Noun phrases http://www-rohan.sdsu.edu/~gawron/syntax

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Diagnostic properties

Subjecthood An amazing feast greeted him upon his arrival.

Wh-cleft What greeted John saw was an amazing feast .

Object of PP I gave thanks for an amazing feast.

Variety: Left hand side

- John
- John's book
- The book/every book/all books/ most books
- 4 All the books/both the books
- More men/three more men/ as many as three more men
- more men than women/fewer men than women/as many men as women/
- three times as many men as women/as many as three times as many men as women
- such a book/so impressive a book/too great a book

Variety: Right hand side

- John's gift to Mary
- The billionaire's gift of 1 million dollars to the university
- The capital of Spain/a picture of Marty/a credit to his people
- lacktriangle The idea [s that people can overcome their baser instincts]
- lacktriangle The suggestion [$_{\mathrm{S}}$ that our mayor might be guilty of grand larceny]
- \odot The instincts [$_{\rm S}$ that people can overcome]
- $oldsymbol{0}$ * The instincts [s that people can overcome their impulses]

Adjective phrases

Examples

- (i) John bought a red car.
- (ii) John bought an extremely red car.
- (iii) ? John bought an extreme red car.
- (iv) ? John bought an extreme car.
- (v) John bought a large expensive red car.

Diagnostic properties

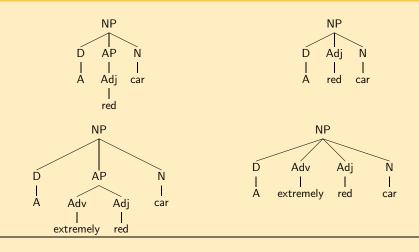
Subjecthood An extremely red car honked at him.

Wh-cleft What honked at him was an extremely red car .

Object of PP I looked at an extremely red car.

Noun phrase rules

Trees



 \rightarrow (Adv) Adj Jean Mark Gawron (SDSU)

 \rightarrow (D)(AP)N

Gawron: Noun phrases

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 $NP \rightarrow (D)(Adv) (Adj) N$

Complex determiners

Examples

All the All the fine young men

at least three polliwogs.

a good deal more than five
John has written a good deal more than five

books.

a career-high 70 Barry Bonds hit a career-high 70 home runs.

Noun complements

Noun phrases

- a. The *belief* that he would prevail
- b. The ${\it claim}$ that he would prevail
- c. The fact that he would prevail

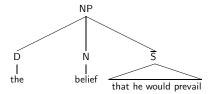
Sentences

- a. John believed that he would prevail.
- b.John claimed that he would prevail.

Subjecthood The belief that he would prevail kept John going.

Wh-cleft What kept John going was the belief that he would prevail

Object of PP John clung to the belief that he would prevail.

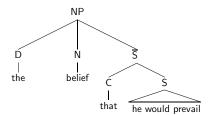


Subjecthood

The belief that he would prevail kept John going.

Wh-cleft What kept John going was the belief that he would prevail

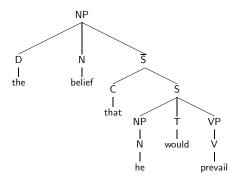
Object of PP John clung to the belief that he would prevail.



Subjecthood The belief that he would prevail kept John going.

Wh-cleft What kept John going was the belief that he would prevail

Object of PP John clung to the belief that he would prevail.



Relative clauses

Complement [NP] The claim [NP] The claim [NP] that the Allies launched an attack [NP] was widely disbelieved.

Disallowed [$_{\mathrm{NP}}$ The attack [$_{\mathrm{S}}$ that the Allies launched an attack]]

was a complete success.

Relative clause constraint

A relative clause contains an NP gap:

[$_{
m NP}$ The attack [$_{
m S}$ that the Allies launched [$_{
m NP}$ e]]] was a complete success.

Other examples

Relative clause variety				
Rel pro	Gap			
that	OBJ	$[_{ m NP}$ The attack $[\overline{\sf S}$ that $[_{ m S}$ the allies launched $[_{ m NP}$ e $]$ $]$ $]$		
which	OBJ	$\left[_{ m NP} \ {\sf The \ attack} \ \left[\overline{\sf S} \ {\sf which} \ \left[_{ m S} \ {\sf the \ allies} \ {\sf launched} \ \left[_{ m NP} \ e \ ight] \ ight] ight]$		
Ø	OBJ	$[_{ m NP}$ The attack $[\overline{\sf S} \; \emptyset \; [_{ m S} \;$ the allies launched $[_{ m NP} \; e \;] \;] \;]$		
who	SUBJ	$[_{ m NP}$ The general $[\overline{\sf S}$ who $[_{ m S}$ $[_{ m NP}$ e $]$ launched the attack $]$ $]$		
Ø	POBJ	$[_{\rm NP}$ The general $[\overline{\sf S}$ whom $[_{\rm S}$ we reported to $[_{\rm NP}$ e $]$ $]$		

Pied piping

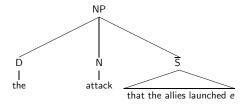
whom

Relative clauses in which there is a relative pronoun that does not equal the gap exhibit pied piping. The gap filler contains more syntactic material than just the relative pronoun, and the gap corresponds to the gap filler not the relative pronoun, but the relative pronoun still refers to the head noun.

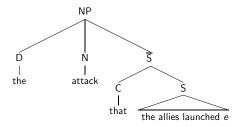
 $[_{NP}]$ The general $[\overline{S}]_{PP}$ to whom $[_{S}]$ we reported $[_{PP}]_{e}$

OBL

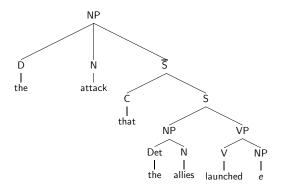
Trees



Trees



Trees



More pied piping

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Ross (1967)
              \overline{S} [NP which ] [S the government prescribes the height of the
the reports
              letters on the covers of [NP e]
              [S]_{PP} of which ]_{S} the government prescribes the height of
the reports
              the letters on the covers [PP e]
the reports
              \overline{S} [NP] the covers of which ] [S the government prescribes the
              height of the letters on [NP e]
              \overline{S} [PP on the covers of which ] [S the government prescribes
the reports
              the height of the letters [PP e]
              \overline{S} [NP] the letters on the covers of which ] [S the government
the reports
              prescribes the height of [NP] e ] ] ]
              [S]_{NP} the height of the letters on the covers of which ]_{S}
the reports
              the government prescribes [NP e]
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Summary

Relative clauses versus Complement clauses				
Relative clauses	Noun Complement clauses			
Contain a gap	Full clauses (like verb complement clauses)			
Adjuncts (any noun)	Complements			
Preceded by relpro	Preceded by complementizer			
Pied piping rel pro \neq gap				

Possessors/Subjects

S NP	$\begin{array}{c} \text{Nominalization: Verbal subject} \to \text{Nominal possessor} \\ \text{John believed } [_{\overline{S}} \text{ that he would prevail}]. \\ \text{John's belief} [_{\overline{S}} \text{ that he would prevail}] \end{array}$			
	Subject			
S	* John believed $[\bar{S}]$ that he would prevail] kept him going.			
NP	John's belief $[s]$ that he would prevail] kept him going.			
	Yes-No question			
S	Did John believe $\left[\frac{1}{8}\right]$ that he would prevail]?			
NP	* Did John's belief $\left[\frac{1}{S}\right]$ that he would prevail]?			

English nominalization

Spielberg lavishly produced the movie.

\Downarrow	Ν
\Downarrow	0
\Downarrow	m
\Downarrow	i
\Downarrow	n
\Downarrow	а
	- 1

For Spielberg to lavishly produce the movie Spielberg lavishly producing the movie Spielberg's lavishly producing the movie Speilberg's lavish producing of the movie Spielberg's lavish production of the movie Spielberg's lavish movie production

- * Spielberg's lavish producing the movie
- Speilberg's lavishly producing of the movie
- * Speilberg's lavish production the movie

Kinds of English nominalization

-ing	Spielberg's making the movie is a real advantage.
for-to	For Spielberg to make the movie would be a great triumph.
-tion	Spielberg's objection to the movie
-al	Spielberg's refusal to compromise
-ment	Speilberg's abandonment of narrative convention
-ure	Spielberg's failure to realize this vision
Ø	Spielberg's move to LA
←`	Spielberg's progress in this regard

English stress-shift nominalizations (Raffelsiefen 1993): address, abstract, conflict, decrease, export, misprint, survey, protest, remake (and a host of two-syllable re- verbs: refill, redo, reprint, retread, but NOT if the reprefix is Latinate: reward, reform, report, resign, retort, except record?)

Noun to verb

Malouf (1998), p 31, citing Quirk et al. (1985)

- a. Brown's painting(s) of his daughter hang(s) in the town mueum.
- b. Brown's deft painting of his daughter is a delight to watch.
- c. Brown's deftly painting his daughter is a delight to watch
- d. I dislike Brown (deftly) painting his daughter.
- e. Brown is (deftly) painting his daughter. / Brown might be painting his daughter.

Five properties

- Finite verb (takes modal test): e only
- ② Direct case subject: d,e
- Adverb modifier: c,d,e
- Direct case object: c,d,e
- Morphological verb form: b, c, d, e (no plural)

 $\begin{array}{cccc} \mathsf{Finite} & \to \mathsf{D.case} & \to \mathsf{D.case} & \to \mathsf{Adv.} & \to \mathsf{Verb} \\ \mathsf{Verb} & \mathsf{subj} & \mathsf{obj} & \mathsf{mdfr} & \mathsf{form} \end{array}$

Cross-linguistic statement

Verbalization hierarchy Croft (1991)

If a verbal form inflects for tense-aspect-modality like a predicated verb [= finite verb], then it will take subject and object dependents like a predicated verb. If verbal form takes a subject dependent like a predicated verb, then it will take an object dependent like a predicated verb. p. 83

 $\begin{array}{ccc} \text{Finite} & \rightarrow \text{D.case} & \rightarrow \text{D.case} \\ \text{Verb} & \text{subj} & \text{obj} \end{array}$

Implicational hierarchy

The hierarchy of nouniness properties on the previous slide

$$\begin{array}{ccc} \mathsf{Finite} & \to \mathsf{D.case} & \to \mathsf{D.case} \\ \mathsf{Verb} & \mathsf{subj} & \mathsf{obj} \end{array}$$

is called an implicational hierarchy.

- Ross (1973)b is another example of such a hierarchy which arranges NPs on a scale from most prototypical to least prototypical based on a variety somewhat different tests, ranging from expletives (it, there) through idiom chunks (kicked the bucket) to ordinary proper names.
- Implicational hierarchies play a role in stating many linguistic generalizations:

Obj agreement \rightarrow Subj agreement

Implicational hierarchies & universals

Implicational universals

If a language has voiced obstruent phonemes, then it has voiceless obstruent voiced obstruents \rightarrow voiceless sonorants

If a language has voiceless sonorant consonants it has voiced sonorant consonants voiceless sonorants → voiced sonorants

If a language has fricative, then it has stops.

If a language has affricates, then it also has stops and fricatives.

 $\mathsf{affricates} \to \mathsf{fricatives} \to \mathsf{stops}$

Nouniness

- Ross (1973)a, Ross (1973)b: Original work identifying variability on the concept of an NP category
- Sankoff and Cedergren (1976): Foundational work in establishing dimensionality in linguistic variation using a statistical method called multidimensional scaling.
- Malouf (1998): develops a theory of mixed categories (form can mix noun and and verb properties) which captures the above implicational hierarchy; applied to English as well to "noun incorporating" languages like Greenlandic Eskimo.

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