

EXPLORING THE PROSODY OF INFORMATION PACKAGING IN BRITISH ENGLISH: AN FDG ACCOUNT

MATTHIAS MITTENDORFER

IC-FDG-2024 (SÃO CARLOS, BRAZIL)

JULY 04 2024



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 - The A- / B-accent distinction
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Part I

Empirical analysis

Basic assumptions:

- intonation = string of sequentially ordered local pitch events (H and L)
(Pierrehumbert1980; BeckmanPierrehumbert1986; Ladd2008)
- three types of pitch events
 - pitch accents (T*)
 - phrase accents (T-)
 - boundary tones (T%)
 } e.g. H* L-L%; L+H* L-L%; etc.
- prosodic constituency hierarchy (NesporVogel2007; BeckmanPierrehumbert1986)
 - Intonational Phrase (IP) – e.g. H* L-L%
 - Phonological Phrase (PP) – e.g. H* L-

A- / B-Accent distinction: (Bolinger1965; Jackendoff1972)

- A-accent
 - Focus accent
 - high pitch accent with low phrase accent/boundary tone (H* L-L%)
- B-accent
 - Topic accent
 - high pitch accent with low phrase accent/high boundary tone ((L+)H* L-H%)

(1) A: Well, what about FRED? What did HE eat?

B: [[FRED]_{Top} ate the [BEANS]_{Foc}].~.

(Jackendoff1972)

→ see also Pierrehumbert1990; Steedman2000; Buring2003<empty citation>¹

¹B-Accent defined in terms of contrast

HedbergSosa2007<empty citation>: study on spontaneous English dialogue

- testing correlation between A-/B-accent and Topic and Focus
 - systematic correlation between intonation and information packaging confirmed
 - empirical situation more complex than A-/B-accent distinction
- no clear Topic or Focus accent in the data → results generally inconclusive

Hedberg2006<empty citation>: review of results (2007 study)

→ miscoding, optionality of contrastive coding, target undershoot

"[I]nformation structure categories [...] may be indeterminate" (Hedberg2006)

Definitions: (Gundel1988)Topic:

An entity, E, is the topic of a sentence, S, iff, in using S the speaker intends to increase the addressee's knowledge about, request information about, or otherwise get the addressee to act with respect to E.

Comment:

A predication, P, is the comment of a sentence, S, iff, in using S the speaker intends P to be assessed relative to the topic of S.

Focus:

That part of the linguistic expression that realizes the comment.

→ more constrained theoretical framework needed

Questions under discussion (QUD):

- pragmatic method for information-structural analysis
- each assertion comes with an implicit QUD²
- QUD determines which part of assertion is focused / backgrounded / not-at-issue

Criteria for QUD formulation:

- Q-A-CONGRUENCE
Assertion of target utterance must be a possible answer to QUD
- MAXIMIZE Q-ANAPHORICITY
Questions must consist of as much given (or highly salient) material as possible
- Q-GIVENNESS
Questions can only consist of given (or salient) material³

²Adjunct-like material treated as answer to separate question (Brunetti et al 2021)

³i.e. familiarity in a broad sense

(2) We didn't meet at Cambridge and we didn't in Ipswich either although we were both born there. [...] *But we certainly met in Stratford.*

Q₁: {Where did you meet?}

> A₁: [[We]_{Top} certainly met [in Stratford]_{Foc}]~.

(S1B-023 #022)

- RQ1: Can a refined analysis of natural data using QUDs contribute to our understanding of the relationship between information packaging and prosody?
- RQ2: What is the prosodic realisation of Topic, Focus, and Contrast?
- RQ3: How can the interface between information packaging and prosody best be modelled in Functional Discourse Grammar?

ICE-GB: (Nelson2002)

- covers a wide variety of genres (private conversations, interviews, etc.)
- includes audio files

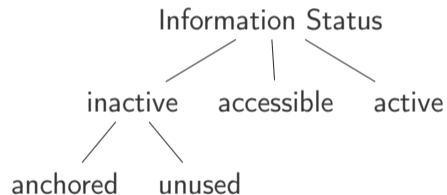
Data collection:

- 69 utterances from three different texts
 - Interview (16 utterances)
 - Public speech (13 utterances)
 - Talk show (40 utterances)
- QUD and ToBI analysis (Riester2018; Brunettietal2021; Silverman1992)

Information Packaging:

- Topic
- Frame-setting Topic
- Focus
- TopicFocus (TopFoc)
- Contrastive Topic
- Contrastive Focus
- Contrastive frame-setting Topic

For Topic expressions:



(Lambrecht1994; Prince1981)

Overview:

Tag	o	H*	!H*	L*	L+H*	L+!H*	L*+H	H+!H*	Total
Top	47	26	4	0	6	1	1	0	86
Foc	0	79	24	7	4	3	0	1	118
TopFoc	0	3	1	0	0	0	0	0	4
CT	0	1	0	0	2	0	0	0	3
CF	0	2	0	0	0	0	0	0	2
FS	0	5	2	0	1	1	0	0	9
CFS	0	0	0	0	0	0	0	0	0

Table 1: Pitch accent distribution in the data set

86 Topic expressions:

- unaccented: 47
 - majority pronominal (43 of 47)
 - preferred Topic expressions (Lambrecht1994)
- accented: 39
 - majority full Nps (29 of 39)
 - many low in familiarity status → activation accent
 - pronominals → emphasis⁴

Tag	H*	!H*	L*	L+H*	L+!H*	L*+H	H+!H*	Total
Top	26	5	0	6	1	1	0	39

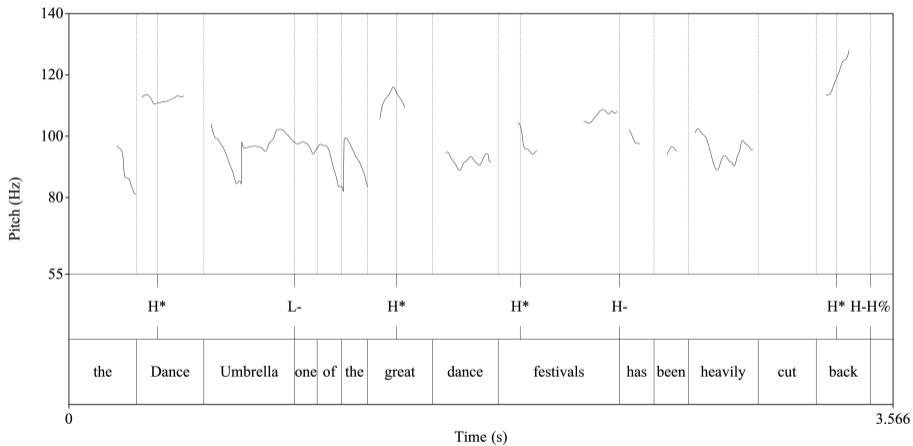
Table 2: Pitch accents on Topic expressions

⁴L+H* marker of (strong) emphasis; cf. H* – L+H* continuum for emphasis (Ladd2008; Arvaniti2022)

- (3) The turmoil [...] has meant that a lot of local boroughs have been pulling out and even renegeing on their promises. Theatres like the Almeida, which has a wonderful record, have been cut by twenty per cent.

[The Dance Umbrella]_{Top}, one of the great dance festivals, has been heavily cut back.

(S1B-022 #026)



Tag	o	H*	!H*	L*	L+H*	L+!H*	L*+H	H+!H*	Total
Foc	0	79	24	7	4	3	0	1	118

Table 3: Pitch accents on Focus expressions

Focus:

- all Focus expressions accented
 - 103 assertions carry H* or !H* → comes close to a Focus accent
 - L+H family → likely emphasis
 - L* accent
 - and the end of utterances (declination)
 - narrow speaker pitch range/span
 - coding uncertainty as result of narrow pitch range/span

Broad Focus:

- (4) And if there's going to be any Conservative criticism of support for the arts on purely monetarist Thatcherite principles, the arts is the best investment we can possibly have. *It's the third biggest employer of labour.*

Q₁: {What shows that the arts is the best investment we can possibly have?}

> A₁: [[It]_{Top} [is the third biggest employer of labour]_{Foc}]_~.

(ICE-GB S1B-022 #042)

Narrow Focus:

- (18) Politics does come into this and one has to say straight away I won't say it again during this programme but all three who've just spoken are active supporters of the Labour Party. [...] *So they all are committed to the Labour Party*

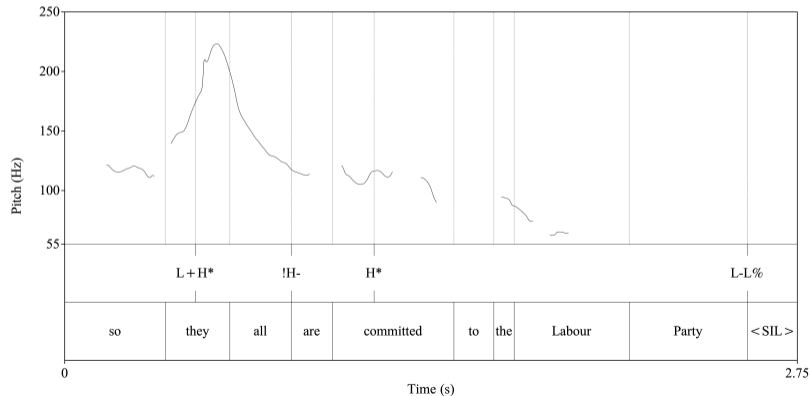
Q₁: {They are what to the Labour Party?}

> A₁: [[They all]_{TOP} are [committed]_{FOC} to the Labour Party]~.

(ICE-GB S1B-022 #074)

- narrow Focus on *committed* → post-focal deaccentuation (Buring2016)
- Topic accented → emphasis

(18) [[THEY all]_{TOP} are [COMMITTED]_{Foc} to the Labour Party]~. Play



(19) It [= a production of *The Winter's Tale*] was a very contemporary version of the play. *Most people responding to it didn't feel that it had been updated to a specific period.*

Q₁: {What was the reaction to this contemporary version?}

> Q₁': {What about it?}

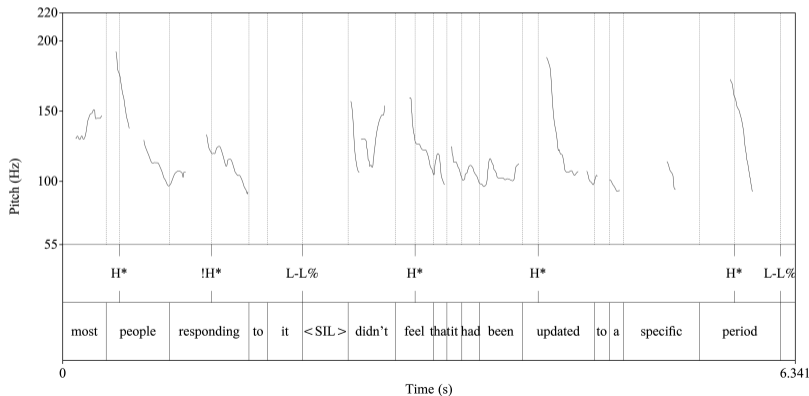
> > A₁: [[Most people responding to it]_{Top} [didn't feel that [it]_{Top} [had been updated to a specific period]_{Foc}]_{Foc}].~.

(ICE-GB S1B-023 #047)

Embedded Foci:

- Top-Cm partitioning within the Comment of a larger categorical statement
- embedded Focus structure *not* marked separately

- (19) [[Most people RESPONDING to it]_{TOP} [didn't feel that [it]_{TOP} [had been updated to a specific PERIOD]_{Foc}]_{Foc}~. [Play](#)



Part II

An FDG analysis

Kojadinovic2022; Mittendorfer2025<empty citation>:

- individual PA represented at PL
 - T% on IP (f or r)
 - T- on PP (f or r)
 - T* on PP (h or l)
- } account for all combinations of PAs

→ inflates set of phonological π at PL

Pierrehumbert1990<empty citation>:

- H* → related to new information
- L* → salient but mutually believed

New proposal:

- abstraction away from individual PA
- 2 macro-operators
 - High group **H** \rightarrow H^* , $!H^*$, $H+!H^*$, $L+H^*$, $L+!H^*$
 - H^F (Focus accent)
 - H^C (Contrastive accent)
 - H^{emph} (Emphatic accent)
 - Low group **L** \rightarrow L^* , L^*+H , $L^*+!H$

Benefits:

- captures systematicity without cluttering set of π
- grammar remains flexible enough to allow for variation
- exact physical realisation not relevant for Foc structure (nor for emphasis)

(22) H^* L-L%
 [[Most people responding to it]_{Top} [didn't feel that [it]_{Top} [had been updated to a
 H^* L-L%
 specific period]_{Foc}]_{Foc}]_~.

- a. $(C_i: [(R_i) (CM_i: [(T_i) (R_j: (C_j: [(R_k) (CM_j: [(T_j) (R_l)]_{Foc} (CM_j))] (C_j)) (R_j))]_{Foc} (CM_i))] (C_i))$
- b. $(U_i: [(f_{IP_i}: [(f_{PP_i}: \text{most people responding to it } (PP_i))] (IP_i)) (f_{IP_j}: [(H^F f_{PP_k}: \text{didn't feel that it had been updated to a specific period } (PP_k))] (IP_j))] (U_i))$

- embedded Focus not reflected separately at the PL (but: H^* on *period* upstepped)
 → potential reflex of combined Focus functions
- pre-nuclear H^* on *responding* → activation

General conclusions:

- Topic expression
 - typically unaccented (& pronominal)
 - if accented → activation, emphasis
- Focus expressions
 - always accented in some way
 - (!)H* as a Focus accent
- QUDs predict accent location well

In FDG:

- Interpersonal Level
 - Comment layer at the IL
 - embedded Communicated Contents
- Phonological Level
 - 2 macro-operators H and L
 - H^F on PP layer
 - H^{emph} on PW layer
 - H^C

Aboutness Topic:

- referential & identifiable
- familiar (i.e. \neq brand-new unanchored)
- semantic predication (+ addressation) (Jacobs2001)

Implications:

- restricts Topic to position before the Comment (of its domain)
- allows for a straightforward distinction between sentence and discourse Topics
- too restrictive? essentially restricts Topic to subject

^PFoc → adjunct-like material

- does “not answer the QUD that is answered by the sentence [it] syntactically depend[s] on” (Brunetti et al. 2021, Onea 2015, Ramm 2011)
- needs separate QUD

(23) C: So the prospect of the United Kingdom which is only accounts for only about ten per cent of the combined gross domestic product of the European Community becoming economically marginalised is all too real. *Europe could frankly get along without us perfectly happily.*

Q₁: {What follows from this prospect?}

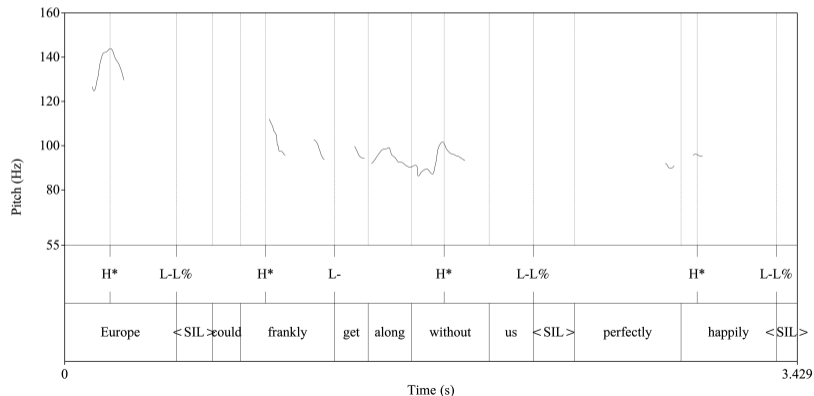
> A₁: [[Europe]_{Top} [could frankly get along without us]_{Foc}]_~

> Q₂: {In what state?}

> > A₂: [[perfectly happily]_{Foc}]_~.

(20) [[Europe]_{TOP} [could frankly get along without us]_{Foc}]~ [[perfectly happily]_{Foc}]~.

Play



(22) The reason why I'm we're here and people are watching is because most people think that the arts add something to their lives that nothing else will give them.
It affect millions of people.

Q₁: {How many people does it affect?}

L+H* L-L%

> A₁: [[It]_{Top} does affect [millions]_{Foc} of people]~.

(S1B-022 #015)

- pragmatically ambiguous
 - emphatic interpretation
 - contrastive interpretation ('millions, not just a few')
- both equally possible

(23) Q₁: {What does the fact that it affects millions of people show?}

L+!H* L-L%

A₁: [[It]_{Top} is not [an ELITIST activity]_{Foc}].~.

(S1B-022 #016)

- pragmatically ambiguous
 - broad, emphatic Focus interpretation
 - narrow, contrastive Focus interpretation (contrasting implicit assumption that art is elitist)
- both equally possible

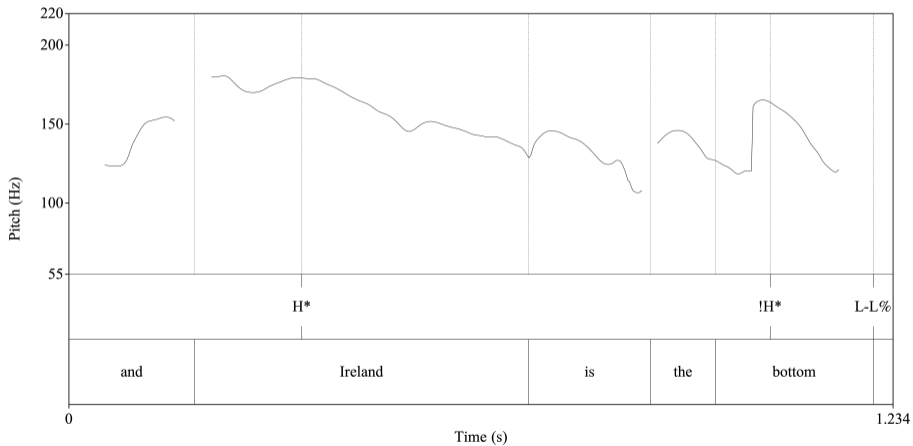
Play

(24) We're bottom but one of the European list. *And Ireland is the bottom.*

Q₁: {Which country is the bottom?}

> A₁: [[Ireland]_{Foc} is the bottom]~.

(S1B-022 #036)



(25) We're bottom but one of the European list. *And Ireland is the bottom.*

Q₁: {What about this list?}

> A₁: [[IRELAND is the BOTTOM]_{Foc}]~.

- discourse Context **does not** always predict Focus structure
- mismatches expected
- prosody disambiguates (or proves wrong) some QUD analyses

