

Copy Raising and its implications  
Potsdam and Runner (2001)

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April 16, 2003  
Linguistics 795K/820, Spring 2003

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### The construction in question: Richard/Copy Raising

Richard: a transformation christened by Rogers (1971, 1972, 1974a) to derivationally relate sentences like (1a) and (1b).

- (1) a. It seems like Richard is in trouble.  
b. Richard seems like he is in trouble.  
c. Richard seems to be in trouble.

Richard is also known as Copy Raising because of its similarity to Subject-to-Subject Raising (SSR) out of an infinitival clause in (1c).

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### Overview

- The construction in question: Richard/Copy Raising (CR)
- Evidence that CR predicates involve a non-thematic subject position
- A movement analysis of CR (Ura (1998)) and its problems
- An alternative base-generated analysis of CR
- Remaining analytical issues

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### Defining Copy Raising

- Copy Raising: a construction in which some constituent appears in a non-thematic position with its thematic position occupied by a pronominal copy.
  - In English, CR predicates include *seem*, *appear*, *look*, *sound*, etc. (Rogers (1974b)). Unlike in infinitival SSR, in CR, the predicate takes a tensed clause complement introduced by *like*, *as if*, or *as though*.
- (2) a. It seems/appears/looks/sounds like/as if/as though Richard is in trouble.  
b. Richard seems/appears/looks/sounds like/as if/as though he is in trouble.

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CR has been largely ignored probably for the following two reasons:

- 1) CR is perhaps viewed as a marked/uncommon construction in English. But CR is not marginal cross-linguistically, as it exists in many typologically distinct and genetically unrelated languages, such as Samoan, Igbo, Hebrew, Turkish, Irish, etc.
- 2) CR poses considerable challenges for some syntactic theories. These include i) apparent A-movement from a Case position, ii) apparent A-movement out of a finite clause, and iii) questions regarding the status of the pronominal copy for the derivational Standard Theory.

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## Subject CR: Test 1

The following examples, in which CR alternates with an extraposition structure, show that the subject position of CR predicates can be non-thematic.

- (3) a. It seems like Richard is in trouble.  
b. Richard seems like he is in trouble.

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## Evidence for a non-thematic subject position

CR predicates are ambiguous between a thematic and a non-thematic use.

- Non-thematic use is only available with Subject CR
- Non-subject construction involves a thematic use of the predicate, and is not CR as defined above

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## Subject CR: Test 2

CR predicates place no selectional restrictions on their subject; therefore, the expletives *there* and whether *it*, idiom pieces, and funny NPs can all appear in the subject position of a CR predicate.

- (4) a. % There looks like there's gonna be a riot.  
b. It seems like it's raining harder than it is. (the weather *it* (Horn (1981)), mistaken or contradictory)  
c. % The shit appears as though it's going to hit the fan very soon.  
d. % Advantage appears like it was taken of the workers.

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### Subject CR: Test 3

The cognitive synonymy of the following examples provides additional evidence. If the matrix predicate is non-thematic, the examples have identical theta role distribution and are predicted to be synonymous.

- (5) a. John seems like he interviewed Bill.
- b. Bills seems like he was interviewed by John.

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### Subject CR: Test 5

If CR predicates do not restrict their surface subjects, then it is predicted that non-DP subjects (Davies and Dubinsky (1998)), such as PP and AP, can appear in the construction.

- (7) a. Under the bed seems like it is an unoriginal place to hide.
- b. Sickeningly sweet seems like it's how Calvin likes his cereal.

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### Subject CR: Test 4

The ungrammaticality of (6a) follows because the NP *John* does not receive a theta role from anywhere and is thus ruled out by Full Interpretation (Kaplan-Myrth (2000)).

- (6) a. \* John seems like there is no tomorrow.
- b. John eats like there is no tomorrow.

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### Subject CR: Test 6

If the subject position of CR predicates is non-thematic, PRO will not appear there because it must be assigned a theta role.

- (8) a. The workers expect for it to seem like they are successful.
- b. ?? The workers<sub>i</sub> expect PRO<sub>i</sub> to seem like they are successful.

Conclusion: The subject position of CR predicates may be non-thematic, at least when the pronominal copy is in the embedded subject position.

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## Non-subject examples

CR examples in which the pronominal copy is a non-subject:

- (9) a. Bill sounds like Martha hit him over the head with the record.  
b. The roach looks to me like Abbie gave it to Myrna.  
c. Mary appears as if her job is going well.

These non-subject examples do not involve a non-thematic use of CR predicates.

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Second, for the semantically weak *seem* and *appear*, they assign an external theta role similar to the patient role and the predicates are paraphrased as *act like* or *put on the appearance of* when in their thematic use. Thus, there is a contrast in available interpretations between the CR examples and the non-subject examples below.

- (11) a. He seems like he's ill.  
b. = He is acting like he's ill.  
c. = It seems like he is ill.
- (12) a. He seems like Kim just dumped him.  
b. = He's acting like Kim just dumped him.  
c. ≠ It seems that Kim just dumped him.

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First, these examples fail the above diagnostics. Expletives, idiom pieces, funny NPs, and non-DPs are impossible.

- (10) a. \* There seems like John expects there to be an election.  
b. \* The other foot appears like the shoe is on it.  
c. \* Tabs appear as if the government keeps them on us.  
d. \* Very tall appears like he likes his body guards it.

The ungrammaticality follows if the matrix predicates are necessarily thematic.

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Third, Heycock's (1994) examples of CR predicates where the matrix subject has no copy pronoun in the embedded clauses are compatible with the proposal that matrix subject is receiving a theta role from the CR predicate.

- (13) a. That book sounds like everyone should own a copy.  
b. Her apartment sounds like there must be a wonderful view.  
c. From what you say, your car sounds like you need a new clutch.

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Then, the matrix clause is formed and the embedded subject raises to the matrix specifier of  $T^o$ :

(18)  $[_{TP} Eze_i T [_{VP} seems [_{CP} COMP[_{TP} t_i T [_{VP} see Ada]]]]]$   
 $\checkmark$ EPP  $\checkmark$ EPP  
 $\checkmark$ Case,  $\phi$ -features  $\times$ Case,  $\phi$ -features

The movement obeys Last Resort since the strong EPP feature of matrix  $T^o$  is checked. In the matrix clause *Eze* also checks Case and  $\phi$ -features. If the derivation stops here, it would crash because the embedded  $T^o$  contains unchecked Case and  $\phi$ -features.

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(20)  $[_{TP} Eze_i T [_{VP} seems [_{CP} COMP[_{TP} he_i [_{VP} see Ada]]]]]$   
 $\checkmark$ EPP  $\checkmark$ EPP  
 $\checkmark$ Case,  $\phi$ -features  $\checkmark$ Case,  $\phi$ -features

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Finally, a language-particular rule spells out the trace with a pronominal copy:

(19) Rule S (Ura (1998:74))  
 A language-particular rule that “supplies an intermediate position of the A-chain with a pronominal copy of the head of the chain”

Rule S serves two purposes: the pronominal copy appears in the embedded clause, deriving the fundamental property of CR, and the spelled out pronoun checks the Case and  $\phi$ -features of the embedded  $T^o$ . Application of Rule S obeys Last Resort and yields the surface form of the sentence with all features checked:

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To summarize, Ura’s analysis assimilates CR to SSR with the following assumptions:

- 1) CR involves ordinary A-movement
- 2) Feature checking is an optional operation
- 3) Some languages, like Igbo, have a language-particular trace spell out rule, Rule S.

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## Challenges for the movement analysis

First, the movement illustrated in (18) appears to violate locality conditions on A-movement, in particular the Tensed S Condition of Chomsky (1973):

(21) Tensed S Condition (Chomsky (1973))

A-movement is impossible from a tensed clause.

Ura (1998:82) responds that “the Tensed S Condition has lost its theoretical validity under assumptions of the Minimalist Program, according to which A-movement is constrained only by the Last Resort Condition and the Shortest Move Condition.” However, the Tensed S Condition continues to be part of the Minimalist Program in Chomsky (2000).

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Finally, in English, the CR pronoun is not an intrusive pronoun, indicating that the derivation of CR does not involve a last resort strategy that spells out trace and that a movement analysis should be abandoned.

Intrusive pronouns (IPs) are pronouns that show up in a position from which movement would otherwise be illicit (Chao and Shells (1983), Shells (1984)). IPs can repair illicit traces in A'-chains (Chomsky (1977), Kayne (1984), Sells (1984)):

(22) a. \* This is the painting that everyone wonders whether t will be for sale.

b. ? This is the painting that everyone wonders whether it will be for sale.

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Second, the desirability of a language-particular Rule S is questioned, since within the Minimalist Program, parametric variation is restricted to the lexicon and the computational system is claimed to be invariant across languages (Chomsky (1995)). In addition, Rule S has no other consequences on the grammar of Igbo except accounting for CR.

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Three reasons why the CR pronoun is not an IP:

First, IPs are not fully natural for most speakers and they have a 'last resort' feel. The CR pronoun is fully grammatical (Heycock (1994:291)).

Second, IPs cannot be bound variables because they are type e and consequently cannot serve as a higher type (Chao and Sells (1983), Sells (1984)). The CR copy is not an IP since it can be a bound variable (Lappin (1983)).

(23) a. \* There is no painting that John wonders whether it will be for sale.

b. No one seems like she wants to go to Antarctica.

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Finally, some Germanic languages, such as Dutch and German, lack IPs (Merchant (1999)), but some of them may well have CR. A Dutch example follows:

- (24) Hij ziet eruit, alsof hij moe is  
he sees there.out as.if he tired is  
'He seems as if he is tired.'

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The motivation for chain formation is that if the derivation ended without it, the matrix DP Richard would not receive an interpretation, in violation of the Principle of Full Interpretation (at LF everything must receive an interpretation).

A chain may be formed subject to independent well-formedness conditions. Representational constraints on chains require that chain links be local in some sense. Chain formation across an intervening element is prevented, thus CR chains can only be created between a matrix DP and an embedded subject position.

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### A base-generated analysis of CR

The CR subject is merged directly into the matrix subject position after the embedded clause with its subject pronoun is formed. The syntactic relation between the two subjects is a base-generated A-chain:

- (25) [<sub>TP</sub> Richard<sub>i</sub> T seems [<sub>XP</sub> like [<sub>TP</sub> he<sub>i</sub> T [<sub>VP</sub> is in trouble]]]]

All features (EPP, Case, and  $\phi$ -features) are independently checked in the matrix and embedded clauses by the two DPs. The A-chain is formed between the two base-generated DPs prior to assignment of a single theta role at LF.

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### Evidence for a base-generated account

First, it does not violate the Tensed S Condition or encounter the Last Resort problem, since there is no movement.

Second, the distinct derivation: movement vs. base-generation accounts for the interpretational differences between SSR and CR subjects. In SSR the raised DP can be interpreted in either its raised position or its base position. The CR subject can only be interpreted in the higher subject position.

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## Analytical issues

First, what role do A-chains play in a highly derivational framework like the Minimalist Program. It is possible Agree is what is at work in CR. Agree is an operation which establishes a relation (agreement, case-checking) between a lexical item and a feature F in its domain (Chomsky (2000)). It creates a relation between base-generated items without movement. However, challenges exist for this assumption:

- The theta role on a DP must be assumed to be an uninterpretable feature, so that Agree can be invoked.
- Agree must be able to relate not just heads to phrases, but phrases to phrases, establishing a relation between the matrix subject and the embedded pronoun.

- (26) a. Two people<sub>i</sub> seem t<sub>i</sub> to have won the lottery. (seem  $\bar{i}$  2, 2  $\bar{i}$  seem)  
b. = It seems that two people have won the lottery. (seem  $\bar{i}$  2)  
c. = Two people are such that they seem to have won the lottery. (2  $\bar{i}$  seem)
- (27) a. Two people seem like they have won the lottery. (\*seem  $\bar{i}$  2, 2  $\bar{i}$  seem)  
b. ≠ It seems like two people have won the lottery. (seem  $\bar{i}$  2)  
c. = Two people are such that they seem to have won the lottery. (2  $\bar{i}$  seem)

The ambiguity of (26a) is attributed to the movement relation between the two positions and the availability of Quantifier Lowering at LF (May (1977,

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1985)), which optionally reconstructs a DP into the position of its trace for purposes of interpretation.

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Second, CR is restricted to clauses introduced by particles such as *like*, *as if*, and *as though*. The A-chain relation cannot be established in non-CR structures.

- (28) a. John seems like he is ill.  
b. \*John seems that he is ill.

Chomsky's (2000) notion of Phase: the derivation is broken down into phases; once the derivation has completed a phase, the internal structure of that phase is no longer available for further derivation. CP and VP are phases.

The A-chain formation (or Agree) in CR may respect phases, i.e. the relevant relation between the two DPs cannot be formed across a CP phase boundary.

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