What are **Feature People** and why do they exist?

“there are pinky purple Bleeper People living on the moon” (Mick Inkpen, 1994)

What kind of Feature People are there?

- **The Sigma Feature People** (Grewendorf & Sabel 1999, Kawamura 2004)
- **The non-Sigma Feature People** (Miyagawa 1997, 200, Saito 2003, JFB 2003, 2007)

1. **The Sigma Feature People** (Grewendorf & Sabel 1999, Kawamura 2004)

What these accounts are reacting to:

**A. the claim that (local) Scrambling has both A and A’-properties:**

(Webelhuth 1989, Mahajan 1990, Saito 1992)

- Acquired anaphor/variable binding (A) ← Parasitic gap licensing (A’)
- Non-reconstruction (A) ← Reconstruction (A’)
- Weak Crossover violation (A’) ← Weak Crossover avoidance (A)

1) a. *[ Otagai-no sensei]-ga karera-i-o hihansita ]] (koto) (JP)

each other-Gen teacher-Nom they-Acc criticized fact

'Each other;'s teachers criticized them.' [out because no c-command to start with]

b. [ Karera-o [[otagai-no sensei]-ga ___i hihansita ]] (koto)

they-Acc each other-Gen teacher-Nom criticized fact

'Them, each other;'s teachers criticized' [fine after scrambling of *them*]

• In (1)b, the scrambled object binds into the subject (an A property)

2) a. [IP karera-i-ga [VP otagai-o hihansita ]] (Japanese)

they-NOM each other-ACC criticized

‘They criticized each other.’ [binding fine: *(them binds each other)*]

b. [IP otagai-o [IP karera-i-ga [VP ___i hihansita ]] (Japanese)

each other-ACC they-NOM criticized

‘Each other, they criticized.’ [still fine, despite Scrambling]

• In (2)b, the bound object “reconstructs” to allow successful binding (an A’ property)

**B. the claim that LD Scrambling has only A’ properties** (violates Weak Crossover, doesn’t create new binding options, always reconstructs)

3) a. *[ otagai-no sensei]-ga [Hanako-ga karera-o hihansita] to] itta] (JP)

[each other’s teacher]NOM [Hanako-ACC criticized] C” said

*“Each other;'s teachers said that Hanoko criticized them” [out, no c-command]

b. *[ Karera-o [[otagai-no sensei]-ga [Hanako-ga ___i hihansita] to] itta]]

[them-ACC] [each other’s teacher]NOM [Hanako-ACC criticized] C” said

*“Them, each other;'s teachers said that Hanoko criticized.” [no improvement after LDS]

**C. the fact that LDSScrambling = OK in Japanese** (see handout 1) **but bad in German**

4) *dass [[dieses Buch] Hans dem Studenten gesagt hat [dass [Maria ___i besitzt]]]

that [this book]ACC Hans the studentDAT said has that Maria ___i owns

“that Hans told the student that Mary owns this book”
5) Grewendorf and Sabel 1999’s main claims and contributions:
   a. Local Scrambling in German has only A’-properties (contra Webelhuth)
   b. Local Scrambling in Japanese has only A-properties (contra Saito)
   c. German has no LDS; Japanese does
   d. (a-c) result from a single parametric difference
   e. Scrambling is feature-driven (the Scrambling feature is called “sigma” [Σ])
   f. Anaphor binding is derivational

6) G&S’s single parametric difference: the presence or absence of multiple subject positions

   because the teacher of self doubtless the student-Acc in good memory
   "The teachers of himself have undoubtedly kept the student in good memory."
   b. *weil den Studenten, [der Lehrer von sich] zweifellos in guter Erinnerung behalten haben
   because the teacher-Acc the teacher of self doubtless in good memory kept have
   "the student, the teachers of himself have undoubtedly kept in good memory."

   • What about the acquired binding properties shown by Webelhuth and Mahajan?

8) weil die Gäste der Student [ohne ___ anzuschauen] since the guests-Acc the student without to look at
   [einander t vorgestellt hat] each other-Dat introduced has (G&S ex. 40)
   "since the student has introduced the guests to each other without look at (them)."

   • 2 things matter about (8): (i) that the binding is OK (ii) that it isn’t a WCO violation
   • G&S account for the A-binding in a lower scrambled A-position (VP-adjoined) followed by A’-movement at the clause level, allowing the PG.

   • Problem: If all Japanese local Scrambling = A-mvt, why is (9)b OK (similar to (2))?  

9) a. Karera-i-ga [[otagai-no sensei]-o hihansita
   they NOM each other GEN teachers ACC criticized
   "They criticized each other's teachers"
   b. [[Otagai-no sensei]-o karera-i-ga hihansita
   each other GEN teachers ACC they NOM criticized
   "Each other's teachers they criticized"  

10) Derivational Binding: a. Principle A can be fulfilled at any point of the derivation
    (G&S pp. 13-15)  
    b. A pronoun can be interpreted as a bound variable if it is A-bound by an operator at any point in the derivation

   • (11)a satisfies Principle A before A-movement (Belletti & Rizzi 1988), similarly to (12):
12) [Each other’s pictures], seem to the men to be t, the most beautiful
how do G&S account for the core German vs Japanese differences?

13) a. **The Multiple Spec Parameter**: The Japanese agreement system allows “multiple Agr Specifiers” (G&S p. 21)

   b. **The Scrambling Generalization** (G&S p. 3)
      A scrambling language allows A-scrambling as well as scrambling out of finite clauses iff multiple Agr-specifiers are licensed in the language.

   c. **The adjunction prohibition**: Adjoined elements are frozen. If A’-Scrambling is adjunction, LD-A-Scrambling is impossible…. “Adjunction is a ‘dead end’ for every kind of movement” (G&S, p. 4)

   d. Scrambling is a “feature-mediated process driven by a scrambling feature [Σ] that is optionally realized with Agr heads”

NB: being a [Σ]-person is not necessary for the main components of G&S

The WCO problem. If we maintain that German local scrambling is A’-movement only, why aren’t (8) and other scrambling over coreferent pronouns Weak Crossover violations?

G&S argue that clear cut cases of German A’-movement also do not cause WCO violations:

14) a. **Wen** [liebt [seine Mutter t t ]]  
     who-Acc loves his mother  
     “Who does his mother love?”  (bad in English)

   b. **Jeden Studenten [liebt [seine Mutter t t ]]**  
     [each student]-Acc loves his mother-Nom  
     “Every student his mother loves.”  (bad in English)

   • They conclude that WCO does not work as an A vs. A’-diagnostic. Therefore (8) and does not show German scrambling is A-movement. (see G&S p. 17 for references)

   • Kawamura (2004) (also a [Σ] Person), argues that all movement must be feature-driven, and that Scrambling must have its own [Σ] feature or objects could never scramble over subjects.

   The non-Sigma Feature People

   • Miyagawa (1997, 2000) (on Japanese scrambling)

15) a. A-Scrambling is driven by the EPP

   b. Languages that have V0-to-T0 and morphological case marking allow EPP-driven scrambling of the object (even over subjects)

   • JFB (2004) (on Russian OVS (and other inversion) constructions)

16) **Soldata** ranilo pulej  
    soldier-Acc wounded [-agr] bullet-Instr  
    "A soldier was wounded by a bullet."

Locative Inversion (LI):

17) **V klasse pojavilsja noven'kij**  
    in class appeared new  
    "A new boy entered the class."
PP Inversion (PPI)

18) **U menja est’ vopros.**
   PP-V-S
   at me is question-Nom
   "I have a question."

Dative experiencers

19) **Saše nравjaetsja deti**
   DatExp-V-S
   Sasha-Dat likes-pl children-Nom
   "Sasha likes children."

"Bad health" verbs (Preslar 1998)

20) **Menja tošnit ot ryby**
    O-V-PP
    me-Acc nauseates from fish
    "I feel sick from the fish."

OVS:

21) **Étu knigu čitaet Ivan**
    O-V-S
    [this book]-Acc reads Ivan
    "Ivan is reading this book."

22) Schematic View of IP Inversion: (Bailyn 2004, following Miyagawa 2001)

   \[graphic\]

   b. Characteristics of IP-Inversion:
   -- non-Nominative XP in SpecIP
   -- V precedes subject
   -- differs from (standard) Topicalization (IP-adjunction)

• **Principle A** (Huang 1993, Belletti & Rizzi 1988)
  i. dative experiencers

23) a. ???Svoja_i rabota ponadobila’s Maše_i
    [self’s work]-Nom need Masha-Dat
    "Masha needed her work."

   b. **Maše_i ponadobila’s svoja_i rabota**
    Masha-Dat needs [self’s work]-Nom
    "Masha needed her work."

   ii. possessive-PP inversion

24) a. ???[Svoj_i dom] byl u Petrovyx_i
    [self’s house]-Nom was at the Petrovs
    "The Petrovs had their own house."
b. U Petrovyx₁ byl [ svoji dom]  
at the Petrovs was [self's house]-Nom  
"The Petrovs had their own house."

iii. locative inversion

25) a. *[Svoji staryj mer] vernulsja v razrušennyj rodnoj gorod;  
self's old Mayor returned to destroyed native city  

b. ??V razrušennyj rodnoj gorod; vernulsja [ svoji staryj mer]  
to destroyed native city arrived self's old Mayor  
"To (his) destroyed native city; returned its; old Mayor"

• Weak Crossover

26) a. *Ee₁ sobaka ljubit každuju devočku₁  
[ her dog]-NOM loves [ every girl]-ACC  
"Her₁ dog loves every girl₁."

b. [Každuju devočku₁]ₖ ljubit ee sobaka tₖ  
[ every girl]-ACC loves [ her₁ dog]-NOM  
"Every girl is loved by her dog."

ii. dative experiencers

27) a. ??[Ee sobaka] nužna [ každoj devočke]₁  
her dog-NOM needs every girl-DAT  
"Her₁ dog is needed by every girl₁."

b. [Každoj devočke]₁ nравitsja [ee sobaka]  
every girl-DAT likes her dog-NOM  
"Every girl₁ needs her₁ dog."

28) a. The EPP is a strong [D] feature (cf Miyagawa’s EPP feature)  
b. Russian IP-inversion is accompanied by V-movement to check a T feature

The A vs A’ Question: Why does IP-Inversion show A-properties and LDS (adjunction) not?

The answer (generalized):  
It’s a side effect of the derivational nature of the feature-driving movement system


29) Linguistic expressions and their interpretations are built up derivationally  

i. Assume Copy Theory of Movement

ii. Assume XP arguments have (at least) the following features:

[P] (PF-relevant)  
[D], [OP] (LF-relevant) (D=phi-features; OP = P-features in Chomsky 2000)

iii. Assume “Feature-Splitting”

iv. WH-movement and Long-Distance Scrambling are driven by [OP] feature

v. Inversion (local scrambling) is driven by D-feature ("EPP" as in Miyagawa)

30) Derivational Binding Theory:  

Principle A: Satisfied if an anaphor is bound by a coindexed [+D] antecedent at any time in the derivation
31) Derivational Interpretation (Kitahara’s version)

"NPs are interpreted and enter into binding relations at the positions where their uninterpretable case features are checked and deleted" (Kitahara 2000, quoted in Saito 2003)

• Problem: Does not allow for obliques or PPs to satisfy the EPP (contra GenInv facts above)

32) Derivational Interpretation (Saito’s 2001 version)

Let us assume that deletion applies to the features P, O and D so that each of them is retained only at one position. The P-feature must be retained at the head of the chain. For the rest, suppose that a feature can only appear in a position where it is selected.

33) Derivational Interpretation (JFB’s version)

NPs are interpreted and enter into binding relations at the highest point in the derivation where their D features are active (selected) (JFB 2003)

34) Derivational schema of scrambling behavior: ([D] feature crucial for binding relations)

a. EPP-driven scrambling: (local, A)  
   \[ IPX_P{D,P} IP...t\_i\_D,P,OP... ]\]

b. Discourse-driven Scrambling: (long, A')  
   \[ IPX_P{P,OP} IP...t\_i[D,P,OP]... ]\]

CONCLUSIONS:

i. The EPP (possibly driven by a D feature) is a (universal) primitive requiring overtness in the IP zone. The EPP is not a requirement about subjects.

ii. Inversion is movement to satisfy the EPP. "A-scrambling" is (non-canonical) satisfaction of the EPP (possible only if accompanied by V-raising) (Miyagawa 2001, 2003, Bailyn 2004)

iii. In a derivational framework, the [D] feature of the EPP accounts for the A-properties of Inversion, by providing the position in the chain from which binding occurs.

iv. "A'-scrambling" is discourse-driven movement. Reconstruction facts fall out from the derivational approach: the D feature relevant for binding is inactive at the high position

v. Reconstruction properties of scrambling types can be derived.

References

Saito, M (2003) “A Derivational Approach to the Interpretation of Scrambling Chains” Lingua 113