Prosodic constraints on pronoun placement

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Sandbjerg, June 17, 2006

- I will show with two case studies how a prosodic regularity affects the placement options for pronouns in the Germanic languages.

1 Preliminaries: Selkirk '96: The prosodic structure of function words

- Selkirk (1996) assumes that function words do not necessarily form prosodic words. In particular, this distinguishes weak forms from strong forms.
- Some monosyllabic English function words:

word	strong	weak
/can/	[kæn]	[kən], [kn̩]
/is/	[ɪz]	[z]
/at/	[æt]	[ət]

- We have four possibilities:

(1) Possible prosodic representations for functions words: (Selkirk, 1996, 188):

i.	prosodic word	((*fnc*)$_{\text{PWd}}$ (*lex*)$_{\text{PWd}}$)$_{\text{PPh}}$
	prosodic clitic:	
ii.	*free clitic*	(*fnc* (*lex*)$_{\text{PWd}}$)$_{\text{PPh}}$
iii.	*internal clitic*	((*fnc lex*)$_{\text{PWd}}$)$_{\text{PPh}}$
iv.	*affixal clitic*	((*fnc* (*lex*)$_{\text{PWd}}$)$_{\text{PWd}}$)$_{\text{PPh}}$

- (1-i.) is a strong form, (1-ii.-iv.) are possible variants of weak forms which has been argued for in the literature.
- Selkirk's account relies on a theory of prosodic structure which is based on the prosodic hierarchy in (2) and the violable constraints in (3):

(2) prosodic hierarchy:

Utt	Utterance
IP	Intonation phrase
PPh	phonological phrase
PWd	prosodic word
Ft	foot
σ	syllable
μ	mora

(3) Constraints on prosodic structure (Selkirk, 1996, 190):

Layeredness
No C^i dominates a C^j, $j > i$,
e.g. "No σ dominates a Ft"

Headedness
Any C^i must dominate a C^{i-1} (except if $C^i = \sigma$),
e.g. "A PWd must dominate a Ft"

Exhaustivity
No C^i immediately dominates a constituent $C^j, j < i - 1$,
e.g. "No PWd immediately dominates a σ"

Nonrecursivity
No C^i dominates $C^j, j = i$, e.g. "No Ft dominates a Ft"

- Alignment constraints:

(4) (Selkirk, 1996, 192)

a. *Word Alignment Constraints (WdCon)*
   (i) Align (Lex,L; PWd,L) = WdConL
   (ii) Align (Lex,R; PWd,R) = WdConR

b. *Prosodic Word Alignment Constraints (PWdCon)*
   (i) Align (PWd,L; Lex,L) = PWdConL
   (ii) Align (PWd,R; Lex,R) = PWdConR
   "The left/right edge of a lexical category (a prosodic word) is aligned with the left/right edge of a prosodic word (lexical category)"

- Prosodic Words tend to be built of lexical categories

(5) The crucial constraint on phonological phrase alignment (Selkirk, 1996, 202): Align(PPh, R; PWd, R) (= AlignPPh)

- strong forms of function words occur if the function word
  - is isolated
  - is focussed
  - is at the edge of a phonological phrase
- The latter case interests us most:

(6)

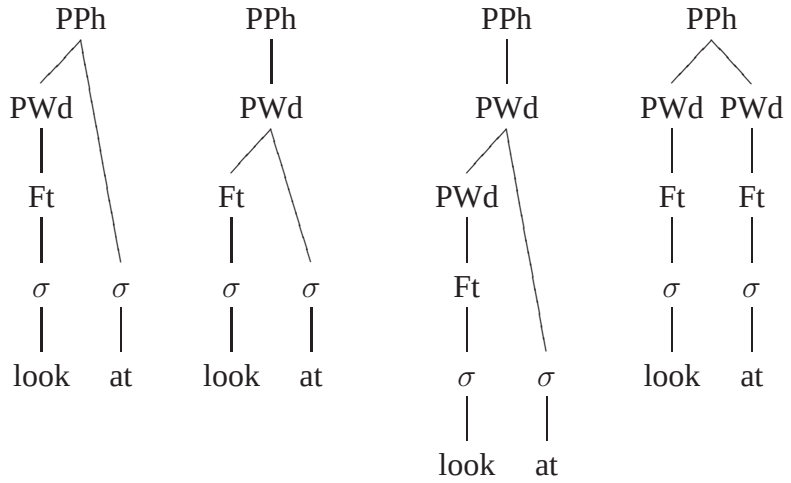
a.	I can eat more than Sara *cán*	[kæn], *[kən], *[kn̩]
b.	If you think you *cán*, go ahead and do it	
c.	Wherever Ray *ís*, he's having a good time	[ɪz], *[z]
d.	What did you look *át* yesterday?	[æt], *[ət]
e.	Who did you do it *fór* that time?	[fɔr], *[fr̩]

- The emphasised function words only occur in strong form here. Ranking for English:

(7) AlignPPh ≫ WdCon ≫ $\text{NonRec}_{\text{PWd}}$ ≫ PWdCon

(8) $(\text{What})_{\text{PPh}}$ (did you look at)$_{\text{PPh}}$ (yesterday)$_{\text{PPh}}$

(9) a. *free clitic* b. *internal clitic* c. *affixal clitic* d. *prosodic word*



(10)

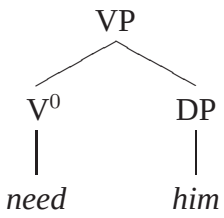
	/*look at*/	AlignPPh	WdCon	NonRecPWd	PWDCon
	(9-a)	∗!			
	(9-b)		∗!		∗
	(9-c)			∗!	
☞	(9-d)				∗∗

- Pronouns are problematic as they may occur clause-finally in weak form:

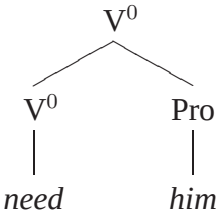
(11) *We need him*
need him, them ≡ Needham [nid m̩]

Selkirk proposes an exceptional syntactic analysis which is supposed to help circumventing a violation of WdCon (12-b):

(12) a.



b.



- The syntactic clitic analysis precludes a candidate like (9-d) from the beginning – perhaps as unfaithful. And now, a candidate with a structure like (9-c) becomes optimal.
- This move is quite unattractive. If it is possible to trigger a prosodic structure by an exceptional syntactic representation then we can stipulate such an exceptional piece of structure whenever we need it. This is no explanation.
- *Remark*: This is a general difficulty that we see in one or the other way in many papers on the syntax-phonology interface. Authors tend to spoil everything by including too many options for the syntactic representation.
- But first of all: Such a move renders it impossible to account for cases where we find the expected effects. These have not been taken into account by Selkirk:

(13) a. *I gave Mary it
b. I gave it to Mary

(14) a. *I gave up it
b. I gave it up
c. I gave up the plan
d. I gave the plan up

- **Solution:**
Selkirk assumes that AlignPPh is *inviolable* in English. This might only be true, insofar as further prosodic constraints are concerned, but it's impact might be restricted by syntactic constraints.
- Thus, an object might simply not be allowed to escape a violation of AlignPPh in cases like (11):

(11) *We need him.*

- This distinguishes English from French:

(15) a. *Marie voit Jean.*
M. sees J.
b. *Marie le voit.*
M. him sees
c. *Marie Jean voit.
d. *Marie voit le.

- But if the syntax allows for a structural alternative that avoids a violation of AlignPPh, we go for it ((13), (14)).

(13) a. *I gave Mary it
b. I gave it to Mary

(14) a. *I gave up it
b. I gave it up

- This calls for an explanation in terms of syntax – (prosodic) phonology interaction.

2 An OT model of the syntax-phonology interaction

(16) The general architecture:

input	*syntactic structure* [S_I]
output candidates	*syntax, phonology* [S_O,P]

- The structures are generated by *generation functions*. The syntactic generation function follows the principles of a simple X-bar theory: phrases have a head and at most one specifier and complement. Adjunction is allowed. Head movement is allowed. The surface form is generated by another generation function. It generates all possible linear orders of the involved words in all possible morphological variants and prosodic phrasings.

- The mapping between S and P is regulated by mapping constraints like those in (17) from Schmid and Vogel (2004):

(17) a. **MAP(complement before head) (MAPch)**
If A and B are sister nodes at S, and A is a head and B is a complement, then the correspondent of B precedes the one of A at P.

b. **MAP(head before complement) (MAPhc)**
If A and B are sister nodes at the S, and A is a head and B is a complement, then the correspondent of A precedes the one of B at P.

2.1 English object shift

- In the English double object case, the winning structure is a syntactic alternative. We capture this by including syntactic faithfulness in our constraint set.

FAITH-SYN The syntactic structure specified in the input is preserved in the output.

- Note that simple reordering of object and verb does not lead to a violation of FAITH-SYN, as the syntactic relations encoded by the VP remain the same – the syntactic tree does not encode linear order!

(18)

[$_{VP}$ *She* [*saw it*]]	MAPhc	AlignPPhR	FAITH-SYN
☞ She saw it		∗	
She it saw	∗!		
[$_{VP}$ *I* [*gave Mary it*]]			
I gave Mary it		∗!	
☞ I gave it to Mary			∗
[$_{VP}$ *She* [*gave up it*]]			
She gave up it		∗!	
☞ She gave it up			

2.2 French Object Shift

(19)

[$_{VP}$ *Marie* [*voit le*]]	AlignPPhR	MAPhc	FAITH-SYN
Marie voit le	∗!		
☞ Marie le voit		∗	
[$_{VP}$ *Marie* [*voit Jean*]]			
☞ Marie voit Jean			
Marie Jean voit		∗!	

2.3 Scandinavian Object Shift

- Object shift (OS) is restricted to weak pronouns:

(20) Object shift in Danish:

a. *Hvorfor læste Peter aldrig *den*?
b. *Hvorfor læste Peter* den *aldrig ?*
Why read P. (it) never (it)
c. Hvorfor læste Peter aldrig *den her bog* ?
d. **Hvorfor læste Peter* den her bog *aldrig ?*
Why read P. (this book) never (this book)
(Vikner 2001, 321)

- OS may never cross the verb:

(21) Weak object pronoun shift in Swedish:

a. **Jag har henne inte kysst*
I have her not kissed
b. *Jag har inte kysst henne*
I have not kissed her
c. *Jag kysste henne inte*
I kissed her not
d. %*Jag kysste inte henne*
I kissed not her
(Swedish, Holmberg 1999, 1; Sells 2001, 44)

- OS may in fact never cross material other than adverbs:

(22) Swedish, OS blocked:

a. **Jag talade henne*$_i$ *inte med* t_i
I spoke her not with
b. **Jag gav den*$_i$ *inte Elsa* t_i
I gave it not Elsa
c. **Dom kastade mej*$_i$ *inte ut* t_i
They threw me not out
(Holmberg 1986; Sells 2001, 47f)

(23) Stressed pronouns do not shift in Swedish (Sells, 2001, 45f, citing unpublished work of Elisabeth Engdahl from 1997):
Kalle hämtade inte HENNE utan HONOM
K. collected not her but him

"Kalle didn't collect [$_{FOC}$ her] but [$_{FOC}$ him]"

- This leads to the following descriptive generalisation:

(24) *Holmberg's* (actual version of his) *generalisation* (HG, Holmberg, 1999, 15): Object Shift cannot apply across a phonologically visible category asymmetrically c-commanding the object position except adjuncts.

- OS has often been correlated with case movement. However, OS is not restricted to pronouns, it also occurs with weak pronominal adverbs (Josefsson, 2003; Hellan and Platzack, 1995):

(25) a. *Därför bor Sten (*i Lund) inte (i Lund) längre*
therefore lives Sten (*in Lund) not in Lund anymore
b. *Därför bor Sten (där) inte (där) längre*
therefore lives Sten (there) not (there) anymore

- Let us assume the following syntactic configuration for the object shift contexts:

(26) $[_{IP_i}$ NP V_j $[_{VP}$ NEG $[_{VP}$ t_j NP_k]]]

- I assume the following correspondence conventions (Vogel, to appear):

(27) S-P correspondence:

S		**P**
X^0	corresponds to	a (lexical or functional) word.
XP	corresponds to	the word that corresponds to the head of XP plus the prosodic words that correspond to elements in the specifier and complement positions of XP.

- A VP that has been left by the verb and other material except the object has no P correspondent, if the object is a weak pronoun, but it does so, if the object is a full lexical noun.

- Therefore, contraints on the relative order of VP and adverb are trivially fulfilled in the weak pronoun case, irrespective of the linear position of the pronoun:

(28) $[_{VP}$ t_{Subj} t_V $[_{NP}$ PRO_{wk}]] – no P correspondent for VP

(29) $[_{VP}$ t_{Subj} t_V $[_{NP}$ *Marit*]] – VP's P correspondent: *Marit*

- Let's assume the following constraint on the relative order of an adjunct (like adverbs) and its host:

(30) ADJUNCTLEFT (ADJL):
If A is adjoined to B at S, then the correspondent of A precedes the correspondent of B at P.

- The ranking in (31) gives us the winners as in (32) and (33):

(31) MAPhc ≫ ADJL ≫ ALIGNPPh

(32) Weak pronoun OS in Danish: (Vogel, to appear)

[… [$_{VP}$ NEG [VP t_V PRO$_{wk}$]]]	MAPhc	ADJL	ALIGNPPh
☞… *pro neg*			
… *neg pro*			∗!

(33) Prohibition of full NP OS in Mainland Scandinavian: (Vogel, to appear)

[… [$_{VP}$ NEG [$_{VP}$ t_V NP]]]	MAPhc	ADJL	ALIGNPPh
… *noun neg*		∗!	
☞… *neg noun*			

(34) Prohibition of OS with V in situ in Mainland Scandinavian: (Vogel, to appear)

[… [$_{VP}$ NEG [$_{VP}$ V PRO$_{wk}$]]]	MAPhc	ADJL	ALIGNPPh
a. … *neg pro V*	∗!		
☞b. … *neg V pro*			∗
c. … *V pro neg*		∗!	

- Blocking of OS by non-verbal material needs to be reflected, too:

(35) Swedish, OS blocked:
a. **Jag talade henne*$_i$ *inte med* t_i
I spoke her not with
b. **Jag gav den*$_i$ *inte Elsa* t_i
I gave it not Elsa
c. **Dom kastade mej*$_i$ *inte ut* t_i
They threw me not out
(Holmberg 1986; Sells 2001, 47f)

- For (35-a,c), MAPhc is sufficient, (35-b) is derived with the following constraint, and the ranking in (34):

(36) MAP(NP)
If A c-commands B at S, and A and B are NPs, then the correspondent of A precedes the correspondent of B at P.

(37) MAP(NP) MAPhc ≫ ADJL ≫ ALIGNPPh

3 OS from non-final position

(38) Danish:
a. *Jeg skrev det op /*op det*
I wrote it up
b. *Jeg skrev det måske ikke op*
I wrote it maybe not up
(Holmberg, 1999, 2)

(39) Danish (Ken Ramshøy Christensen, p.c.)
a. **Jeg skrev ikke ned det*
I wrote not down it
b. Jeg skrev ikke *det/✓DET ned
c. Jeg skrev det ikke ned

- Assume a constraint that requires adjacency of the correspondents of adverb and VP. Then, a weak pronoun might be in the way:
  - The weak pronoun is not a prosodic word, so it does not belong to the P correspondents of VP.
  - The only P correspondent of the VP is the particle.
  - To fulfil ADJADJ we need to have adverb and particle adjacent.

(40) ADJADJ:
If A is adjoined to B at S, then the correspondents of A and B are adjacent at P.

(41) Syntax:
[$_{IP}$ jeg skrev [$_{VP}$ ikke [$_{VP}$ t$_V$ det ned]]]

(42)

[$_{VP}$ ikke [$_{VP}$ t$_V$ det ned]]	ADJL	ADJADJ	ALIGNPPHR
a. *ikke det ned*		∗!	
b. *ikke ned det*			∗!
c. *det ned ikke*	∗!		
☞d. *det ikke ned*			

(Vogel, to appear)

- This explanation carries over to weak subject pronouns in German and Swedish:

(43) German subject pronouns:
  a. *Heute wird * bestimmt es regnen/ ✓es bestimmt regnen*
  today will certainly it rain/ it certainly rain
  b. *Dann hat *wohl er / er wohl gelogen*
  then has *seemingly he / he seemingly lied

(44) Swedish subject pronouns:
*Igår tog * inte han / han inte med sig sina pengar*
yesterday carried * not he / he not with SELF his money

- See Vogel (to appear) for a different approach that is more suitable especially for the much more flexible behaviour of Swedish pronouns.

4 A left-edge phenomenon in German

- Weak object pronouns may not appear at the left edge in German (likewise Dutch, a.o.)

(45) a. *Es regnet*
  It rains
  b. *Es gefällt mir*
  It-NOM pleases me-DAT
  c. *Es hat ein Junge ein Auto gestohlen*
  It has a boy a car stolen
  d. **Es kaufe ich*
  It-ACC buy I
  e. *Das kaufe ich*
  the-ACC buy I

- An object '*es*' may occur at thge left edge when there is no subject within its clause:

(46) *[Es zu kaufen] ist eine gute Idee*
[It to buy] is a good idea

- We need a constraint conjunction of two constraints:

1. **AlignPPhLeft**
2. **S**$<$**O**: The subject of a clause precedes its object.

AlPPhL&S<O No simultaneous violation of AlignPPhLeft and S<O by the same element.

es, gefällt, mir	AlPPh&S<O	Faith	ALignPPhLeft	S<O
☞es gefällt mir			*	
das gefällt mir		*!		
es, kaufe, ich				
es kaufe ich	*!		*	*
☞das kaufe ich		*		

5 Wh-Island Exceptions in English

- German obeys the so-called Wh-Island constraint — it is impossible to extract a Wh-phrase out of a Wh-clause:

(47) German:
  a. *Was glaubt Maria, dass sie gekauft hat?*
  What thinks M. that she bought has
  "What does Maria think that she bought?"
  b. **Was fragt sich Maria, wer gekauft hat?*
  What asks SELF M. who bought has
  intended: "What is the thing for which Maria wonders who bought it?"

- One possible repair construction leaves '*was*' inside the subordinate clause – an echo question:

(48) Maria fragt sich, wer was gekauft hat?
  M. asks SELF who what bought has
  "Maria wonders who bought what"

- How can we account for this contrast? Let us have a look at the intended semantics of (47-b):

(49) Qy.wonder(maria, (Qx.bought(x,y)))

- Example (47-b) has two *wh*-operators with different semantic scope, although both belong to the embedded clause.

- '*wer*' ('x' in (49)), having embedded scope, only needs to occur in the specifier of the embedded CP in order to fulfil a constraint on SCOPING:

SCOPING An operator occupies its scope position.

- But '*was*' ('y' in (49)) has to occur in the specifier of the main clause CP to fulfil SCOPING, outside the embedded clause where it originates.
- More importantly, fulfilling SCOPING requires that the *wh*-phrase c-commands the elements in its scope.
- The trouble is that the two *wh*-phrases semantically play a double role, as operators and as variables.
  - As an operator, '*was*' wants to c-command '*wer*',
  - but as a variable, it wants to be c-commanded by '*wer*'.
- Therefore, if '*was*' moves out of the embedded clause in order to fulfil SCOPING, that same constraint becomes violated for '*wer*'.
- It is impossible to satisfy SCOPING for both operators, if '*was*' corresponds both to the operator 'Qy', and to the variable 'y'. Extraction of '*was*' additionally leads to a violation of the constraint CLAUSE-MATE:

CLAUSE-MATE A predicate and its argument are clause-mates.

Qy.wonder(m, (Qx.buy(x,y)))	SCOPING	CLAUSE-MATE
(47-b)	∗('*wer*')	∗('*was*')
☞ (48)	∗('*was*')	

- In order to derive that extraction out of ordinary subordinate clauses is well-formed, we need to take into account that it is the simultaneous violations of the two constraints that is not tolerated:

SCOPING&$_{CP}$CLAUSE-MATE (WhIsl) No simultaneous violation of SCOPING and CLAUSE-MATE within the same CP.

We should the also take into account the repair structure. Let us assume that it is one where we have no syntactic movement, i.e., a different syntactic structure. This structure violates syntactic faithfulness in a competition where syntactic movement was intended to hold. Thus, the ranking we can use for our German case is the following:

(50) WhIsl ≫ FAITH-syn ≫ SCOPING CLAUSE-MATE

- If all languages were as strict as German with respect to *wh*-island effects, we could stop here. Unfortunately, English provides already some exceptions. The classical example is the contrast in (51):

(51) (Sabel, 2002, 274):

a. ??[$_{CP}$ What do you [$_{VP}$ t"wonder [$_{CP}$ how John could [$_{VP}$ t' [$_{VP}$ fix t]]]]] ?
b. *[$_{CP}$ How do you [$_{VP}$ t" wonder [$_{CP}$ what John could [$_{VP}$ t' [$_{VP}$ fix t]]]]] ?
c. *[$_{CP}$ Who do you [$_{VP}$ t' wonder [$_{CP}$ how [$_{IP}$ t could fix the car]]]] ?

- From an OT perspective, it is also important to consider which the alternative candidate structures are that clauses like (51-c) lose against.

- A brief look at corpus data might give us some hints. I found the following examples in the world wide web via a *google* search (all highlightings by me, R.V.).

(52) "Jerry Hall is one of those models, along with so many nowadays (including her daughter) who I wonder how **they** ever made it."
`chat.dailymail.co.uk/dailymail/threadnonInd.jsp?forum=82&thread=9689929&message=10932031`

(53) "I have a couple of friends who I've lost touch with who I wonder what gender **they** are now"
`forum.genderpeace.com/index.php?t=msg&goto=158034&`

(54) "I too have seen CMTs who I wonder how **they** ever passed that test."
`archives.mtstars.com/main/13766.html`

- Here, the trace position is occupied by a resumptive pronoun, '*they*'.

- Examples where a preposition is inserted to assign case to the 'extracted' *wh*-pronoun can also be found:

(55) "Obvious bug, **for** which I wonder how **it** slipped the Opera quality control."
`list.opera.com/pipermail/opera-users/2001-November/006894.html`

(56) "My body has painfull feelings **of** which I wonder what emotional state causes **them** . . . "
`www.palikanon.com/diverses/guestbook/guest-03_01-04_04.htm`

- In the following examples with possessive resumptives, a movemnent analysis is likewise impossible:

(57) "I realize Nursing is an important job, but I see many Nurses who I wonder how accurate is **their** opinion?!!"
`allnurses.com/forums/showthread.php?t=109128`

(58) "There are some super-fast DB players out there, tremendous musicians, who I wonder what **their** ambitions were."
`www.talkbass.com/forum/showthread.php?t=124023`

- An alternative analysis of the structure of *wh*-island configurations is available which does not rely on syntactic movement at all:

(59) $[_{CP1}$ WH_1 ... *wonder* $[_{CP2}$ WH_2 ... `pronoun`$_1$ ...]]

1. WH_1 is directly inserted into CP1.
2. CP2 is a *wh*-clause which has another *wh*-pronoun or *wh*-complementiser (WH_2) in initial position, and a resumptive pronoun that correlates with WH_1.

- The crucial task is now to determine the conditions under which it is possible to leave out `pronoun`$_1$ in English.

- In other words, English can display pronoun drop under special circumstances.

- This point of view also sheds some light on exceptions to the wh-island constraint in Spanish (and, likewise, Italian, cf. Rizzi, 1982), as illustrated in (60), after Sabel (2002):

(60) *?Quién no sabes qué compró ?*
who not know-you what bought
'Who don't you know bought what'

- Spanish and Italian are pro-drop languages, which means that subject pronouns usually remain unrealised, unless they are focused, or otherwise information structurally prominent.

- This also holds of resumptive pronouns. Thus, instead of an exceptional movement analysis, structure (60) could as well be interpreted as a structure with a resumptive pronoun inside the *wh*-island, with the perhaps irritating property that the resumptive subject pronoun is the null pronoun.

- English has resumptive pronoun drop for object pronouns in the wh-'extraction' construction:

(61) "met some new people last night who i wonder how i didn't meet before."
`chainedlightning.blogspot.com/`

- The gap is not obligatory, though. An example with a resumptive pronoun is the following one:[1]

(62) "I meet people everyday who I wonder how their parents could love **them** not TO mention a partner."
`supernaturale.com/glitter/viewtopic.php?p=207795&sid=6f3fd91ce2635dec876dabfeb19be8ba`

- Typical positions for the pronominal gap are also sisters to prepositions:

(63) "There are lots more examples of that in my life; people that were cool, and unique, and who I wonder how things have worked out for."
`homepage.mac.com/dvorak/Journal.html`

(64) "he is like a long lost sister who I wonder How I ever lived without."
`onefuckedupgirl.blogspot.com/2004_11_01_onefuckedupgirl_archive.html`

- What these examples share is that the 'gap' is at the right edge of the verb phrase.

- However, as the following example shows, it might not necessarily be the right edge:

(65) "Lately I feel an ever so slight tug toward things which I wonder whether I have truely left behind."
`www.livejournal.com/users/martian2b/2003/03/05/`

- Here the pronoun would occur between the verb and the particle:

(66) … left (them) behind (*them)

- Nevertheless, the position after the particle is a legitimate position for an object, as in

(67) She left behind her rival.

- So, (65) might not necessarily count as counterexample.

(68) Prosodic phrasing for (63):

$$\begin{array}{llllll} (& & & & &)_{\text{IntP}} \\ (& \times &)_{\text{PhP}}(& \times &)_{\text{PhP}}(& \begin{matrix}\times \\ \times\end{matrix} \quad)_{\text{PhP}} \end{array}$$

who I wonder how things have worked out for ∅

[1] But examples like (61) are rather rarely to be found at the WWW. With direct objects and objects of prepositions the gap seems to the preferred option. This preference seems to be even stronger with '*whether*'-clauses as *wh*-islands.

- Thus, the location where the resumptive pronoun is deleted, is a position where it would incur a violation of AlignPPhR!
- For the analysis, assume that the resumptive pronoun is protected by the constraint '*pro-drop' ("No zero realisation of pronouns").
- The resumptive strategy makes it possible to avoid a violation of SCOPING and of our Wh-Island constraint.
- However, in the case of a resumptive in final position, the pronoun leads to prosodic ill-formedness.
- The optionality of the clause-final resumptive pronoun signals equal ranking of *pro-drop and AlignPPhR.

(69) English ranking (preliminary):
WhIsland ≫ *pro-drop AlignPPhR ≫ FAITH-syn ≫ SCOPING CLAUSE-MATE

- We have to take care, however, that a pronoun may not be deleted in other cases.

(70) *I saw
(meaning: "I saw her/him")

MAX(DR) ("Maximise discourse referents") Every discourse referent must be pronounced.

- The resumptive pronoun can have zero realisation, because it is *resumptive*: the discourse referent is still pronounced, by the *wh*-pronoun.

(71) English ranking:
MAX(DR) WhIsland ≫ *pro-drop AlignPPhR ≫ FAITH-syn ≫ SCOPING CLAUSE-MATE

Conclusion

- Exploiting syntax-prosody interaction will help us simplifying syntactic analyses, and (hopefully) will lead to a deeper understanding of the involved phenomena.

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