Functional and Anaphoric Control in Arabic

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Introduction

- Structure sharing
  - total or partial equality of the controller and the control target
  - a single element occupying/controlling two syntactic positions simultaneously
    - Lexically determined: raising, equi
    - Structurally determined: open adjuncts and long distance dependencies

Introduction

- The theory of control should answer
  1. The distribution of unrealized grammatical functions. The position where they must, may, and may not appear.
  2. When the link to a controller is obligatory or optional
  3. What constitutes an eligible controller

Mohanan. 1983. Functional and Anaphoric Control

Functional Control:

Raising

- The controller is **not** a semantic argument of the verb
- They take propositional-themes

  seem ___ < propositional-theme >

  expect < experiencer propositional-theme > ___

  believe
- Control is lexically determined

seem	V	(↑ PRED)= ‘seem<(↑ XCOMP)> (↑ SUBJ)’
		(↑ XCOMP SUBJ) = (↑ SUBJ)

Functional Control:

Raising

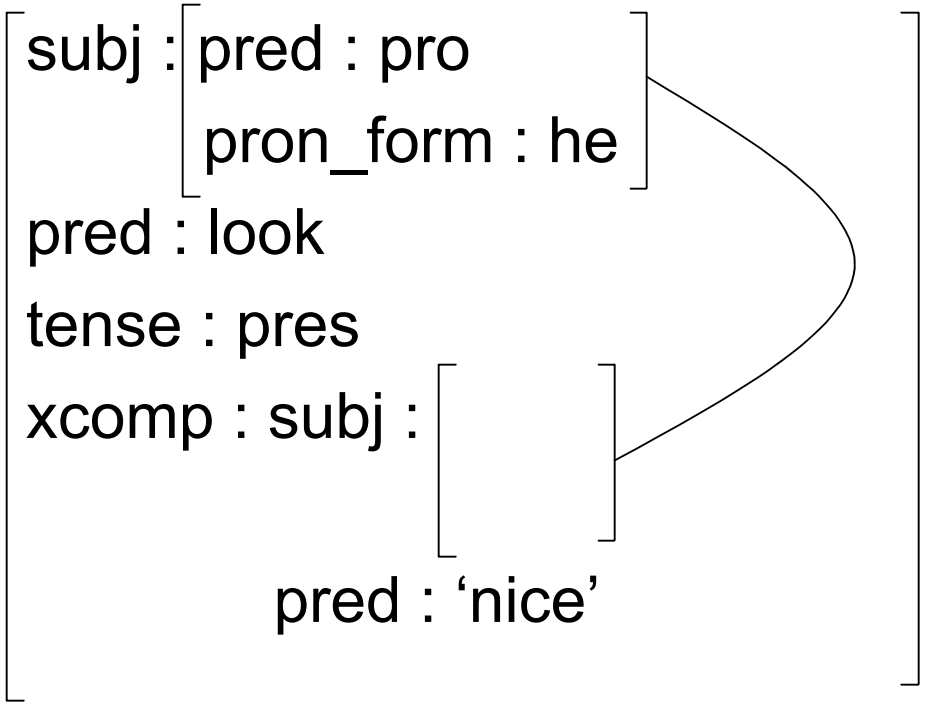
- Raising to Subject
  - verbal/non-verbal complements
    - *seem, appear*
      - *He seems to study hard*
      - *He seems happy*
  - non-verbal complements
    - *look, taste, smell*
      - *He looks nice.*
      - **He looks to study hard.*

Functional Control:

Raising

- Raising to Subject

He looks nice



http://lfg-demo.computing.dcu.ie/lfgparser.html

Functional Control:

Raising

- Raising to Object
  - verbal/non-verbal complements
    - *Make*
      - *I made him happy*
      - *I made him to study hard*
  - verbal complements
    - *expect, believe*
      - *I expect him to study hard*
  - non-verbal complements
    - *Find*
      - *I found him happy.*

Functional Control:

Raising

Types of predicational Constructions involved in Control

- Verbal XCOMPs
  - Infinitives with *to*
    - He seems to sleep
  - Infinitives without *to*
    - I saw him go
    - He kept playing
- Non-Verbal XCOMPs
  - Adjectives
    - We found him nice
  - PPs
    - He seems in a bad mood
  - NPs
    - The pills made him a monster

Functional Control:

Arabic Raising Construction

Governors of Subject-Predicate Constructions
(نواسخ الابتداء)

- Arabic Nominal (Verbless) Sentences
  - الرجل سعيد
    The man [is] happy
  - الرجل في الدار
    The man [is] in the house
  - الرجل طبيب
    The man [is] a doctor
  - الرجل يشاهد التليفزيون
    The man watches TV

Functional Control:

Arabic Raising Construction

- Raising to Subject

كان وأخواتها: Verbal/non-verbal complements

(كان وأصبح وصار وظل وليس)

– كان الولد سعيدا	The boy **was** happy
– كان الولد يذاكر	The boy **was** studying
– أصبح الولد سعيدا	The boy **became** happy
– أصبح الولد يحب القراءة	The boy **became** to love reading
– ظل الولد سعيدا	The boy **remained** happy
– ظل الولد يذاكر	The boy **remained** studying

Only non-verbal complements

– يبدو الولد سعيدا	The boy seems happy

Functional Control:

Arabic Raising Construction

- Raising to Subject

Only Verbal complements

أفعال المقاربة: كاد وأوشك، يجب اقترانها بأن

- كاد الولد أن ينام
  The boy nearly slept
- أوشك الولد أن ينام
  The boy nearly slept

أفعال الشروع: شرع، أخذ، جعل، قام، يجب عدم اقترانها بأن

- أخذ الرجل يدرس القرار
  The man kept study[ing] the decision.
- قام الرجل بدارسة القرار
  The man undertook with studying the decision.

Functional Control:

Arabic Raising Construction

- Raising to Object

  ظن وأخواتها: ظن ورأى وعلم ووجد وحسب وزعم

  believe, see, know, find, reckon, claim

  – ظننت الولد سعيدا
    I believe the boy happy
  – حسبت الولد يذاكر
    I reckon the boy study
  – رأيت الولد سعيدا
    I saw the boy happy
  – وجدت الولد يذاكر
    I found the boy study

Functional Control:

Equi

The controller **is** a semantic argument of the verb that lexically determines the identity

Control is lexically determined

- *to*-infinitive
  - I promised him to go
- gerund
  - He began playing

Functional Control:

Equi

Example

- Subject Controller
  - Try: He tried to go
  - Promise: He promised to go
  - Begin: He began to go
  - Start: He started to go
- Object Controller
  - Persuade: I persuaded him to go
  - Gesture: I gestured to him to go
  - Convince: I convinced him to go
  - Teach: I taught him to play

Functional Control:

Arabic Equi Construction

- Verbal complement
  - وعدته أن أذهب
    I promised him to/that go
  - وعدته أن يتم سداد الفاتورة في الموعد
    I promised him that he bill will be paid on time.
- Verbal noun complement
  - وعدته بالذهاب
    I promised him of going
  - وعدته بسداد الفاتورة في الموعد
    I promised him of paying the bill on time

Functional Control:

Functional or Anaphoric Control?

- Yehuda N. **Falk** (2001) ***Lexical-Functional Grammar****: An Introduction to Parallel Constraint-Based Syntax*

  a. The geneticist agreed to clone dinosaurs.

  b. The geneticist tried to clone dinosaurs.
- These could be anaphoric control, with a COMP argument or functional control, a predicative construction with an XCOMP
- Complement of *agree* is an anaphorically controlled COMP, while the complement of *try* is a functionally controlled XCOMP.
- Obligatory control constructions = functional control
- Nonobligatory control constructions = anaphoric control

Functional Control:

Functional or Anaphoric Control?

Dalrymple, Mary. 2001. Lexical Functional Grammar

a. David seemed to yawn.

b. David tried to leave.

- *Raising involves* functional control
  - The subordinate complement is the open function XCOMP
  - syntactic identity

seem	V	(↑ pred)='seem<xcomp>subj'
		(↑ comp subj) = (↑ subj)

- Equi involves anaphoric control
  - The subordinate complement is the closed function COMP
  - anaphoric binding

try	V	(↑ pred)='try<subj,comp>'
		(↑ comp subj pred) = 'pro'
		((↑ comp subj)σ antecedent)=(↑ subj) σ

Functional Control:

Functional or Anaphoric Control?

Dalrymple, Mary. 2001. Lexical Functional Grammar

- Evidence
  - from Icelandic
  - VP complement drop is a lexically governed option, impossible for the open function XCOMP,
  - *[Did David really yawn?] He seemed
  - [Did David really leave?] He tried.

Functional Control:

Functional or Anaphoric Control?

- Evidence from Arabic: difference between raising and equi construction
  - Raising: verbal and non-verbal complements
  - Equi: only verbal complements
  - Equi tends to take closed complements with a free reference pronoun
- Function control is still viable but obligatory anaphoric control seems more motivated for Arabic equi constructions

Functional Control:

Adjuncts

Sure of winning, Mary entered the competition yesterday.

Functional control is structurally determined

S →	(AP)	XP	VP
	(↑ XADJUNCT) = ↓	(↑ SUBJ) = ↓	↑ = ↓
	(↑ SUBJ) = (↓ SUBJ)		

Sells, Peter. 1985. Lectures on Contemporary Syntactic Theories

Functional Control:

Adjuncts

John discusses peeling navel oranges.

Peeling navel oranges, John watched the game.

Gerunds are V-*ing* clauses that have nominal functions such as subject, object, or prepositional object,

Participial clauses are V-*ing* (or V-*en*) clauses that have sentential (adjunct or complement) functions.

- With gerunds the missing subject is a PRO
- With participials the missing subject is identified by a control equation … (↓ SUBJ) = (↑ SUBJ)

Mohanan. 1983. Functional and Anaphoric Control

Functional Control:

Adjuncts

Walking the dog, Chris saw David

The SUBJ of the adjunct *walking the dog* is functionally controlled by the SUBJ of the matrix clause *Chris*

(123) *Walking the dog, Chris saw David.*

$$
f\begin{bmatrix}
\textsc{pred} & \text{`SEE}\langle\textsc{subj},\textsc{obj}\rangle\text{'} \\
\textsc{subj} & g\begin{bmatrix}\textsc{pred} & \text{`CHRIS'}\end{bmatrix} \\
\textsc{obj} & h\begin{bmatrix}\textsc{pred} & \text{`DAVID'}\end{bmatrix} \\
\textsc{xadj} & \left\{ i\begin{bmatrix}\textsc{pred} & \text{`WALK}\langle\textsc{subj},\textsc{obj}\rangle\text{'} \\ \textsc{subj} & \\ \textsc{obj} & j\begin{bmatrix}\textsc{pred} & \text{`DOG'}\end{bmatrix}\end{bmatrix} \right\}
\end{bmatrix}
$$

Dalrymple, Mary. 2001. Lexical Functional Grammar

Functional Control:

Arabic Adjuncts

- Subordinating conjunctions are not omissible. Conjunctions express adverbs of time (when, while), place (where), reason (because, since), condition (if, provided), concession (although, even if), purpose (to, in order to), result (so that)
- Subordinating conjunctions are followed by finite verbs or infinitival nouns of action
  - بعد أن ذاكر الولد، ذهب إلى الحديقة
    After the boy studied, he went to the park.
  - بعد إنهائه المذاكرة، ذهب الولد إلى الحديقة
    After him finishing studying, the boy went to the park.
  - بعد إنهاء التجهيزات، ذهب الأولاد إلى الحديقة
    After finishing preparations, the boys went the park.
- Control is arbitrary anaphoric control

Functional Control:

Arabic Adjuncts

- When adjuncts are not preceded by Subordinating Conjunctions, the clause is headed by a noun agent, patient or noun of action, and control seems to be functional. Adverbs here express either manner or resumption.
- Noun Agent (active participle)
  - قدم الاقتراح إلى البرلمان، رافضا انتقادات المعارضة
    He introduced the proposal to the parliament, rejecting the reservations of the opposition
  - قال إن الوضع متري مضيفا أن الإصلاح أصبح ضرورة
    He said that the situation is deteriorating, adding that reform had become a necessity
  - معربا عن أسفه، قدم الوزير استقالته
    Expressing his regret, the minister offered his resignation.

Functional Control:

Arabic Adjuncts

- Noun Patient (passive participle)
  - خرج من الانتخابات مهزوما
    He came out of the elections defeated.
  - عاد إلى البيت منهارا
    He came home devastated.
  - محبطا ومهزوما، خرج الشعب إلى الشارع
    Frustrated and defeated, the people took to the street.

Functional Control:

Arabic Adjuncts

- **Noun of Action**
  - زار زعماء المعارضة بحثا عن الدعم
    He visited opposition leaders, [searching for/in search for] support
  - ألغى زيارته تأكيدا لرفضه لسياسات الدولة
    He cancelled his visit, [confirming/as a confirmation of] his rejection of the country's policies
  - تعبيرا عن الرفض، خرج الناس إلى الشوارع
    [Expressing/as an expression of] rejection, the people took to the street.

Functional Control:

Functional or Anaphoric Control?

- With subordinating conjunctions, control is anaphoric.
- Tenseless clausal adjuncts without subordinating conjunction are functionally controlled.

Functional Control:

English Verbal Nouns

- English gerunds can be classified into nominal and verbal
  - The meeting was useful. (Nominal)
  - Meeting new people is useful. (Verbal)
- English gerunds can have various subcategorization frames
  - meeting
  - meeting new people
  - his meeting with them
  - the meeting between him and them

Functional Control:

English Verbal Nouns

Verb	Verbal Noun	Nominal Noun
Meet	Meeting	Meeting
Confront	Confronting	Confrontation
Assist	Assisting	Assistance
Enrol	Enrolling	Enrolment
Break	Breaking	Break
Lead	Leading	Leadership
Analyze	Analyzing	Analysis

Functional Control:

The Arabic Verbal Noun System

- In Arabic there is a class of nominals derived from verbs. They are assumed to inherit some or all of the verb's argument structure
- The derivation process uses non-concatenative morphotactics: unlike English –ing, or –en suffixes

Functional Control:

The Arabic Verbal Noun System

Verb	Verbal Noun	Nominal Noun
قابل	مقابلة	مقابلة
واجه	مواجهة	مواجهة
ساعد	مساعدة	مساعدة
سجل	تسجيل	تسجيل
كسر	تكسير	تكسير
قاد	قيادة	قيادة
حلل	تحليل	تحليل

Functional Control:

The Arabic Verbal Noun System

A word on subcategorization

1. SUBJ:
   - تدهور deteriorating/deterioration
2. SUBJ,OBJ
   - قتل killing …
3. SUBJ,OBJ,OBL
   - إبلاغ informing … of ..
4. SUBJ, OBL
   - إخفاق failing in …
5. SUBJ,COMP
   - إثبات proving that …
6. SUBJ,OBJ,OBJ2
   - اعطاء giving … …
7. SUBJ,OBJ,COMP
   - طمأنة comforting … that …

Functional Control:

The Arabic Verbal Noun System

A word on subcategorization

8. SUBJ,OBL,COMP
   - طلب appealing to … to …
9. SUBJ,OBL1,OBL2
   - اتفاق agreeing with … on …
10. SUBJ,OBJ,OBL1,OBL2
    - تحويل transferring … from … to …
11. SUBJ,OBL1,OBL2
    - رحيل moving from … to …
12. SUBJ,OBL1,OBL2
    - إصلاح reconciling between … and …
13. OBL1,OBL2,OBL3
    - اتفاق agreement between … and … on …

Functional Control:

The Arabic Verbal Noun System

The Problem of Obliques: Solution #1

OBL1, OBL2, OBL3

<u>Disadvantages:</u>

1. Obliques can easily exchange places with no default order
   speak with … about … / speak about … with …
   travel from … to … / travel to …from …
2. No packed features can be expressed
   put … on/in/above/under/besides …

<u>Advantage:</u>

1. Grammatical functions are expressed in a way that is distinct from both lexical and semantic levels
2. Easy to do

Functional Control:

The Arabic Verbal Noun System

The Problem of Obliques: Solution #2

OBL-on, OBL-from, OBL-to

<u>Disadvantages:</u>

1. Lexical forms are expressed in the grammatical level
2. No packed features can be expressed put … on/in/above/under/besides …

<u>Advantage:</u>

1. Easy to do

Functional Control:

The Arabic Verbal Noun System

The Problem of Obliques: Solution #3

OBL-topic, OBL-source, OBL-medium

Disadvantages:

1. Semantic terms are expressed in the grammatical level
2. Hard to do

Advantage:

1. Packed features can be expressed:
   - direction (origin/path/destination)
   - temporal (start/completion)

Long Distance Dependencies

Long Distance Dependencies

a. Which book do you think I put on the shelf?

b. That theory, she told me she had never heard of.

- A phrase belongs in two different clauses simultaneously
- The top end = **filler** = discourse function
  - Question = FOCUS
  - Topicalized phrase and relative pronoun = TOPIC
- The lower end = **gap** = grammatical function
- Process = **extraction**
- Unlimited number of clauses between the filler and the gap = long distance dependencies/unbounded dependencies

Yehuda N. Falk. 2001. Lexical-Functional Grammar: An Introduction to Parallel Constraint-Based Syntax

Long Distance Dependencies

- Extended Coherence Condition:
  - FOCUS and TOPIC must be linked to the semantic predicate argument structure of the sentence in which they occur, either by functionally or by anaphorically binding an argument.

The clause ‘anaphorically binding’ is related to cases where the domain of extraction is not a gap in c-structure, but rather some kind of pronominal form.

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies

- The functional control involves structure sharing.
- Outside-in functional equation

(↑ DF) = (↑ COMP* GF)

- An infinite number of possible COMPs intervening = **functional uncertainty**

Yehuda N. Falk. 2001. Lexical-Functional Grammar: An Introduction to Parallel Constraint-Based Syntax

Long Distance Dependencies

- **Subjects vs. nonsubjects**
- extraction of subjects is different from the extraction of nonsubjects
- In English
  - No inversion
    - Who put the book on the shelf?
  - No overt complementizer
    - *Who do you think that __ put the book on the shelf?
- In Arabic/Hebrew
    - resumptive pronouns are generally more likely to be used for non-SUBJ gaps than SUBJ gaps
- Explanation: SUBJ is an overlay function and not exclusively related to its governing predicate

Yehuda N. Falk. 2001. Lexical-Functional Grammar: An Introduction to Parallel Constraint-Based Syntax

Long Distance Dependencies

- Two kinds of restrictions in long distance dependencies
  - Restrictions on the "body": The path from the discourse function to the function it is identified with
    - *What will you be surprised if John buys? (the path cannot contain an adjunct)
  - Restrictions on the "bottom": what grammatical function a discourse function can be identified with
    - *That he might be wrong he didn't think. (cannot be a COMP)

$$(\uparrow \mathrm{DF}) = (\uparrow \underset{\text{body}}{\mathrm{GF}^*} \quad \underset{\text{bottom}}{\mathrm{GF}})$$

Long Distance Dependencies:

Topicalization Constructions

- Phrase Structure
  - NP: *Chris, I like.*
  - PP: *To Chris, I gave a book.*
  - AP: *Happy, Chris will never be.*
  - CP: *That Chris was a movie star, I never would have guessed.*

TopicP = {NP | PP | VP | AP | CP}

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Topicalization Constructions

– *Chris, we like.*
– *Chris, we want to thank.*
– *Chris, we think that David saw*.
– *Chris, we saw a picture of.*
– *This hammer, we smashed the vase with.*

- English TOPICPATH:

$$\{\text{XCOMP} \mid \underset{(\rightarrow \text{LDD}) \neq -}{\text{COMP}} \mid \underset{(\rightarrow \text{TENSE})}{\text{OBJ}}\}^* \quad \{(\text{ADJ} \underset{\neg(\rightarrow \text{TENSE})}{\in}) \quad (\text{GF}) \mid \text{GF}\}$$

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Relative Clauses

- Phrase Structure
  - NP: *a man who I selected*
  - PP: *a man to whom I gave a book*
  - AP: *the kind of person proud of whom I could never be*
  - *AdvP: the city where I live*

RelP = {NP | PP | AP | AdvP}

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Relative Clauses

- RelPath
  - *the man [who] I met*
  - *the man [whose book] I read*
  - *the kind of person [proud of whom] I can be*
  - *the room [in which] I teach*

English RELPATH:

{SPEC* | [(OBL$_\theta$)OBJ]*}

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Relative Clauses

- *a man who we like*
- *a man who we want to thank*
- *a man who we think that David saw*
- *a man who we saw a picture of*
- *a hammer, we smashed the vase with*

- English RTOPICPATH:

$$\left\{\text{XCOMP} \mid \underset{(\rightarrow \text{LDD})\neq -}{\text{COMP}} \mid \underset{(\rightarrow \text{TENSE})}{\text{OBJ}}\right\}^* \quad \left\{\left(\text{ADJ} \underset{\neg(\rightarrow \text{TENSE})}{\in}\right) \quad (\text{GF}) \mid \text{GF}\right\}$$

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Questions

- Phrase Structure
  - NP: *Who do you like?*
  - PP: *To whom did you give a book?*
  - AdvP: *When did you yawn?*
  - *AP: How tall is Chris?*

QuesP = {NP | PP | AdvP | AP}

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Questions

- WhPath
  - *[Whose book] did you read?*
  - *[In which room] do you teach?*

English WHPATH:

{SPEC* | OBJ}

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Questions

- *Who do you like?*
- *Who do you want to thank?*
- *Who do you think that David saw?*
- *Who did you see a picture of?*
- *What did you smash the vase with?*

- English RTOPICPATH:

$$\left\{\text{XCOMP} \mid \underset{(\rightarrow \text{LDD}) \neq -}{\text{COMP}} \mid \underset{(\rightarrow \text{TENSE})}{\text{OBJ}}\right\}^* \quad \left\{\left(\text{ADJ} \underset{\neg(\rightarrow \text{TENSE})}{\in}\right) \quad (\text{GF}) \mid \text{GF}\right\}$$

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Island Constraints

- Restrictions on the path between filler and gap
  - Complex NP Constraint
    - *What did you deny [the claim that you put __ on the shelf]?
    - *This is the book which I saw [the woman who wrote __].
  - SUBJ Constraint
    - *What do you think that [to put __ on the shelf] would be a good idea?
    - *Which person does [a picture of __] looks nice?
  - ADJUNCT Constraint
    - *Which picture did they blush [when they saw ___] ?

Yehuda N. Falk. 2001. Lexical-Functional Grammar: An Introduction to Parallel Constraint-Based Syntax

Long Distance Dependencies:

Resumptive Pronouns

- Examples
  - الرجل الذي شكر الولد
    The man **who** thanked the boy
  - الرجل الذي أظن أنه شكر الولد
    The man **who** I think that **he** thanked the boy
  - الرجل الذي شكره الولد
    the man **who** thanked **him** the boy
  - الابن الذي يسود انطباع بأنه يستعد لخلافة والده
    the son **who** there is an impression that **he** is getting ready to succeed his father

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

- Definition
  - Pronouns that mark the lower end of a long-distance dependency, filling the gap
  - Both gaps and resumptive pronouns are linked to a discourse function
  - The Extended Coherence Condition allows an anaphoric link
  - Resumptive pronouns are reported in Spanish, Irish, Swedish, Palauan, Hebrew and Arabic

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

- Definition
  - English resumptive/intrusive pronouns
  - *??(the guy) that I denied the claim that Rina likes him*
    - Without the pronoun: ungrammatical (island)
    - With the pronoun: odd, but interpretable and usable. There is no other way of saying it.

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

Distribution in Arabic

- With questions: Resumptive pronouns are not allowed
  - ماذا أكل الرجل؟
    what did the man eat?
  - إلى من قال الرجل أنه أعطى المال
    To whom did the man say that he gave the money
- With questions: Island constraints apply
  - * ماذا هناك ادعاء أن الرجل سرق
    *What there is a claim that the man stole __ ?

Long Distance Dependencies:

Resumptive Pronouns

Distribution in Arabic

- With topicalized constructions: resumptive pronouns are required
  - هذا المعلم يقدره الطلاب
    this teacher, appreciate **him** the students
  - هذا المعلم يزعم البعض أن الطلاب يكرهونه
    this teacher, some claim that the students hate **him**
- With topicalized constructions: Island constraints do not apply
  - هذا الرجل هناك ادعاء أنه سرق المال
    this man, there is a claim that **he** stole the money?

Long Distance Dependencies:

Resumptive Pronouns

Distribution in Arabic

- With Relative constructions:
  - Not allowed: Subject
    - الرجل الذي أكل التفاحة
      the man who ate the apple
  - Optional: Object
    - التفاحة التي أكل الرجل
      the apple which the man ate
    - التفاحة التي أكلها الرجل
      the apple which the man ate it
  - Required: Object of oblique, long paths
    - الولد الذي يعتمد عليه الرجل
      the boy who relies on him the man
    - الرجل الذي زعمت البنت أنه أكل التفاحة
      the man who the girl claimed that he ate the apple

Long Distance Dependencies:

Resumptive Pronouns

- Resumptive pronouns are not subject to island constraints
  - Complex NP Constraint
    - الابن الذي يسود انطباع بأنه يستعد لخلافة والده
      the son who prevails an impression that he is getting ready to succeed his father
  - SUBJ Constraint
    - الرجل الذي فازت صورته بالجائزة
      the man who his picture won the prize
  - ADJUNCT Constraint
    - الولد الذي وقعت البنت وهي تلعب معه
      the boy who the girl fell when she was playing with

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

Analysis by Vaillette (2001)

Resumptive pronoun = gap

Analysis by Dalrymple (2001)

Resumptive pronoun ?= gap

Morphological signalling: Some languages mark the domain of extraction in a long-distance dependency by means of special morphological or phonological forms

Dalrymple, Mary. 2001. Lexical Functional Grammar

Long Distance Dependencies:

Resumptive Pronouns

Analysis by Falk

- Resumptive pronoun ≠ gap
  - Resumptive pronouns are not subject to island constraints
  - Resumptive pronouns are in approximate complementary distribution with gaps

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

Analysis by Falk

- A resumptive pronoun is referential = ordinary pronouns
  - referential pronouns vs. bound pronouns
    - Bound pronouns are syntactically constrained while referential pronouns are not.
    - Since syntactic constraints on binding are based on notions of rank, and the discourse functions are not part of the relational hierarchy of grammatical functions, we assume that a bound-variable account of the resumptive pronoun is not available.

Falk, Yehuda. 2002. Resumptive Pronouns in LFG

Long Distance Dependencies:

Resumptive Pronouns

Analysis proposed

- Gap = Functional control
  - (↑ DF) = (↑ COMP* GF)
- Resumptive pronoun = anaphoric control
  - (↑ DF)σ = (↑ GF* GF)σ
    (↑ GF PRED) =c 'pro'

Conclusion

Control

- Raising = Functional control
- Equi = anaphoric control
- Nonfinite-verb Adjuncts = Functional control
- Finite-verb adjuncts = anaphoric control

Long distance dependencies

- Gap = Functional control
- Resumptive pronoun = anaphoric control