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www.unice.fr/dsl/tobias.htm

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What the initial CV is initial of

(1) outline
- a. Interface Dualism
  there are two ways for morpho-syntax to influence phonology:
  1. through the procedural channel: cyclic derivation (strata, phases etc.)
  2. through the representational channel: juncture phonemes, #, ω, φ etc.
  ==> today we focus on representational communication
- b. carriers of morpho-syntactic information in phonology: diacritics are sleepers and do not qualify
- c. presentation of the initial CV and predictions made
- d. connected speech in Belarusian: the CV cannot be word-initial. It is utterance-initial.
- e. ==> the initial CV heads computational domains
  ==> it is phase-initial
- f. bumpy match between syntactic phases and phonological footprints thereof

1. Diacritics are sleepers, and sleepers don't make any prediction

(2) what is a diacritic?
- a. a diacritic is an alien in a given workspace (module)
  It is used ONLY in order to carry information into this workspace that comes from another workspace.
  1. TEST: a non-diacritic object is one that is used in phonology in processes that do not appeal to any morpho-syntactic information.
  2. #, ω, φ etc. fail this test: they intervene ONLY when morpho-syntactic information comes into play.
  3. syllables and feet pass the test. The ontological difference between the lower layers of the Prosodic Hierarchy and the higher layers (from the Prosodic Word on) is well known:
     - the former are regular bottom-up constructions
     - the latter are top-down constrautcions: they are the projection of NOTHING
- b. modules carry out computation over a proprietary vocabulary (domain-specificity)
  Hence only objects that belong to this domain-specific vocabulary can be used in the computation.
  ==> phonological computation uses only phonological vocabulary
  labial, coronal, stopness etc. are phonological objects, #, ω, φ etc. are not. They are diacritic carriers of morpho-syntactic information in phonology.
  Scheer (2008, 2009a,b, forth)

(3) the DIRECT EFFECT
   a. diacritics are "sleepers"
      they have no effect at all by simply existing: the presence of a # or an ω in the phonological string does not influence the course of phonology in any way.
      They only have an effect when they are accessed by some phonological rule/constraint: "process X applies within ω/ before #".
   b. also, diacritics have no PREDICTABLE effect:

      they may trigger any process and its reverse.

      This, however, is not how natural language works: the processes that are observed at word margins for example are anything but random: word margins have rather specific and well-known effects:
      1. word-initial consonants are strong (if anything)
      2. word-initial clusters are restricted to TR (if anything)
      3. the first vowel of words must not alternate with zero (if anything)
   c. illustration of the Direct Effect
      suppose two processes:
      1. V → ø / #C__CV
      2. ø → V / #C__CV

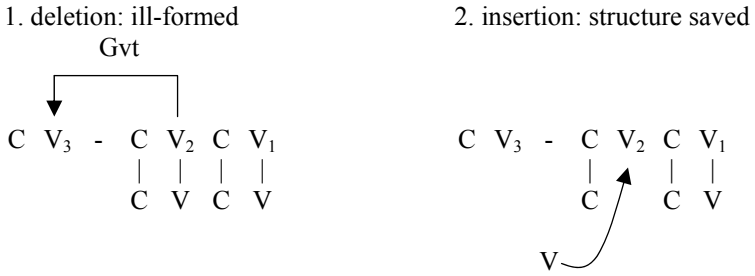
      ==> are they equally probable? Can the left margin of the word be responsible for the insertion AND the deletion of the first vowel of words?

      No: process 2) is regular, while process 1) is alien (masochistic).

2. The initial CV

(4) # = CV
   a. the phonological identity of the beginning of the word is an empty CV unit (Lowenstamm 1999).
      Its presence/absence regulates the distinction between #TR-only languages (only #TR attested) and anything-goes languages (#TR and #RT occur).
   b. this is a special case of a more general situation:
      (representational) carriers of morpho-syntactic information in phonology reduce to syllabic space (a CV unit in CVCV)
      Scheer (2009a,b, forth)
   c. the actual insertion of these carriers into the phonological string depends on a decision made by morpho-syntax to mark this or that particular division.
   d. extension to two other phenomena:
      - first vowels of the word that (do not) alternate with zero
      - strength/weakness of word-initial consonants
      Scheer (2000, 2004, 2009a,b), Pagliano (2003), Seigneur-Froli (2003, 2006), Ségéral & Scheer (2008).

e. the Direct Effect with the initial CV



(5) typological predictions made by the initial CV

	in a language where the initial CV is present	in a language where the initial CV is absent
a.	word-initial consonants are strong	word-initial consonants are non-strong
b.	initial clusters are restricted to #TR	there are no restrictions: #TR, #RT, #TT and #RR clusters may occur
c.	first vowels of words may not alternate with zero	first vowels of words may alternate with zero

3. Connected speech (Belarusian): CV present only utterance-initially

3.1. Distribution of Belarusian /v/

(6) distribution of Belarusian /v/

/v/	[v] /	V__V	korov-a	cow NOMsg
		##__V	vad-a	water
		C.__	barv-a	coloration
	[w] /	__.C	korow-k-a	cow dim. NOMsg
		__##	korow	cow GENpl
	[u] /	##__C	udav-a	widow

(7) behaviour of /v/-initial words in context

a. taja wdava — this widow
this widow NOMsg

b. brat udavy — the brother of the widow
brother NOMsg widow GENsg

c. taja vada — this water
this water NOMsg

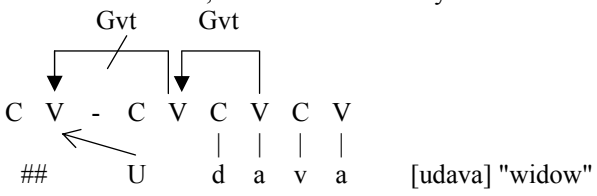
brat vady — the brother of the water
brother NOMsg water GENsg

(8) word boundaries are invisible

word-initial /v/ preceded by another word		/v/ in words quoted in isolation	result	
…C # __C	=	##__C	[u]	brat udavy = udava
…C # __V	=	C.__	[v]	brat vady = barva
…V # __C	=	coda	[w]	taja wdavy =korow, korowka
…V # __V	=	V__V, ##__V	[v]	taja vada = korova

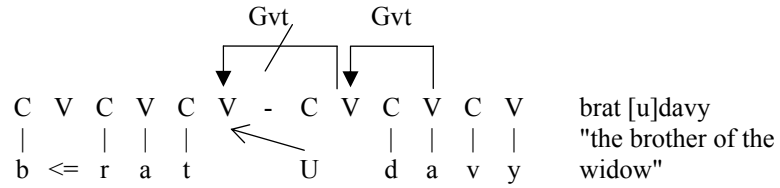
(9) distribution of the initial CV in Belarusian
a. utterances are headed by the initial CV.
b. within utterances, the initial CV is not distributed (especially not word-initially).

(10) /vdava/ in isolation, i.e. utterance-initially = /CV-vdava/



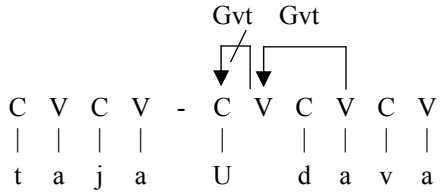
[udava] "widow"

(11) /vdava/ preceded by a C-final word



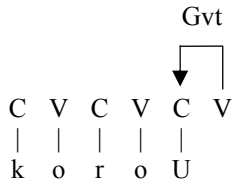
brat [u]davy "the brother of the widow"

(12) [w] appears when /v/ is ungoverned (and unlicensed)
a. word-initially after a vowel-final word



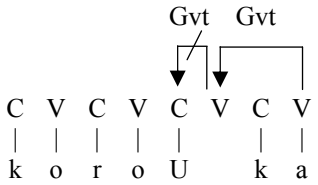
[taja wdava] "this widow"

b. in (utterance-) final codas



[korow] "cow GENpl"

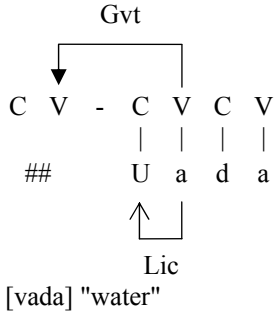
c. in internal codas



[korowka] "cow dim. NOMsg"

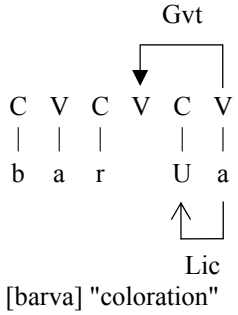
(13) /v/ in Strong Position

a. in utterance-initial position



[vada] "water"

b. in post-coda position



[barva] "coloration"

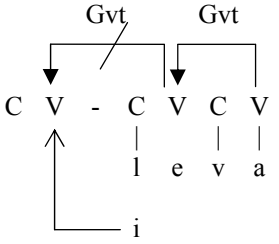
3.2. i-prothesis

(14) i-prothesis before CVC roots that occur in zero grade

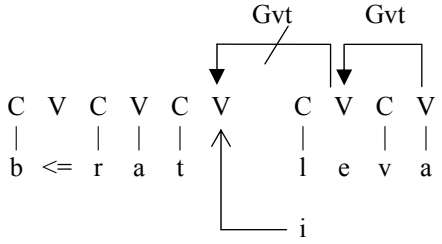
	context	example	gloss
a.	## __CVC	lew	lion NOMsg
	## __CøC-V	i-lva	lion GENsg
b.	…C # __CøC-V	brat i-lv-a	the brother of the lion
c.	…V # __CøC-V	śastra lv-a	the sister of the lion
d.	…C # __CVC	tam jość lew	there is a lion
e.	…V # __CVC	malady lew	young lion

(15) epenthesis into the leftmost of two empty nuclei in a row

a. epenthesis into the (utterance-) initial CV



b. epenthesis into the final empty nucleus of the preceding word



(16) location and causality of Belarusian i-prothesis
all and only those empty nuclei that remain ungoverned are subject to epenthesis.

4. What the initial CV is initial of

(17) phase structure and the distribution of initial CVs

a. CV always heads computational domains
   1. words
   2. utterances

b. but there is no automatic distribution: not every phase is headed by an initial CV.

(18) phase boundaries may be ignored by phonology
   a. are there no Phases between the word level and the CP in languages like Belarusian?
      ==> certainly not.
   b. this just means that Phase boundaries may be ignored by the phonology (i.e. may not require the PIC to be enforced):
      phase boundaries
      - are detected by morpho-syntactic and/or phonological traces
      - may or may not leave morpho-syntactic traces
      - may or may not leave phonological traces

5. Syntactic evidence for phases: atomisation of phasehood

(19) how do phonological footprints of phases correlate with morpho-syntactic phase structure?
   a. Chomsky's (2000) original take on phasehood identifies CP and vP, maybe DP (Chomsky 2005:17f), as phase heads.
   b. Since then there is a constant trend to grant phasehood to smaller and smaller chunks (den Dikken 2007:33 provides an overview): the DP track is followed, and also DP-internal phases are argued for (Matushansky 2005). TP is also under debate: while Chomsky (e.g. 2000:106, 2004:124) is explicit on the fact that TP does not qualify as a phase head (because it is not propositional), den Dikken (2007) points out that according to Chomsky's own criteria, this conclusion is far from being obvious. TP is indeed assumed to act as a phase head in a growing body of literature, and nodes below TP such as Voice^0 (Baltin 2007, Aelbrecht 2008) and AspP (Hinterhölzl 2006) are also granted phasehood.
   c. spell-out-as-you-merge: every node is a phase head
      The vanishing point of the atomization of phasehood is a situation where all nodes trigger interpretation; or, in other words, where interpretation occurs upon every application of Merge. This radical position – Spell-out-as-you-Merge – is defended by Samuel Epstein and colleagues: Epstein et al. (1998), Epstein & Seely (2002, 2006).
   d. argument against spell-out-as-you-merge
      [i.e. in favour of selective spell-out]
      If all XPs are subject to Phase Impenetrability, "no extraction would be possible, as the complement of any phase would have to move to the edge of that phrase/phase, a movement step that would count as too local under any version of 'anti-locality'" (Boeckx & Grohmann 2007:212).
      That is, anti-locality (Grohmann 2003) marshals the atomisation of phasehood. In the evolution that makes smaller and smaller chunks of the tree phase heads, there is a level where the phase edge will not be able to act as an escape-hatch anymore for material that is trapped in the complement: anti-locality will prevent it from escaping.
   e. The field is in steady movement, but even on the most conservative count, i.e. Chomsky's initial vP and CP, there is a "syntactic" phase between the word and the utterance: vP. Less conservative perspectives place many more phase boundaries in this area, **none of which seems to leave phonological traces**.

f. It is hard to believe that this is due to insufficient analysis, or to the lack of cross-linguistic study of phonological traces of phase boundaries. That is, it is hard to imagine a language where word-initial consonants are strong, and first vowels of the word stable, but only in words that happen to be vP-initial (or TP-initial etc.). Also, we have seen a language, Belarusian, where there is definitely no phonological trace of the spell-out of chunk sizes that range between the word and the utterance: (at least) vP will be a phase in Belarusian as well, but its spell-out does not leave any phonological trace.

(20) bumpy match between syntactic and phonological evidence for phases at and above the word level

phases (syntactic evidence)	autonomous chunks (phonological evidence)	
CP	utterance	good match
vP	–	no phonological trace
DP	–	no phonological trace
TP	–	no phonological trace
…	–	no phonological trace
–	word	no syntactic trace

N.B.: the matrix- vs. embedded CP distinction is also active in syntax (so-called root-embedded asymmetry): e.g. V2 in German

As far as I can see, there is no evidence that any other syntactic node leaves *systematic* traces in phonology, i.e. "all and only": e.g.

a. "words are TR-only, but only in DP-initial position"
b. "spirantization applies across all word boundaries, except across XP-TP boundaries"
c. "CC-initial words get a vocalic prothesis, but only if they are vP-initial."

(21) chunks that are relevant phonological domains
phonological domain = phase (Kratzer & Selkirk 2007)
the classical units of the Prosodic Hierarchy

a. below the word: variable (morpheme classes, cf. above)
b. Prosodic Word: about word size
c. Prosodic Phrase: about an X" (DP, VP, AP)
d. Intonational Phrase: no specific syntactic correlate, sometimes an XP, sometimes a CP
e. Utterance

6. Conclusion

(22) the initial CV is phase-initial
   a. syntactic and phonological evidence for phases does not coincide
   b. syntactic evidence is MUCH more fine grained than phonological evidence
   c. there are many syntactic phases that NEVER seem to produce any phonological effect anywhere: vP, TP

   d. 1. phases exist independently of phonology
      2. a decision is made whether their left edge is made visible in phonology
      3. in case it is, the phase is armed with a CV unit
   e. initial CVs are always phase-initial,
      but not all phases have an initial CV.

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Items followed by WEB can be downloaded at www.unice.fr/dsl/tobias.htm.

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