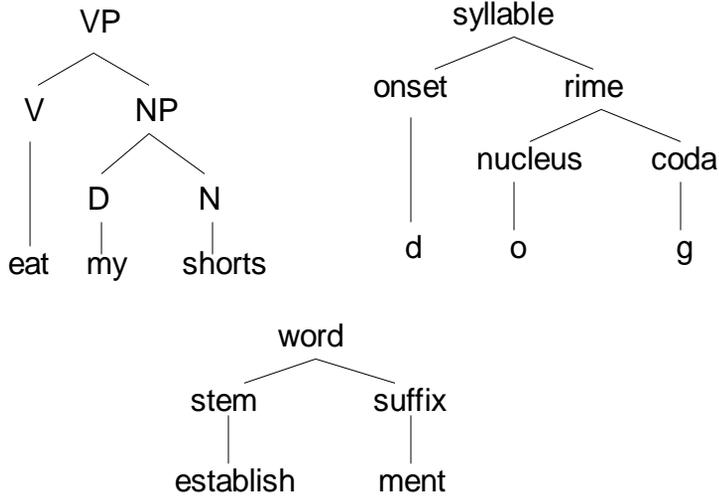


## *Dominance in Linguistics*

- Dominance is widely used in linguistic representations.
- Here are some that might be familiar to you:

Slide 16 

## *Dominance in Linguistics*



Slide 17 

## 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.

