

(Imperfect) Parallels between Nominal Expressions and clauses "the Aarhus Workshop on Clausal and Nominal Parallels"

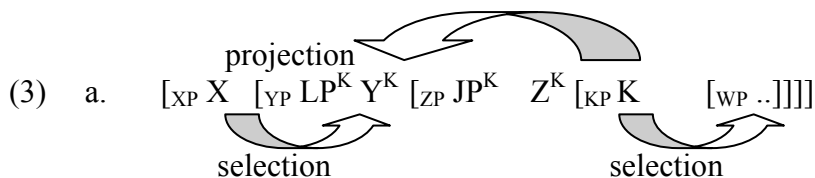
Structure of the talk:

1. Motivating a well known tripartition
2. Agree and EPP
3. Concord is not Agreement
4. Deriving the imperfect parallels

Terminological distinction: “**Nominal Expression**” → the complete nominal constituent

1. Motivating a well-known tripartition

- (1) a. [CP (Complementation layer) [IP (Inflectional layer) [VP (lexical layer)]]]
b. [DP (Complementation layer) [AgrP (Inflectional layer) [NP (lexical layer)]]]
- (2) The defective nature of Nominal Expressions
 - a. reduced capacity of expansion in each of the three layers,
 - b. optionality of arguments (and in particular of the external argument),
 - c. only one structural case, often none, very rarely two.
 - d. highly restricted occurrence of pronominal clitics,
 - e. lack of interrogative features.



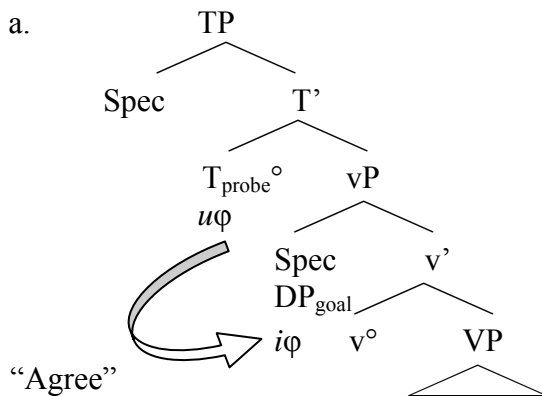
- **selection** merges a lexical head (which is specified in the lexicon for selectional feature) with a fully fledged constituent (or “perfect projection” in the sense of Grimshaw 1991) that can satisfy such selectional features;
- **projection** merges the interpretable and uninterpretable features associated with the lexical item in the lexicon;
- **modification** merges a fully fledged constituent as a specifier of a head.

Each operation is involved with feature transfer:

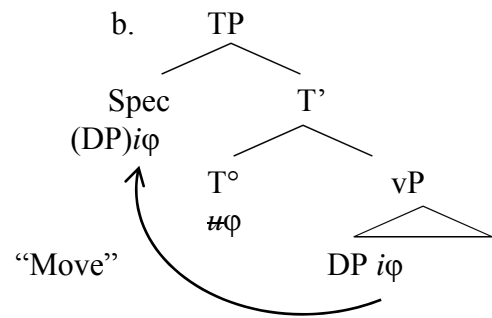
- **selection** transfers selectional features (finiteness, force vs lexical case, theta-roles including possible specification of number, animateness, etc) from the lexical head to the fully fledged constituent (its complement);
- **projection** moves (a bundle of) interpretable features (tense, aspect, mood / gender, number, person) and uninterpretable feature (EPP, Case specification) from the head in which these features are merged up in the structure to create a skeleton in which modifiers can be merged (if present) and the movement triggered by the EPP features can take place;
- **modification** can transfer features of the functional head onto its specifier.

2. AGREE and EPP (an interlude)

(4) a.



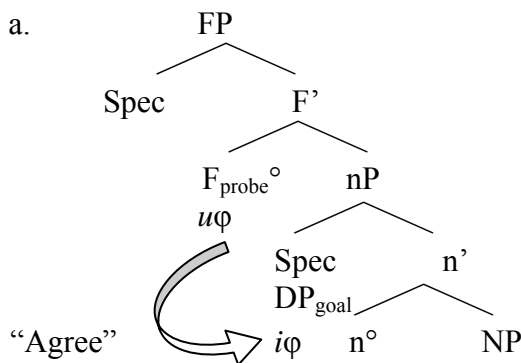
b.



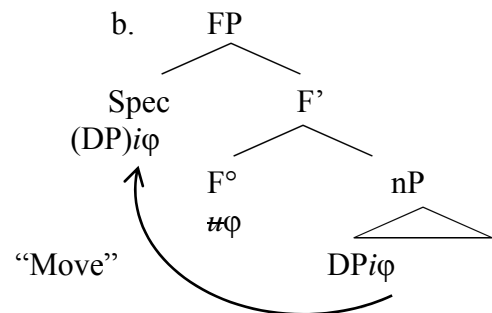
Why is the EPP-feature a defining feature of the clause? → a sentence is true iff the situation denoted by the predicate is true at a given TIME of a given SUBJECT.

Agreement in the nominal expression is limited to the optional merger of a possessor.

(5) a.



b.



(6)

- | | | | |
|----|-----|----------|-------------------|
| a. | az | en | kalapom |
| | the | I-Nom. | hat-1 pers. sing |
| b. | a | te | kalapod |
| | the | you-Nom | hat -2 pers. sing |
| c. | a | Mari | kalapja |
| | the | Mari-Nom | hat -3 pers. sing |

Szabolcsi (1987, 1994)

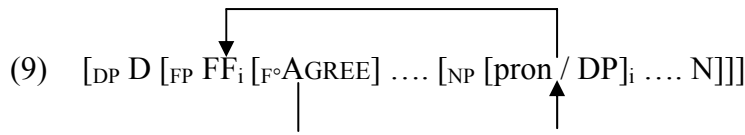
2.1. EPP in the NE is merged at the left edge of the intermediate layer:

(7)

- la vecchia fotografia sbiadita di Gina di Mario
the old faded picture of Gina of Mario
"Gina's old faded picture of Mario/#Mario's old faded picture of Gina"
- la {sua} vecchia {*sua} fotografia sbiadita di Mario
"her old faded picture of Mario"/ *"Mario's old faded picture of her"
- *la mia {tua} fotografia {tua} / la mia fotografia di te
"my picture of you"

(8)

- Full genitive NE's appear embedded into a PP and located after postnominal adjectives.
- The order of these genitive PPs is rather free in object-referring NEs.
- Possessive adjectives and pronominal possessives usually appear preceding prenominal adjectives.
- No more than one possAP is allowed.
- A strict hierarchy is observed even in object-referring nominals as regards theta-role assignment to possAP.



- (i) Why adjectival possessives are moved out of the lexical layer to the high portion of the intermediate layer?
(ii) Why full PPs cannot be moved in the languages under consideration?

- Relational adjectives can't move while possessive adjectives are moved in the unmarked case:

(10) a. la vecchia opinione razzista italiana
 the outdated opinion racist Italian
 b. *L'italiana vecchia opinione razzista
 the Italian outdated opinion racist
 "the outdated Italian racist opinion"

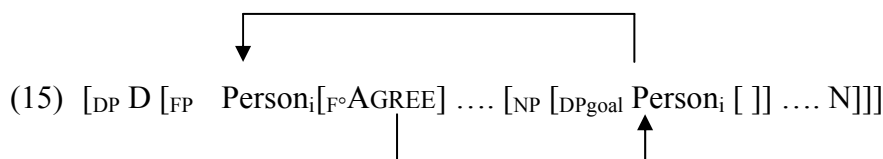
(11) a. ?la vecchia opinione razzista tua
 the outdated opinion racist your
 b. la tua vecchia opinione razzista
 the your old opinion racist
 "your outdated racist opinion"
- Third person possessive pronoun *loro*, which has no adjectival concord, has the same distribution as possessive adjectives:

(12) a. la {loro} vecchia {*loro} fotografia sbiadita {?loro}
 the {their} old {*their} picture faded {?their}
 "their old faded picture"
 b. la {loro} vecchia {*loro} opinione razzista {?loro}
 the {their} old {*their} opinion racist {?their}
 "their old racist opinion"
- In special registers personal pronouns embedded in a *di*PP may move while full NEs do not:

(13) a. con una nuora autoritaria e **le di lei tre figlie**
 with a bossy daughter-in-law and the of her three daughters
 (<http://www.pannostrale.it/scheda.php?compagnia=I+TEATRANTI> (march 2007))
 b. Applausi scroscianti in sala e sorriso stellare sulle labbra del protagonista, mentre **il di lui cane** - di nome Pinocchio - zampetta giocoso sul palco del Teatro dell'Arte, e **la di lui figlia** - Teresa - abbozza un accenno di pianto fra le braccia di mamma Francesca, e **la di lui band** - Saturnino in primis - osserva l'intera scena ...
 the of him dog ... the of him daughter ... the of him bad
 http://www.mybestlife.com/ita_anima/Jovanotti_Autobiografia_di_una_festa_sito.htm (march 2007)
 c. Allora i de Cristofaro scaricano **i di loro schioppi** contro Ramaglia
 Then the de Cristofaro's fire the of them rifles agaist Ramaglia

(14) a. **le di sua nuora tre figlie*
 the of his daughter-in-law three daughters
 b. **i dei de Cristofaro schioppi*
 the of the De Cristofaro rifles
 c. **il di Jovanotti cane / la di Jovanotti figlia / *la di Jovanotti band*
 the of Jovanotti dog/daughter/band

- (i) Why only pronouns and possessive adjectives move? → Because they consist uniquely in person features, targeted by AGREE.
- (ii) Why full PPs cannot be moved in the languages under consideration? → Because the features are not strong enough to pied-pipe a whole constituent.



The weak / strong nature of the person feature is subject to variation: Germanic languages obligatorily move both pronominal and DP possessors, but not PPs. Hebrew seems to leave open the possibility of moving both pronominal and DP possessors and of merging both pronominal and DP possessors into a PP. (cf. Borer 1984, Ritter 1991, Siloni 1997 a.o.). Among Romance languages, Romanian presents apparent similarities to Hebrew (Dobrovie-Sorin 2000). For an implementation of this cf. Giusti 2008.

3. Concord is not Agreement (Or on the effects of Projection and Modification)

Giusti 2002: Adjectives and adverbs appear in functional specifiers and are merged according to a universal hierarchy which is not subject to acquisition (Cinque's 1994, 1999), but:

- the hierarchy of adjectival modifiers does not reflect a rigid sequence of functional projections that are always projected, but a principle which constraints the merger of modifiers.
- functional heads in the inflectional layer do not contain these semantic features but are trivial copies of the ϕ -features of the head noun (i.e. number, gender or word class and case). Cf. Giorgi and Pianesi 1997:

(16) (Giorgi & Pianesi 1997:14-16)

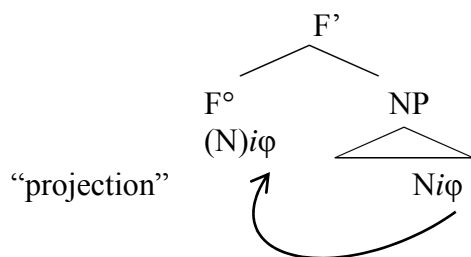
a. **Universal Ordering Constraint**

Features are ordered so that given $F_1 > F_2$, the checking of F_1 precedes the checking of F_2 .

b. **Feature Scattering Principle**

Each feature can head a projection

(17)



(18) Properties of Projection

- Feature copy proceeds in a bottom-up fashion.
- The copies can be silent (and therefore must, due to economy) if they are visible on the specifier.

Corollary: The highest copy is realized as the article in D if specDP does not contain an uninterpretable feature to be erased.

(19) Interpretable and uninterpretable features in NEs

- Gender is specified in the lexicon – or derived in word morphology,
- Number is projected in the inflectional field,
- Person/Deixis/definiteness is projected in the top Specifier (the left edge of the NE).
- Case is in itself uninterpretable but allows for the theta-role to be interpreted on the noun phrase. (But cf. Pesetsky and Torrego 2001 who suggest that Case is a uT on DP)

(20) **Heads as feature bundles**

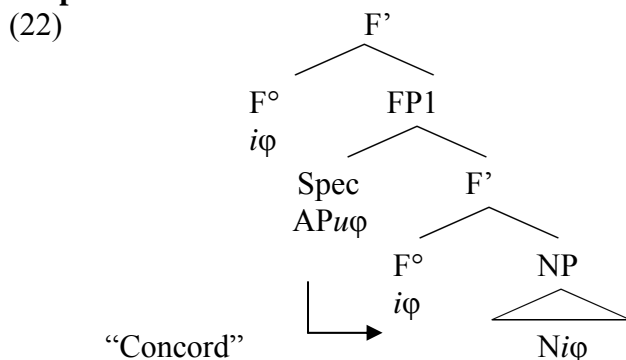
A head is a syntactically indivisible bundle of formal features (Matushansky 2006:)

Split features vs. bundled features

- (21) {N +[masch], [Sing], [3rd p.] [α Case]}
- | | | | | |
|----|------------|--------------|---------|-----------|
| a. | băiatul / | il ragazzo / | gutten | “the boy” |
| b. | un băiat / | un ragazzo / | en gutt | “a boy” |

Nominal feature hierarchy → Case > Person > Number > Gender

Properties of Modification



Feature sharing resulting from Concord is not obtained by movement but is the result of merger of a modifier in a functional Specifier.

- Ordered adjectives usually display concord for the same bundle of formal features, and not for separate dedicated features (such as gender, number, or speaker-orientation, size, etc.).
- Agreement in the clause results in sharing the person features of the subject on the inflectional morphology of the verb (the lexical head in the clause), while nominal concord is quite the opposite in that it consists in sharing the features of the lexical head N with its modifiers (also cf. Carstens 2001).
- While for genitives we have evidence for a base and a derived position, there is no such evidence for adjectives.
- Apart from possessive and relational adjectives, other adjectives do not saturate a theta-role of the noun.
- Adjectives are to be compared to adverbs, which never (need to) A-move.

(23) *le altre belle ragazze italiane*
the other nice girls Italian

- | | |
|----|--|
| a. | [FP1 [APitalian-[uFem, uPl] [F°1 ragazze[iFem, iPl]] [NP ragazze[iFem, iPl]]]]] |
| b. | [FP2 [AP belle[#Fem, #Pl]] [F°2 ragazze[iFem, iPl]] [FP1 [APitaliane[#Fem, #Pl] [F°1 ragazze[iFem, iPl]] [NP ragazze[iFem, iPl]]]]] |
| c. | [FP3 [AP altre[#Fem, #Pl]] [F°3 [iFem, iPl]] [FP2 [AP belle[#Fem, #Pl]] [F°2 ragazze[iFem, iPl]] [FP1 [AP italiane[#Fem, #Pl] [F°1 ragazze[iFem, iPl]] [NP ragazze[iFem, iPl]]]]] |
| d. | [DP Rj [D° le[iFem, iPl]] [FP3 [AP altre[#Fem, #Pl]] [F°3 [iFem, iPl]] [FP2 [AP belle[#Fem, #Pl]] [F°2 ragazze[iFem, iPl]] [FP1 [AP italiane[#Fem, #Pl] [F°1 ragazze[iFem, iPl]] [NP ragazze[iFem, iPl]]]]] |

(24) *Le sue /di lui altre belle amiche italiane*
The his/of him other nice friends italian

- a. [DP R_j[#Fem, #Pl] [D° le[iFem, iPl] [FP4 [PP di lui]_i [F°4 [iFem, iPl]+AGREE] [FP3 [AP altre[#Fem, #Pl]] [F°3 [iFem, iPl]] [FP2 [AP belle[#Fem, #Pl]] [F°2 amiche[iFem, iPl]] [FP1 [AP italiane[#Fem, #Pl] [F°1 amiche[iFem, iPl]] [NP [PP di lui]_i amiche[iFem, iPl]]]]]]]
- b. [DP R_j [D° le[iFem, iPl] [FP4 [AP sue[#Fem, #Pl]]_i [F°4 [iFem, iPl]+AGREE] [FP3 [AP altre[#Fem, #Pl]] [F°3 [iFem, iPl]] [FP2 [AP belle[#Fem, #Pl]] [F°2 amiche[iFem, iPl]] [FP1 [AP italiane[#Fem, #Pl] [F°1 amiche[iFem, iPl]] [NP [PP sue]_i amiche[iFem, iPl]]]]]]]

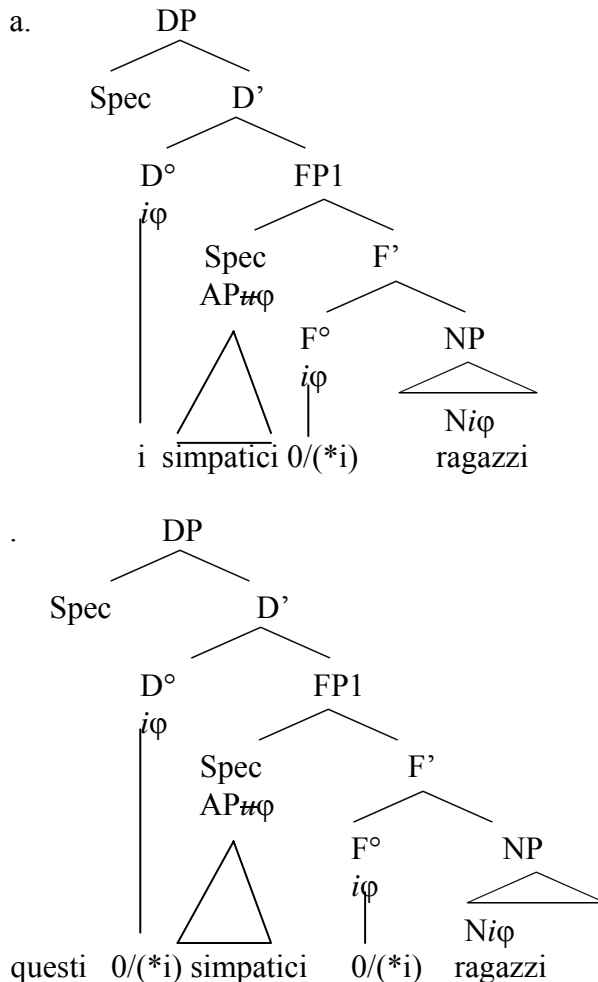
(25) his other nice Italian friends

[DP=NE R_j +[FP=NE_{goal} Person_i [her]] [F°4 [iPl]] [FP3 [FP [AP other]] [F°3 [uPl]] [FP2 [FP [uPl] [AP nice]] [F°2 friend+s[uPl]] [FP1 [FP [uPl] [AP Italian]]_i [F°1 friends[uPl]] [NP [NE_{goal} her]_i friends[uPl]]]]]]]

The hierarchy of reference features is NE > NE_{goal}, namely R_j > R_i.

Let us now turn to overt Reference items such as demonstratives. They may also come with uninterpretable features to be deleted against the interpretable copy in D. As a consequence, according to (18b) in a language like Italian, they are in complementary distribution with an article.

(26) a.



Postnominal demonstratives (the Romanian first discussed by Dobrovie-Sorin 1987, Grosu 1988, Giusti 1993, 2002, 2005) displays a second position immediately following a noun inflected for the enclitic definite article (28), while the Spanish demonstrative (cf. Bernstein 1991, Brugè 1996) appears to be the lowest in the sequence of postnominal adjectives (29):

- (27) a. ce bel garçon French
b. questo bel ragazzo Italian

- | | | | |
|------|---|--|------------|
| | c. | este bonito rapaz | Portuguese |
| | | this good-looking boy | |
| | d. | denne vakkre gutten | Norwegian |
| | | this good-looking boy-the | |
| (28) | a. | acest băiat frumos | Romanian |
| | | this boy good-looking | |
| | b. | băiatul acesta frumos | |
| | | boy-the this good-looking | |
| (29) | a. | este chico hermoso | Spanish |
| | | this boy good-looking | |
| | b. | el chico hermoso este | |
| | | the boy good-looking this | |
| (30) | a. | afto to omorfo paidi | Greek |
| | b. | to omorfo paidi afto | |
| (31) | A functional projection must be visible at all levels of representation by either | | |
| | a. | making the specifier visible, <i>and/or</i> (according to parametric choice) | |
| | b. | making the head visible. (Dimitrova-Vulchanova & Giusti 1998). | |

- (40) a. The terrible Italian destruction of the city [AGENT > PATIENT / *PATIENT > AGENT]
 b. its/the city's (terrible) (*Italian) destruction [*PATIENT > AGENT]
- (41) a. Mary never likes [any picture of herself/*her]
 b. Mary likes [John's pictures of her/*herself]

→ External arguments are proper of little vP. an EPP feature is bundled with T, which is part of the intermediate layer (+T assigns nominative Case, -T assigns null Case). As observed in section 2, an EPP feature may but need not be merged at the left edge of the intermediate layer of the NE.

4.3. *In both noun phrases and clauses we find structural case BUT in sentences we typically find two (nominative and accusative) in nominals we typically find one (genitive) if any.*

- (42) a. John's/his description of Mary
 b. a friend of Mary's
 c. a description of Mary's (only AGENT)
- (43) a. la/una sua descrizione di Maria
 b. *la descrizione di Gianni di Maria
 c. la recensione di Gianni su/??di quel film
 "John's review of that film"

→ If AGREE is the process which assigns structural case, it is present twice in clauses, and at most once in nominal expressions. More research is needed to explore the differences between Object agreement and Subject agreement on the one hand and Object Agreement and Possessor Agreement on the other hand.

4.4. *In both clauses and NEs we find discourse driven displacements BUT the left periphery of noun phrases is much more subject to specific properties of individual languages*

• In Italian adnominal non-restrictive adjectives can be topicalized inside the NE (Giusti 1996, 2006):

- (44) a. le sue lunghe trecce bionde poss > long > N > blond
 the her long braids blond
 b. *le sue bionde trecce lunghe *poss > blond > N > long
- (45) a. le lunghe sue trecce bionde long > poss > N > blond
 b. le bionde sue lunghe trecce blond > poss > N > long

• Despite the presence in Gr and Bg of a clitic inside the DP, and of Cl left dislocation in the clause, only Bg displays clitic left dislocation inside the NE. (Giusti and Stavrou 2008)

- (46) a. na Ivan portretut (mu) (Bulgarian, Dimitrova-Vulchanova and Giusti 1999)
 to Ivan portrait-the (CL.3sg.)
 portretut (mu) na Ivan
 b. tu Jani to portreto (*tu) (Greek, Horrocks and Stavrou 1987)
 the Jani.Gen. the portrait (*CL.3sg.)
 to portreto tu Jani

4.5. *In clauses but not in noun phrases the wh- feature cannot be checked:*

- (47) a. I asked you [[what time] it was].
 b. I asked you [the time].
 c. *I asked you [what time].

→ Force allows for Foc, and wh- features to be checked and is incompatible with Case. The R-features of the NE are associated to a ROLE (and need Case) and are incompatible with wh- and Foc features.

4.6. NEs miss a number of transformations. (Heageman and Guéron 1999:439-446)

- Prepositional genitive cannot be assigned to the subject of a clausal IP-complement of a noun:

- (48) a. John considers Mary (to be) the best candidate.
b. *John's consideration of Mary (to be) the best candidate.
- (49) a. John believes Mary to be leaving soon.
b. *John's belief of Mary to be leaving soon.

- Neither can genitive be assigned to the subjects of the subordinate IP:

- (50) a. *Mary's consideration (by John) to be the best candidate.
b. *Mary's belief (by John) to be leaving soon.
- (51) a. John appears (to Mary) to be eating too much.
b. *John's appearance (to Mary) to be eating too much
- (52) a. Mary is feared by John.
b. *Mary's fear by John
- (53) a. Mary is known by John.
b. *Mary's knowledge by John

- A noun cannot have an expletive subject as a copula as raising verbs do:

- (54) a. It appears that Mary loves John.
b. *its appearance that Mary loves John
c. *the appearance that Mary loves John
- (55) a. Mary looks/seems sad.
b. *Mary's look sad
c. Mary's sad look

→ All the transformations above are the results of iterated AGREE. A possibility to explore is that an AGREE associated with +T can target the goal of an AGREE associated with -T. But an Agree associated with nominal features cannot.

5. Conclusions

Claim 1: Feature sharing results from Agreement, Concord, and Projection

- Agreement arises from the operation Agree. I follow mainstream literature in assuming merger of a formal uninterpretable feature (a probe) to be checked against a constituent (the goal), in a lower specifier. This triggers movement (copy and re-merge) of the features to obtain a Spec-Head configuration with the probe, resulting in covert movement (only the features move) or overt movement (the moved copy pied-pipes the whole constituent).
- Concord arises from the first-merger of a modifier underspecified for uninterpretable features. In other words, Concord is directly enhanced by the Spec-Head configuration, it does not involve merger of a probe targeting a goal, and never triggers overt or covert movement.
- Projection is triggered by (re-)merge of features that constitute a “perfect projection” in the sense of Grimshaw 1991.

Results:

1. It preserves the Agree relation (involving a probe targeting a goal) where it is independently motivated while dispensing with such an operation in the case of adjectival modification.
2. It derives a number of differences between different kinds of feature sharing that will be reviewed in the course of the discussion
3. Both Agreement and Concord may be present in one and the same element.

Claim 2: The features projected by nominal expressions are Gender, Number and Person, which combined are interpreted as R + the uninterpretable feature Case. None of features is associated to an EPP feature.

Result: It derives a number of imperfect parallels between Nominal Expressions and Clauses.

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