

Locality Constraints

(DP) islands

What did Bill claim

$[_{CP} \text{ that he read } t_i ?]$

can get out of a CP

*What did Bill make

$[_{DP} \text{ the claim } [_{CP} \text{ that he read } t_i ?]]$

can't get out of an DP



Islands are surrounded by water: you can't get off of (out of) them. Wh-movement can't get out of an island

DPs are islands

DP Islands

- Check out what Moe says in the following clip:



?*You know what I blame this on the breakdown of?

- I blame this on [the breakdown of society].
- Questioning *society* requires extraction of a *wh*-phrase from inside a DP (*the breakdown of society*).
- The Complex DP Constraint (CNPC):
 - *wh_i [... [DP ... [CP ... t_i ...] ...] ...]

Wh-islands

I wonder [_{CP} what_i [_{TP} John bought t_i with the \$20 bill]]

[_{CP} How_i do [_{TP} you think [_{CP} John bought the sweater t_i ?]]]

*[_{CP} How_i do [_{TP} you wonder [_{CP} what_j [_{TP} John bought t_j]]]]

Wh-islands

I wonder [_{CP} what_i [_{TP} John kissed t_i ?]]

Who_i did you think [_{CP} [_{TP} t_i kissed the gorilla?]]

*Who_i did you wonder [_{CP} what_j [_{TP} t_j kissed t_i ?]]

Wh-islands

- A CP with a wh-word in its specifier is an island for the movement of another wh-word.
- The Wh-island Constraint:
 - * wh_i [... [CP wh_j [... t_i ...] ...] ...]

Other Islands

- *Subject condition*: You can't extract out of the subject CP of a clause:
 - [TP [CP that the police would arrest *several rioters*] was a certainty.]
 - *Who_i was [TP [CP that the police would arrest t_i] was a certainty]?
- The Subject Condition:
 - *wh_i ... [TP [CP ... t_i ...] T ...]

8

Other Islands

- *Coordinate Structure Constraint*: You can't extract out of either conjunct of a conjoined phrase:
 - I liked Mary and John
 - *Who_i did you like Mary and t_i?
 - *Who_i did you like t_i and John?

9

Other Islands

- *Coordinate Structure Constraint*: You can't extract out of either conjunct of a conjoined phrase:
 - I [_{VP} ate some popcorn] and [_{VP} drank some soda].
 - *What_i did you eat some popcorn and drink t_i
 - *What_i did you eat t_i and drink some soda?

10

Other Islands

- The Coordinate Structure Constraint (CSC):
 - *wh_i ... [_{XP} [_{XP} ... t_i ...] conj [_{XP} ...]] ...
 - or *wh_i ... [_{XP} [_{XP} ...] conj [_{XP} ... t_i ...]] ...
 - or *wh_i ... [_{XP} [_{XP} ...] conj t_i] ...
 - or *wh_i ... [_{XP} t_i conj [_{XP} ...]] ...

11

How do we account for the island phenomena?

- We're going to provide an explanation for only one of these island types (wh-islands) but we'll see that that explanation extends to DP and head movement too.
- The Minimal Link Condition (informal version):
 - Move to the closest potential landing site.
 - (formal version is in your textbook)

The MLC and Cycles

$[_{CP} \text{What do } [_{TP} \text{you think } [_{CP} [_{TP} \text{Bill loves } t_i]]]]$

$[_{CP} \text{What do } [_{TP} \text{you think } [_{CP} [_{TP} \text{Bill loves } t_i]]]]$

If you do the movement in two hops (first to the intermediate CP specifier, then to the higher CP specifier) then you don't violate the MLC.

Intermediate Stop off?

- Is there any evidence that the wh-phrase actually stops on it's way up to the top?
- Some dialects of German and Malayalam pronounce a copy in the intermediate specifier
- Kids pronounce a copy at that location



Wh-islands: Try 1

$[_{CP} \text{---} [_{TP} \text{did}_{(wh)} [_{TP} \text{you wonder } [_{CP} \text{---} [_{TP} \text{who kissed what ?}]]]]$

$[_{CP} \text{---} [_{TP} \text{did}_{(wh)} [_{TP} \text{you wonder } [_{CP} \text{what} [_{TP} \text{who kissed } t_i]]]]$

$[_{CP} \text{---} [_{TP} \text{did}_{(wh)} [_{TP} \text{you wonder } [_{CP} \text{who} [_{TP} \text{who kissed } t_i]]]]$

Can't do this. The specifier of this CP is already filled by "what"

Wh-islands: Try 2

$[_{CP} \text{ } ______ \text{ did}_{(aux)} [_{TP} \text{ } ______ \text{ wonder } [_{CP} \text{ } ______ \text{ } \emptyset_{(aux)} [_{TP} \text{ who kissed what ?}]]]$
 $[_{CP} \text{ } ______ \text{ did}_{(aux)} [_{TP} \text{ you wonder } [_{CP} \text{ who}_{(i)} \emptyset_{(aux)} [_{TP} \text{ who kissed } t_i \text{ ?}]]]$
 $[_{CP} \text{ } ______ \text{ did}_{(aux)} [_{TP} \text{ you wonder } [_{CP} \text{ who}_{(i)} \text{ } ______ \text{ } \emptyset_{(aux)} [_{TP} \text{ who kissed } t_i \text{ ?}]]]$

Can't do this! It violates the subadjacency condition!!

Wh-islands: Try 3

$[_{CP} \text{ } ______ \text{ did}_{(aux)} [_{TP} \text{ } ______ \text{ wonder } [_{CP} \text{ } ______ \text{ } \emptyset_{(aux)} [_{TP} \text{ who kissed what ?}]]]$
 $[_{CP} \text{ } ______ \text{ did}_{(aux)} [_{TP} \text{ you wonder } [_{CP} \text{ who}_{(i)} \emptyset_{(aux)} [_{TP} \text{ } t_i \text{ kissed what ?}]]]$
 $[_{CP} \text{ who}_{(i)} \text{ did}_{(aux)} [_{TP} \text{ you wonder } [_{CP} \text{ } t_i \text{ } \emptyset_{(aux)} [_{TP} \text{ } t_i \text{ kissed what ?}]]]$
 $[_{CP} \text{ who}_{(i)} \text{ did}_{(aux)} [_{TP} \text{ you wonder } [_{CP} \text{ } t_i \text{ } \emptyset_{(aux)} [_{TP} \text{ } t_i \text{ kissed what ?}]]]$

can't do this! Specifier of lower CP is occupied by trace of who

No way to do it!

- There is no way to derive a wh-island sentence like:

*Who do you think what read?

MLC effects with DP-movement


- Mark_i is likely [t_i to have left]
- It is likely that Mark has left
- Mark_i seems [t_i to have left]
- It seems [that Mark has left]
- ___ seems [that ___ is likely [Mark to have left]]
- It seems that Mark_i is likely [t_i to have left]
- *Mark_i seems that it is likely [t_i to have left]
 - This last sentence is known as "super-raising"

18

MLC effects with DP-movement

- *_{IT} Mark_i seems that [_{IT} it is likely [t_i to have left]]

First potential
nominative position



This movement thus violates the MLC

19

MLC effects with Head Movement

Mangez vous des pommes?
eat you of.the apples

[CP C₁₋₀] [TP vous T_{pres} [VP t_{pres} mangez des pommes]]



Avez vous mangé des pommes?
have you eaten of.the apples

[CP C₁₋₀] [TP vous avez [VP t_{pres} mangé des pommes]]



20

MLC effects with Head Movement

Mangez vous avez des pommes?
eat you have of.the apples

[CP C₀-Q] [1P vous avez [vP t_{vous} mangé des pommes]]

First potential head position to land in

This is sometimes known as the head-movement constraint (HMC) but it's due to the MLC.

20

Wh-in-situ in English

- D: "Hey, I just heard that Shelly loves Ferdinand."
- A: "Shelly loves WHO?"
- D: "You heard me; Shelly loves Ferdinand!"
- Unlike real wh-questions, Echo questions like the one above aren't requests for information, but are requests for confirmation of info. These don't involve wh-movement. This is one of two phenomena called wh-in-situ

21

Wh-in-situ in English

- Echo questions don't have to have a wh-phrase in them:
 - Fred saw a spaceship in the LINGUISTICS LOUNGE?
- They are marked by special intonation and stress.
- This is possibly coded with a special null C head, which bears some kind of feature that triggers intonation.

22

Summary

- There are locality conditions on Wh-movement.
- These are called Island effects:
 - DP islands (CNPC)
 - Wh islands (MLC)
 - Subject Islands (SC)
 - Coordinate Island (CSC)

26

Summary

- The MLC says "Move to the closest potential position"
- Explains
 - Wh-islands
 - "Super-raising"
 - Head Movement Constraint
- Echo questions in English don't involve movement but probably involve a special C that has intonation features associated with it.

26