Gliding under turbidity

Anthi Revithiadou, Giorgos Markopoulos & Polina Messinioti / AUTh
contact: revith@lit.auth.gr

OCP XI
11th Old World Conference in Phonology
Amsterdam – Leiden, January 22-25, 2014

AIMS:

- To investigate the representation of derived glides, which emerge as the result of a hiatus resolution strategy in a group of Greek dialects.
- To account for the stress behavior of derived glides.

1. The data

Glides [**J**] surface as the result of a recuperation strategy to hiatus due to intervocalic deletion of voiced fricatives, /v, ð, ɣ/ (Dodecanese) or the rhotic /r/ (Samothraki) (Tsopanakis 1940 (Ts), Méndez Dosuna 2002 (MD) a.o.).

2. Research questions

1| F-structure: What is the F-representation of derived glides?
2| Syllable structure: Which melodic position does the newly formed glide occupy in the syllable?
3| Stress: What controls the position of stress when stressed vowels turn into glides?

The proposal: The phonological representation of derived glides consists of three separate levels (feature, melodic and stress tier). High-ranking of markedness constraints (e.g., *VC$_{[+cont]}$V, *HIATUS) forces certain vocalic features and stress to be realized unfaithfully on neighboring elements.

High and mid vowels turn into glides

(1) *CJV sequences*

a.	/aɣóra-s-a/	aɣwásа	‘buy-1SG.PAST’	(Samothraki, MD 2002: 105)
b.	/krevát-i/	krjáti	‘bed’	(Rhodes, Ts 1940: 58)
c.	/léɣ-o/	ljó	‘talk-1SG’	(Rhodes, Ts 1940: 61)
d.	/akríð-a/	akrjá	‘grass-hoper’	(Rhodes, Ts 1940: 63-64)

(2) *VJ sequences*

a.	/kladévo/	klájvo	‘prune-1SG’	(Rhodes, Ts 1940: 57)
b.	/fovéra/	fójra	‘threat’	(Rhodes, Ts 1940: 61)
c.	/kávuras/	káwras & kówˠras	‘crab’	(Rhodes, Ts 1940: 52)
d.	/panáɣiri/	panájri & panéjri	‘festival’	(Rhodes, Ts 1940: 58)

High vowels optionally spread their backness & roundness to the neighboring vowel

(3) a.	/ta íðes/	tájðis	‘you saw them’	(Sarakatsanian, Höeg 1925: 169)
b.	/su ípa/	sújpa	‘I told you’	(Peloponnesian, Pantelidis 2001: 554)

Glides arise in clitic + verb strings

(4) a.	/súða/	(i) swá (S. Rhodes) (ii) sfá (Apolakkia)	‘mammilla’	(Ts 1940: 55)
b.	/kopellúða/	(i) kopellúa (N. Rhodes) (ii) kopellwá (S. Rhodes) (iii) kopelvá (Apollona)	‘girl’	(Ts 1940: 55)

Evidence in support of J as an onset

(5) a.	/karávia/	karáv3a (Vati)	‘ship-PL’	(Ts 1940: 69-71)
b.	/xoráfia/	xoráʃa (Vati)	‘field-PL’	(Ts 1940: 69-71)
(6) a.	/karíðia/	(i) karíðʝa (Trianta, Salakos) (ii) karíʝʝa (Archangelos)		(Ts 1940: 70-72)
b.	/alíθia/	(i) alíθca (Trianta, Salakos) (ii) alícca (Archangelos)	‘truth’	(Ts 1940: 70-72)

Evidence in support of J as a coda

(7) a.	/kladévɣo/	klájv.ɣo	‘prune-1SG’	(Rhodes, Ts 1940: 57)
b.	/laɣós/	láws	‘hare’	(Rhodes, Ts 1940: 52)

Prediction 1 is fulfilled
glide ⇒ C[LAB]
glide ⇒ C[COR]
glide ⇒ C[DOR]

3. The featural representation of derived glides

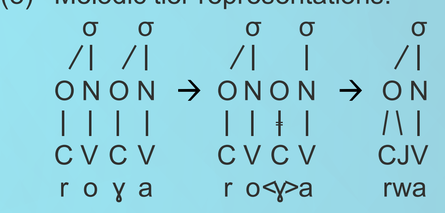
- Derived glides (like underlying vowels) are [-cons]; their syllabic realization hinges on phonological context (Levi 2008, 2011).
- Underlying and derived glides differ in their *Designated Articulator* (DA) (*Revised Articulator Theory*, Halle 1995, 2005; Halle et al. 2000). Glides can have more than one DA (Nevins & Chitoran 2008).

Hypothesis 1: Derived glides are specified for two DAs: **w** [LAB], [DOR], **j** [COR], [DOR].
Prediction 1: Derived glides can surface as labial or dorsal consonants (<w) and as dorsal or coronal consonants (< j).

4. Derived glides in the melodic tier

The recuperation of hiatus forces mid and high vowels to occupy non-nucleic positions and surface as glides (Soultatis 2013; Levi 2008; Nevins & Chitoran 2008, a.o.) ⇒ mora loss

(8) Melodic tier representations:



- Derived glides become automatically [-voc] when placed at syllable margins (⇒ *([+voc]/_MARGIN, Nevins & Chitoran 2008).
- Often they receive [+cons] from a preceding C (Kaisse 1992), hence they are forced to surface with one DA (*|DA|>1, [+cons], Nevins & Chitoran 2008).

Hypothesis 2: Glide formation of a stressed V triggers rightward stress shift because Greek stress is trochaic.
Prediction 2: Stress carried out by the original vowel will **not** shift to the direction of its syllabification.

5. Derived glides and stress

Vowels, which turn into glides, shift their stress to the vowel of the syllable they syllabify to. Thus, stress transcends the limits set by the trochaic foot – contra to Halle & Vergnaud’s (1987) foot-limited stress shift pattern.

(9) (* .) (* .) (*)
klaðévo → kláðJ.vo / *klaðJ.vó

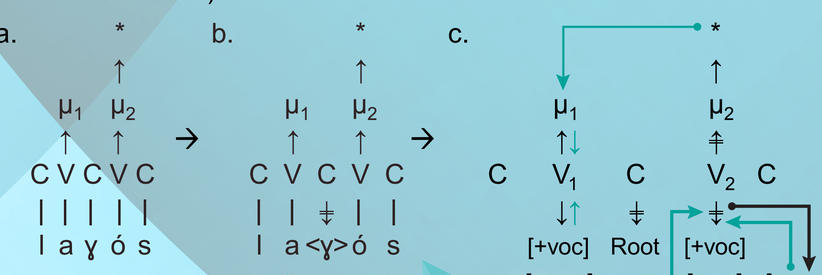
Prediction 2 is not fulfilled

In certain varieties, after intervocalic fricative deletion, vowel metathesis takes place to yield VJ sequences (11a-b). Stress refuses to shift – at the expense of hiatus – in order to protect the less sonorous vowel of the sequence from being lost (11c):

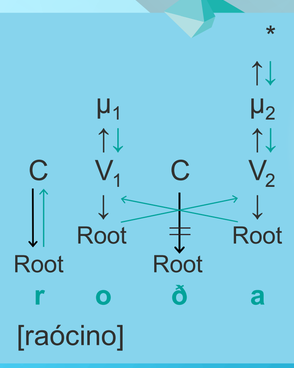
(11) a.	/liɣarj-á/	lajrjá	‘wicker’	(Ts 1940: 55)
b.	/próvat-a/	práwta	‘sheep-PL’	(Ts 1940: 78)
c.	/roðákin-o/	raócino /*ráwcino	‘peach’	(Ts 1940: 78)

Proposal: Turbidity Theory - TT (Goldrick 1998, 2000; van Oostendorp 2006, 2008; Revithiadou 2008):

(10)



(12)



feature tier
V_1: projection and pronunciation of Fs [+voc, -cons] match
(RECIPROCITY V↔F: ✓✓)
V_2: projection and pronunciation of [-cons] but only projection of [+voc]
(RECIPROCITY V↔F: ✓*)
melodic tier
$μ_1$: projection and pronunciation lines match
(RECIPROCITY V↔μ: ✓)
$μ_2$: only projection, no pronunciation
(RECIPROCITY V↔μ: *)
stress tier
$μ_2$: projection of lexical accent, pronunciation on $μ_1$ (RECIPROCITY μ↔*: *)
RANKING: *([+voc]/_MARGIN), *VV ≫ RECIPROCITY V↔F, RECIPROCITY V↔μ, RECIPROCITY μ↔*

Q: Why TT?

A: Greater descriptive and explanatory power. Stress is not a property of the vowel but of the moraic slot, thus protecting stress on that mora even if its content is changed.

6. Conclusions

- Derived glides can be realised as dorsal, coronal or labial consonants.
- The direction of underlying stress is determined by the direction of syllabification and not by foot-bound stress shifts.
- A mora can be protected by stress at the expense of hiatus.

Selected references: (1) Goldrick, M. 2000. Turbid output representations and the unity of opacity. In *Proceedings of NELS* 30, 231-245. Amherst, MA: GLSA. (2) Halle, M. & J.-R. Vergnaud. 1987. *An Essay on Stress*. Cambridge, MA: MIT Press. (3) Levi, S. V. 2011. Glides. In M. van Oostendorp, C.J. Ewen, E. Hume & K. Rice (eds.), *Blackwell Companion to Phonology*. 341-366. Oxford: Wiley-Blackwell. (4) Méndez Dosuna, J. 2002. Deconstructing ‘height disimilation’ in Modern Greek. *JGL* 3: 83-114. (5) Nevins, A. & I. Chitoran. 2008. Phonological representations and the variable patterning of glides. *Lingua* 118: 1979-1997. (6) Revithiadou, A. 2008. Colored turbid accents and containment: A case study from lexical stress. In S. Blaho, P. Bye & M. Krämer (eds.), *Freedom of Analysis?*, 149–174. Berlin & New York: Mouton de Gruyter. (7) Topintzi, N. 2011. Paradigm structure and Greek glides. Paper presented at the University of Leipzig, 6 June 2011. (8) Topintzi, N. & M. Baltazani. 2011b. Where the glide meets the palatals. Paper presented at the *20th International Symposium of Theoretical and Applied Linguistics*, Aristotle University of Thessaloniki, Thessaloniki, 1-3 April, 2011. (9) Tsopanakis, A.G. 1940. *Contribution à l’ Étude des Dialects Néogrecs. Essai sur la Phonétique des Parlers de Rhodes*. Athens: Verlag der Byzantinisch-Neugriechischen Jahrbücher. (10) van Oostendorp, M. 2006. A theory of morphosyntactic colours. Ms., Meertens Institute, Amsterdam.