

# Prosody Can Outrank Syntax\*

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## 1 Introduction

- **Principal Claim:** Coordinate structure facts from non-standard French support an analysis in which ONSET outranks a constraint on syntactic economy (\*PROJECTION).
- Not the first claim to the effect that prosody can outrank syntax, but unusual in making the claim about such low-level prosody.
- Focus intonation constrains syntax: Zubizarreta 1998; Szendrői 2001; Samek-Lodovici 2005
- Prosodic word/phonological phrase constrains clitic placement: Zec and Inkelas 1990
- Directly conflicts with Golston 1995, “Syntax outranks phonology”; indirectly with PPFS (Pullum and Zwicky 1988; Zwicky and Pullum 1986).
- **Secondary Claim:** Modular frameworks cannot account for the facts (see Perlmutter 1998 for a similar problem with modular analyses of French possessive adjectives). The analysis requires parallel evaluation of syntax and phonology, which I model within OT (Prince and Smolensky 1993/2004).

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## 2 Portmanteaux and coordinate structures

- Prepositions DE ‘of, from’ and À<sup>1</sup> ‘to’ do not form portmanteaux with most articles

- (1)
- Je parlais de la fille.  
I was.talking of the(f) girl  
‘I was talking about the girl.’
  - Je pensais à la fille.  
I was.thinking to the(f) girl  
‘I was thinking about the girl.’
  - Je parlais d’une fille.  
I was.talking of’a(f) girl  
‘I was talking about a girl.’
  - Je pensais à une fille.  
I was.thinking to a(f) girl  
‘I was thinking about a girl.’
  - Je parlais d’un vélo.  
I was.talking of’a(m) bike.  
‘I was talking about a bike.’
  - Je pensais à un vélo.  
I was.thinking to a(m) bike  
‘I was thinking about a bike.’

- Portmanteaux are formed only with LE (masc. sing. def.) and LES (pl. def.), resulting in *du*, *au*, *des* and *aux*

- (2)
- {du/ \*de le} père  
{of.the(m)/ \*of the(m)} father  
‘of the father’
  - {au/ \*à le} père  
{to.the(m)/ \*to the(m)} father  
‘to the father’
  - {des/ \*de les} Etats-Unis  
{of.the(pl)/ \*of the(pl)} States-United  
‘of the United States’
  - {aux/ \*à les} Etats-Unis  
{to.the(pl)/ \*to the(pl)} States-United  
‘to the United States’

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<sup>1</sup>Capital letters refer to the associated syntactic feature bundle; phonological realization varies.

- Portmanteaux are unavailable for  $\grave{A}$  + LE and DE + LE when the NP is V-initial.

- (3) a. *à l'autre garçon*  
to the'other boy  
'to the other boy'  
b. *\*au autre garçon*  
to.the other boy

- Following are coordinate structure data from Tseng (ms.:8), first noticed by Miller (1992), also discussed in Abeillé, et al, (2003). NOTE: These are not the judgments claimed for Standard French.

- $\grave{A}$  (or DE) can take wide scope over coordinate DPs, subject to semantic restrictions. Can't do so if one conjunct is headed by LE or LES. If portmanteaux are available, scope must be narrow.

- (4) a. *à la mère et la fille*  
to the mother and the daughter  
'to the mother and the daughter'  
b. *\*à le père et la mère*  
to the father and the mother  
c. *\*au père et la mère*  
to.the father and the mother  
d. *au père et à la mère*  
to.the father and to the mother  
'to the father and the mother'

- This is true even if the LE or LES conjunct is not leftmost in the maximal DP.

- (5) a. *\*à la fille et le garçon*  
to the daughter and the boy  
b. *à la fille et au garçon*  
to the daughter and to.the boy  
'to the daughter and the boy'  
c. *\*à la fille et les garçons*  
to the daughter and the.pl boys  
d. *à la fille et aux garçons*  
to the daughter and to.the.pl boys  
'to the daughter and the boys'

- If portmanteaux are blocked, such as when LE precedes a vowel, or when a quantifier intervenes between P and D, wide scope is possible.

- (6) a. à la fille et (à) l'autre garçon  
to the daughter and (to) the'other boy  
'to the daughter and the other boy'
- b. à la fille et (à) tous les garçons  
to the daughter and (to) all the.pl boys  
'to the daughter and all the boys'

- Even for speakers of Standard French, “It seems that those cases where both conjuncts have a feminine singular definite article [(7a)] are slightly more acceptable than the other possible combinations [(7b)], [(7c)] and [(7d)]” (Miller (1992: fn. 59); example numbers are mine).

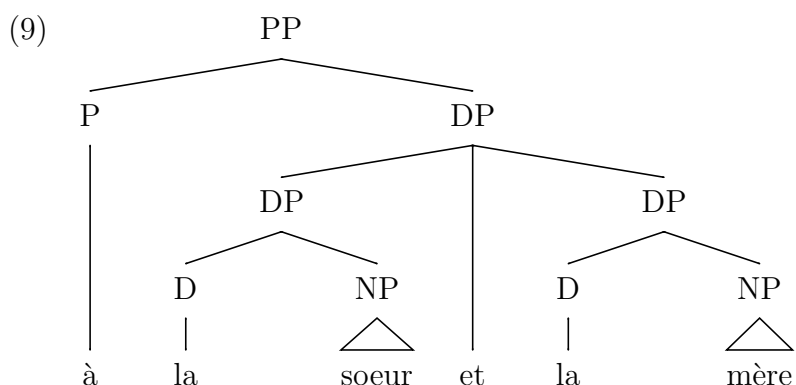
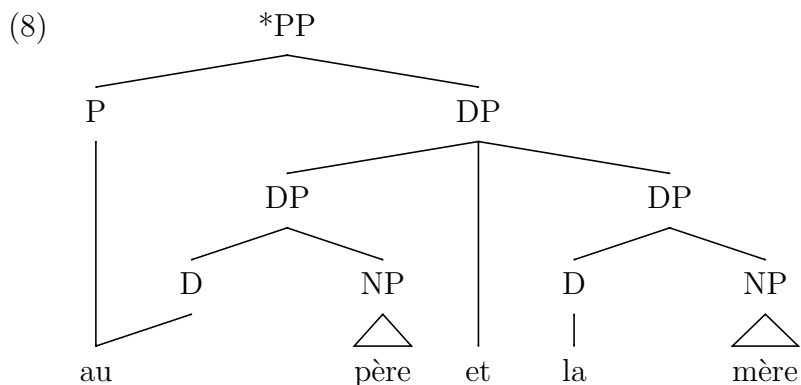
- (7) a. ??Je parlais à la fille et la mère. (Je parlais à la fille et à la mère.)  
b. \*Je parlais au fils et la mère. (Je parlais au fils et à la mère.)  
c. \*Je parlais à la fille et le fils. (Je parlais à la fille et au fils.)  
d. \*Je parlais au garçon et le père. (Je parlais au garçon et au père.)

“However, there is much variation between informers as to the strength of this effect (my own intuitions on this have completely disappeared). I have chosen to ignore this problem in this study, for lack of any solid data. Note that if a substantive difference could be found between cases like [(7a)] and the others such data would be problematic for any modular theory of grammar, since the possibility of not repeating the preposition would depend not only on whether it would contract with the following article, but also on whether it would have contracted with the article of the second conjunct if it had been repeated (i.e. *a priori* a transderivational constraint).” (Miller 1992: fn. 59).

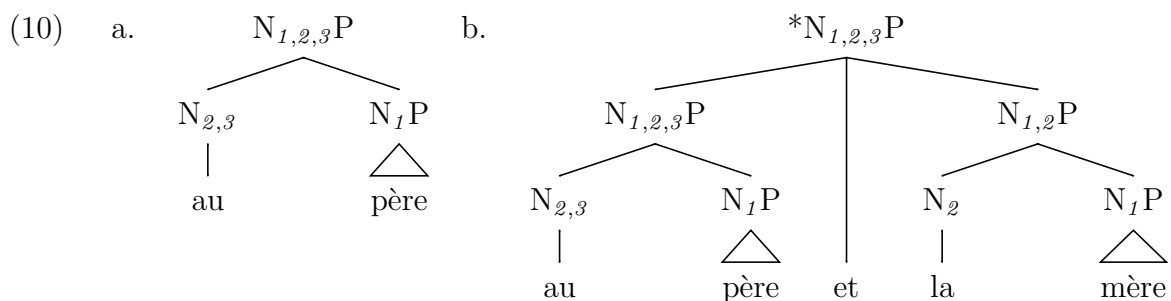
- Some speakers do accept sentences like (7a) as grammatical (and not degraded); see Appendix
- Hence, the suggested analysis is motivated, but it's not necessarily transderivational in OT. Modular theories are at a disadvantage, since the analysis would have to be transderivational.

### 3 Syntactic Assumptions

- The portmanteaux are syntactic constituents (contra Zwicky 1987; Sadock 1991; Miller, Pullum and Zwicky 1997; Stump 2001).
- Zwicky's (1987) lexical sharing analysis predicts ungrammatical results.



- Assumed structure follows Grimshaw's (1997, 2005) theory of extended projections.
- Portmanteaux have the category N (extending the nominal projection); unite two F-values, normally corresponding to a preposition and a determiner, under one syntactic node. (Here I label that node  $N_{2,3}$ , but generally I will just refer to it as though it were a P).



- Miller's (1992) analysis of Standard French: À and DE are not associated with separate syntactic nodes, but are morphological case affixes realized on the first constituent of an NP, along with determiner features.
- This would make it difficult to explain the difference in the non-standard variety between conjuncts with only feminine articles and those with masculine or plural articles.



(14) *de la prison et du gibet* ‘from the prison and the gallows’

FROM(DEF(prison) & DEF(gallows))	a.	b.
EXPRESS		
*PROJECTION	8!	7

## 4.2 Prosody-Syntax Interaction

- The periphrastic sequences *de l'* and *à l'* are selected pre-vocally, in order to satisfy ONSET, at the expense of \*PROJECTION.

(15) ONSET: Count a violation for any syllable which has no onset.

(16) *de l'asile* ‘from the asylum’

FROM(DEF(asylum))	a.	b.
ONSET	*!	
*PROJECTION	**	***

- The analysis assumes /d/ to underlie both *d'* and *de*; /l/ to underlie both *l'* and *le*, with vowel epenthesis before consonants
- DEP-C must also outrank \*PROJECTION.

(17) DEP-C: Count a violation for any epenthesized consonant (McCarthy and Prince 1995, 1999).

(18) *de l'asile* 'from the asylum'

FROM(DEF(asylum))	☞ a.	b.
ONSET		
DEP-C		*!
*PROJECTION	***	**

### 4.3 Serial OT

(19) Meaning → Syntax (then to Morphophonology)

FROM(DEF(asylum))	☞ a.	☞ b.
*PROJECTION	***!	**

(20) Morphophonology → Phonetics

Input: /dy/ /azil/	ONSET	DEP-C	IDENT-V
☞ a. [dœ.la.zil]		*	*!
☞ b. [dy.ta.zil]		*	
c. [dy.a.zil]	*!		

## 5 Alignment Analysis

- Grimshaw (2001) proposes an edge-alignment view of syntactic economy. Structures with more elements will violate more alignment constraints.
- It isn't decisive in coordinate structures (even in Standard French).

- (21) ALIGN(COMP, L, XP, L) (COMPLEFT)  
 Count a violation for any complement of X not aligned with the left edge of XP.
- (22) *du gibet* ‘from the gallows’

FROM(DEF(gallows))	☞ a.	b.
EXPRESS		
COMPLEFT	*	**!

- (23) *de la prison et du gibet* ‘from the prison and the gallows’

FROM(DEF(prison) & DEF(gallows))	a.	☞ b.
EXPRESS		
COMPLEFT	***	***

## 6 Conclusion

- A non-standard variety of French motivates a trans-modular constraint evaluation: the prosodic constraint ONSET outranks \*PROJECTION, which militates for syntactic economy.
- A modular analysis in OT has been shown unable to account for the facts.
- Grimshaw’s (2001) edge-alignment analysis has been shown unable to account for port-manteau selection in coordinate structures, either for the variety of French discussed here, or for Standard French.
- Remaining work: What limits should we place on prosodic-syntactic constraint interactions, if, as I believe, the PPFs (Pullum and Zwicky 1988; Zwicky and Pullum 1986)

is still *mostly* right?

- The answer might involve ranking faithfulness constraints according to which repairs have the most perceptual cost (the P-Map; Steriade 2002).
- E.g., WH-movement in satisfaction of ONSET should have a huge perceptual cost relative to consonant epenthesis or vowel deletion. Hence, it is unlikely to be attested. But does WH-movement violate faithfulness?

## 7 Appendix: Google attestations

- “La présente Convention s’applique aux politiques et aux mesures adoptées par les Parties relatives à *la protection et la promotion* de la diversité des expressions culturelles” [my italics] (<http://unesdoc.unesco.org/images/0014/001429/142919f.pdf>)
- “En Angleterre, le contenu des émissions diffusées à *la télévision et la radio* est contrôlé par le Broadcasting Standard Commission (BSC)” [my italics] ([www.culture.gouv.fr/culture/actualites/communiqu/aillagon/rapportBK.pdf](http://www.culture.gouv.fr/culture/actualites/communiqu/aillagon/rapportBK.pdf))
- “La Plateforme estime nécessaire de soutenir et de prolonger en France l’action de mouvements de la société civile palestinienne et de la société civile israélienne en faveur des droits des Palestiniens, *de la justice et la paix* ainsi que le dialogue entre eux” [my italics] ([http://72.14.253.104/search?q=cache:CZbAW-cxF6MJ:www.france-palestine.org/article6115.html+%22de+la+\\*+et+la%22&hl=en&ct=clnk&cd=65&gl=us&lr=lang\\_fr&client=firefox-a](http://72.14.253.104/search?q=cache:CZbAW-cxF6MJ:www.france-palestine.org/article6115.html+%22de+la+*+et+la%22&hl=en&ct=clnk&cd=65&gl=us&lr=lang_fr&client=firefox-a))
- “Tableau d’affichage de la musique ancienne et la musique baroque” (<http://www.goldbergweb.com/fr/magazine/30930.php>)
- “...de la rénovation urbaine et la promotion du travail manuel” (<http://www.iledefrance.fr/les-dossiers/logement/des-logements-etudiants-tout-confort/>)
- “Les cultivateurs de la côte équatorienne et la forêt” ([http://64.233.167.104/search?q=cache:nwkpD0gUsQYJ:www.tela-botanica.org/actu/article1299.html+%22de+la+\\*+et+la%22&hl=en&lr=lang\\_fr&client=firefox-a&strip=1](http://64.233.167.104/search?q=cache:nwkpD0gUsQYJ:www.tela-botanica.org/actu/article1299.html+%22de+la+*+et+la%22&hl=en&lr=lang_fr&client=firefox-a&strip=1))
- “La Fable de la Cigale et la Fourmi” ([http://64.233.167.104/search?q=cache:3IJ6V1DbPMYJ:www.e-fabre.com/e-texts/souvenirs\\_entomologiques/cigale\\_fourmi.htm+%22de+la+\\*+et+la%22&hl=en&ct=clnk&cd=99&gl=us&lr=lang\\_fr&client=firefox-a](http://64.233.167.104/search?q=cache:3IJ6V1DbPMYJ:www.e-fabre.com/e-texts/souvenirs_entomologiques/cigale_fourmi.htm+%22de+la+*+et+la%22&hl=en&ct=clnk&cd=99&gl=us&lr=lang_fr&client=firefox-a))
- “ceci permettra aux conquérants des cîmes ‘d’observer la biodiversité et la variété’ *de la faune et la flore* afin d’en révéler tous les secrets” ([http://64.233.167.104/search?q=cache:FKX-5W3KLSgJ:www.africultures.com/index.asp%3Fmenu%3Dtele+%22de+la+\\*+et+la%22&hl=en&lr=lang\\_fr&client=firefox-a&strip=1](http://64.233.167.104/search?q=cache:FKX-5W3KLSgJ:www.africultures.com/index.asp%3Fmenu%3Dtele+%22de+la+*+et+la%22&hl=en&lr=lang_fr&client=firefox-a&strip=1))

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