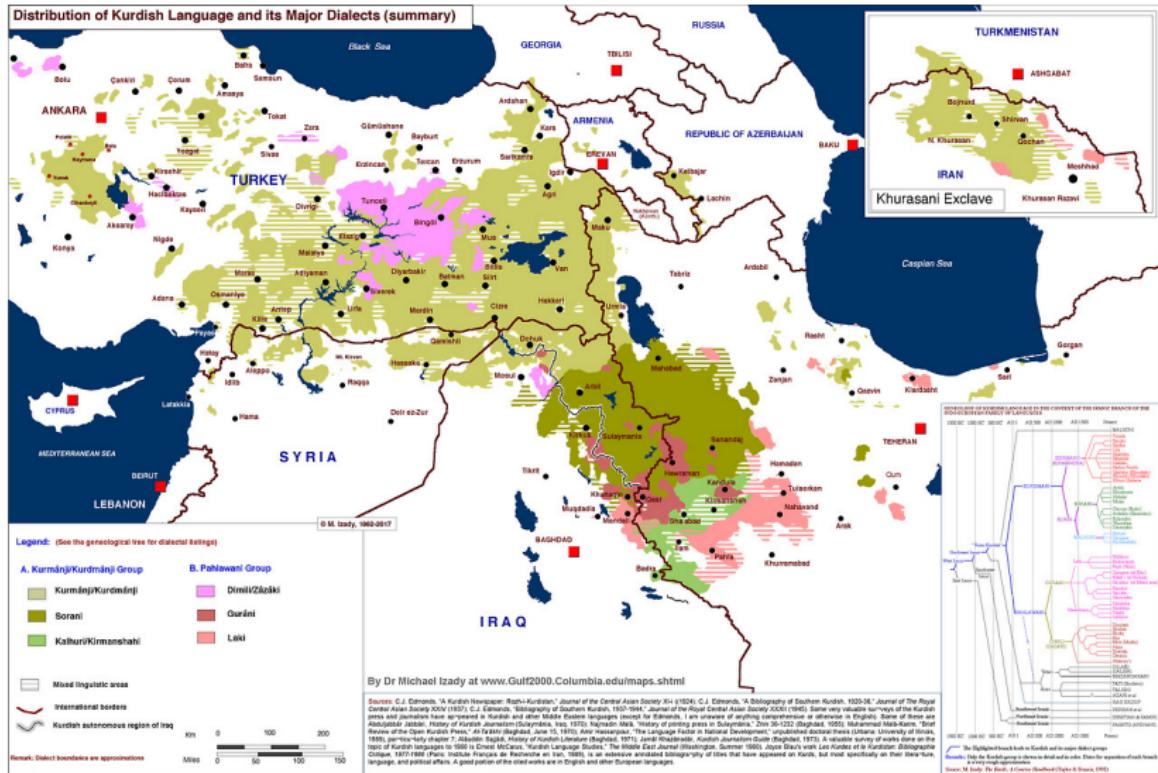


Sensitive Dependence on Initial Conditions, Illustrated through the Interplay between Sound Change and Analogy in the Progressive-to-Imperfective Cycle in Northern, Central, and Southern Kurdish

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Introduction



Sound Change and Morphological analogy

- There is great variation between Kurdish varieties

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- The large number of imperfective markers is particularly illustrative

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Sound Change and Morphological analogy

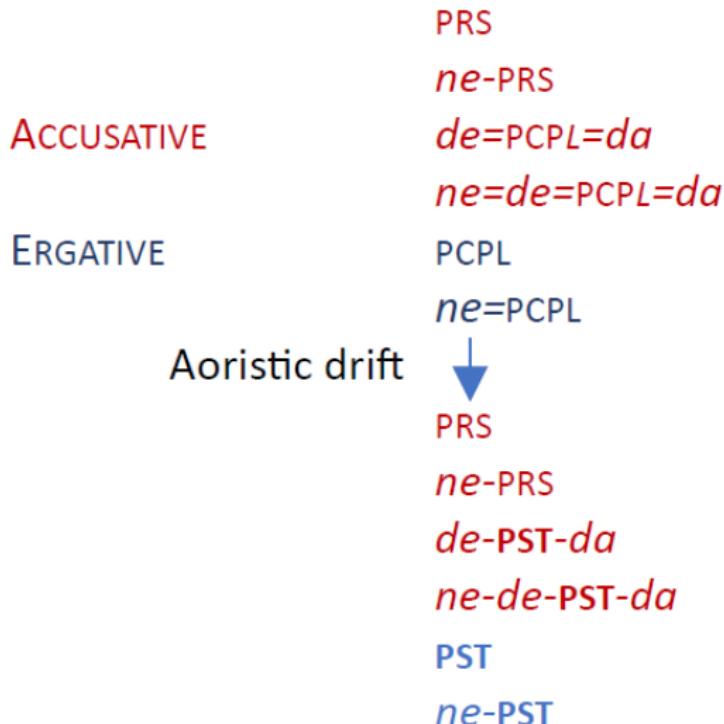
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Sound Change and Morphological analogy

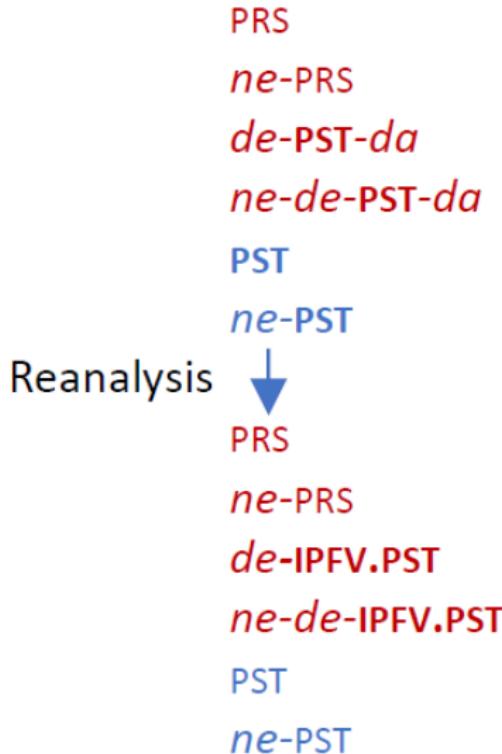
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 - I propose actual borrowing introducing phonological irregularities
 - I show how minimal phonological differences yield disparate results

Idealized Changes

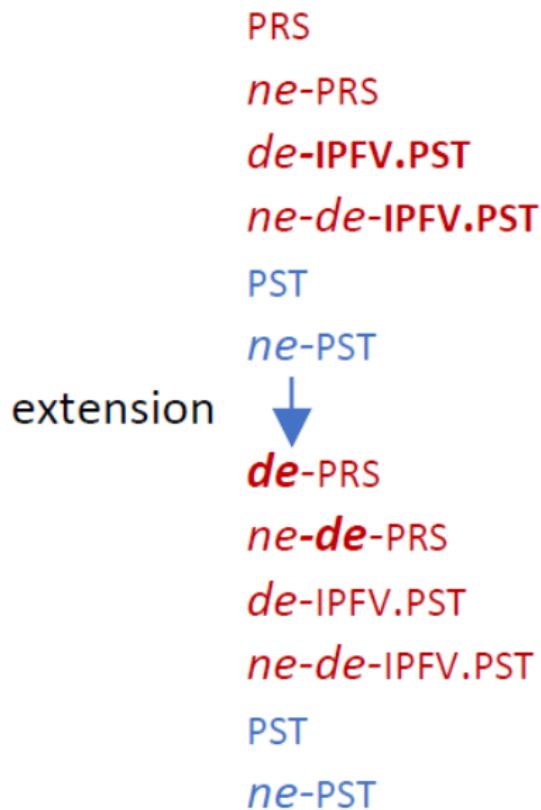
Hypothetical Changes I



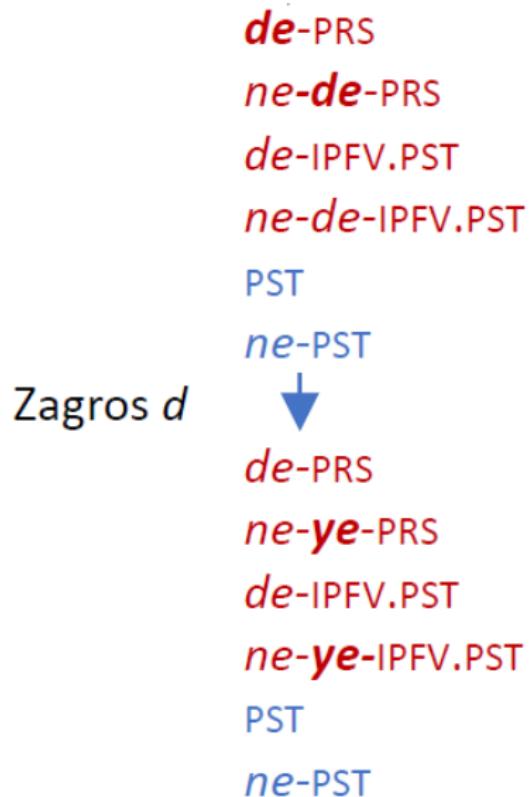
Hypothetical Changes II



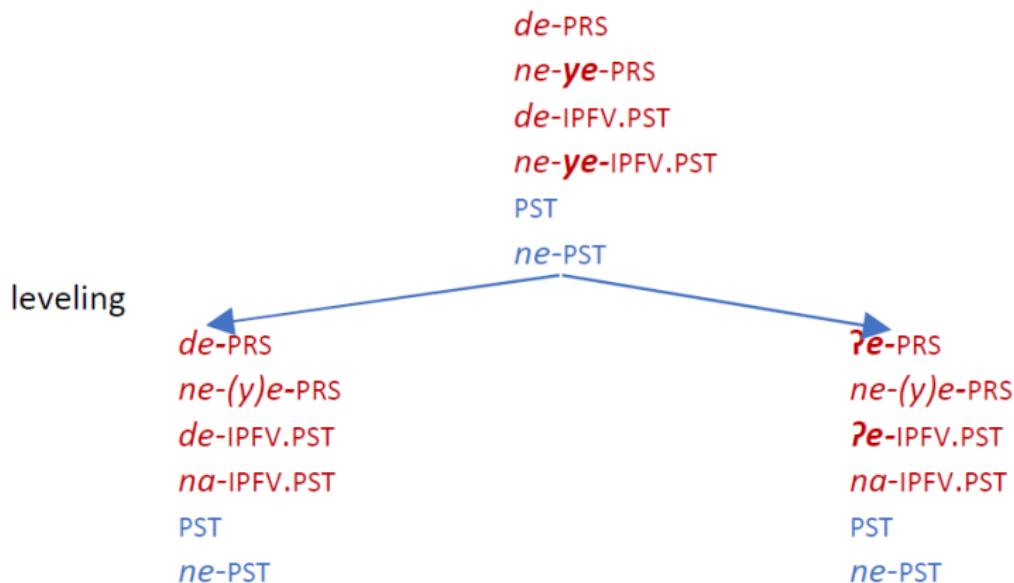
Hypothetical Changes III



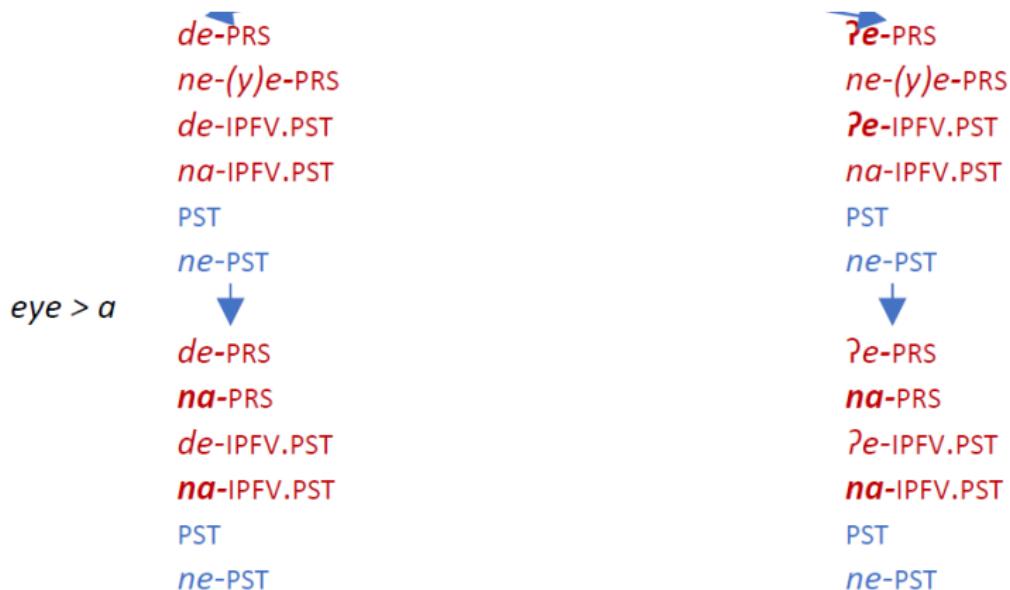
Hypothetical Changes IV



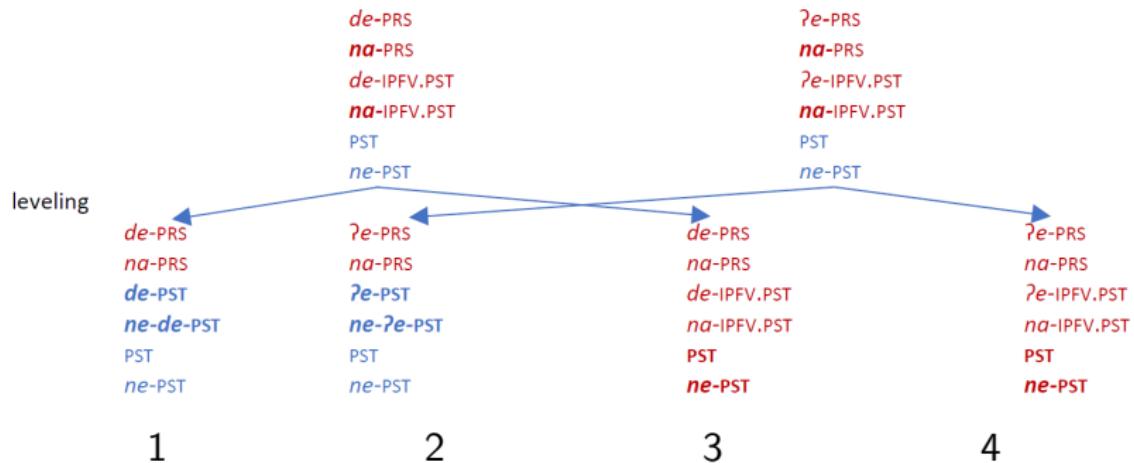
Hypothetical Changes V



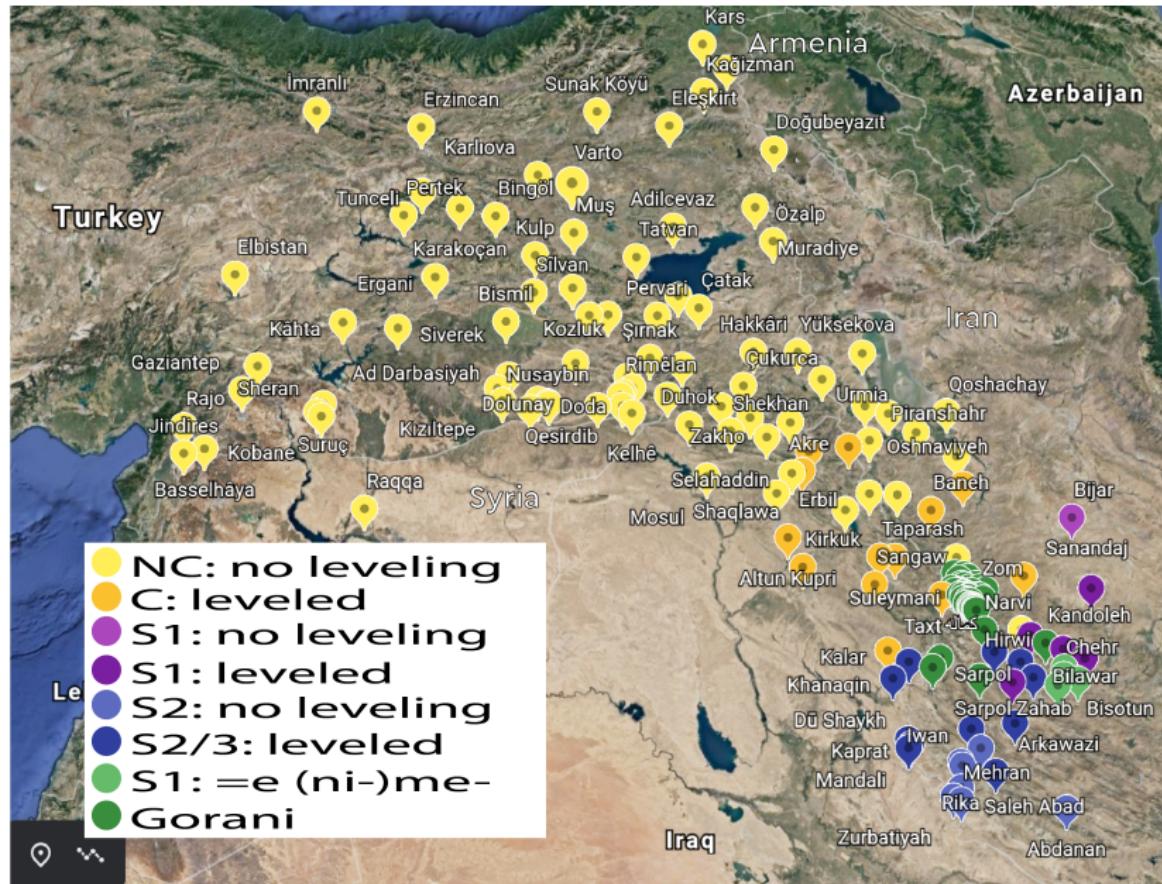
Hypothetical Changes VI



Hypothetical Changes VII



Kurdish varieties (114)



The source of noise

Zagros /d/

“As a widespread regional feature, termed the “Zagros d” (Windfuhr), postvocalic *d* is softened to glide-like *-i-*, or *-w-*, and contracts with adjacent high vowels: *a-da-m* ~ *a-ia-m* ‘I give’; *nadir* ~ *nair* ‘Nadir’ (masc. proper name); *bad* ~ *bai* ‘bad’; *xwa* ~ *xuwa* ‘God’ [< **xuda*].”

(McCarus, 2009, 597)

- $d \rightarrow C_{[+CNT]} / C_{[+CNT]} -$:
 - *diħar* < *diħdar* ‘lover’
- $d \rightarrow d$ (elsewhere):
 - *dest* ‘hand’
 - *kird* ‘do.PST’

(Mackenzie, 1961, 3)

Zagros /d/ re-imagined

1. $d \rightarrow y, w, \emptyset / V_-$ (shared all Kurdish varieties)
2. $d \rightarrow \emptyset / C_{[+CNT]}_-$ (not shared by all Kurdish varieties)
3. Paradigm leveling: allomorphy due to Zagros /d/ occurring as a sandhi phenomenon across word or morpheme boundaries is eliminated. (irregular like all types of analogy)

Gorani/Laki Contact I

- Gorani and Laki varieties use the imperfective marker *m(e)-* not the Kurdish *(d)e-*.
- In these varieties, the presence of the imperfective marker conditions the use of the negation marker *ni-* instead of the typical *ne-*

	Paweyane	Hersîn	Mukrî
PRS	<i>mekeru</i>	<i>mekem</i>	<i>dekem</i>
NEG.PRS	<i>nimekeru</i>	<i>nimekem</i>	<i>nakem</i> < * <i>nedekem</i>
IPFV.PST	<i>kerênenê</i>	<i>mekirdim</i>	(=m) <i>dekird</i>
NEG.IPFV.PST	<i>nekerênenê</i>	<i>nimekirdim</i>	(=m) <i>nedekird</i>

Gorani/Laki Contact II

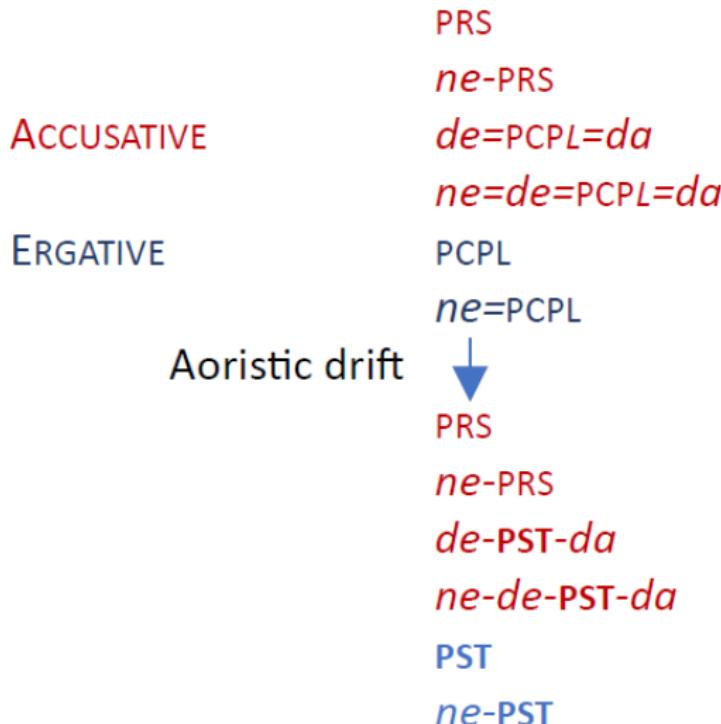
- Some varieties adopted the Gorani model

	Paweyane	Hypothetical	Mukrî
PRS	<i>mekeru</i>	* <i>dekem</i>	<i>dekem</i>
NEG.PRS	<i>nimekeru</i>	*nidekem	<i>nakem</i> < * <i>nidekem</i>
IPFV.PST	<i>kerênenê</i>	* <i>dekirdyam</i>	(=m) <i>dekird</i>
NEG.IPFV.PST	<i>nekerênenê</i>	* <i>nedekirddam</i>	(=m) <i>nedekird</i>

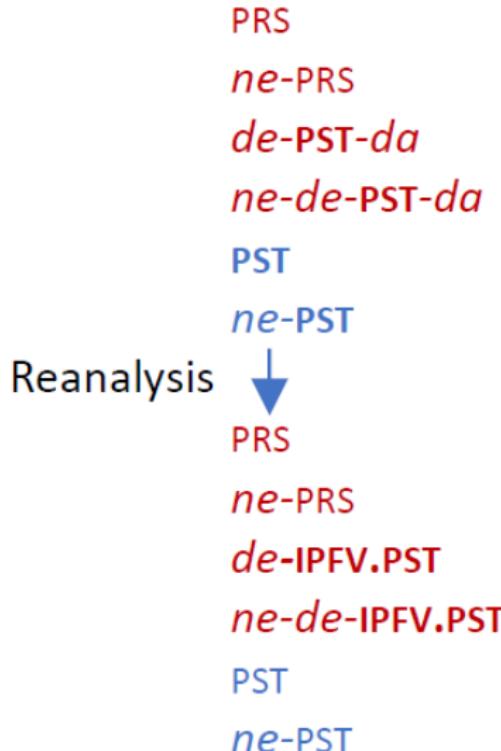
- Some varieties adopted the Laki model

	Hersîn	Hypothetical	Mukrî
PRS	<i>mekem</i>	* <i>dekem</i>	<i>dekem</i>
NEG.PRS	<i>nimekem</i>	*nidekem	<i>nakem</i> < * <i>nedekem</i>
IPFV.PST	<i>mekirdim</i>	* <i>dekirkddam</i>	(=m) <i>dekird</i>
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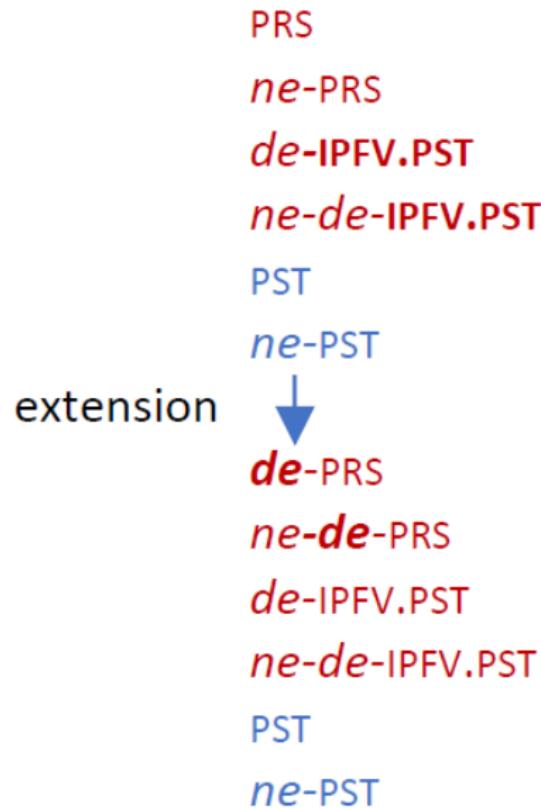
Proposed Changes I



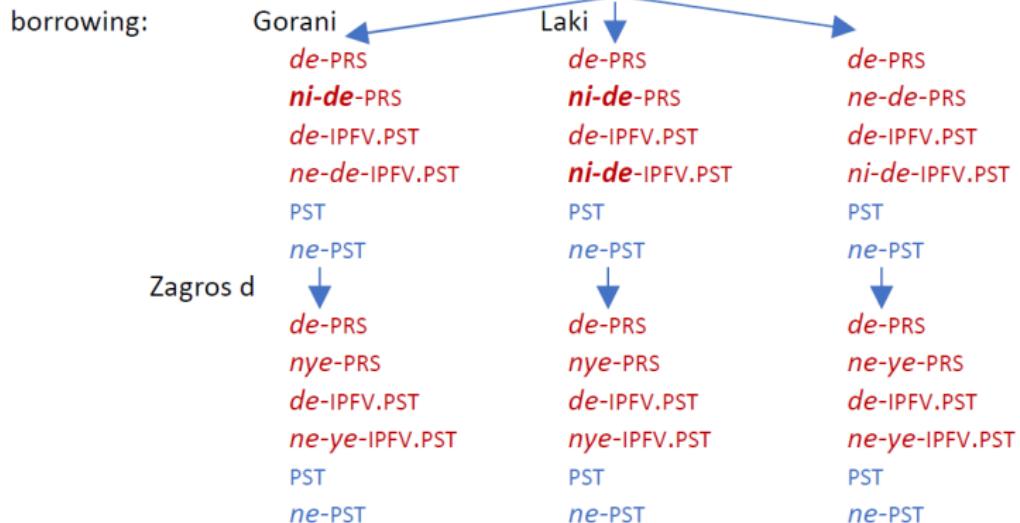
Proposed Changes II



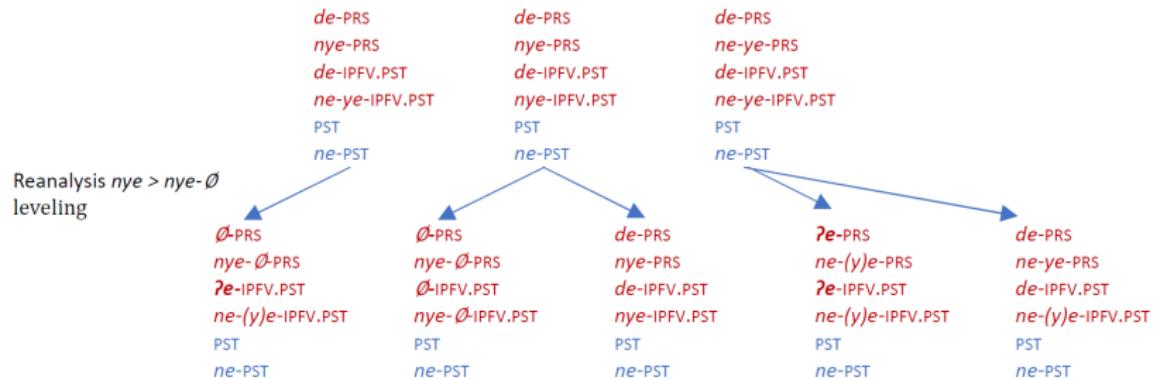
Proposed Changes III



Proposed Changes IV



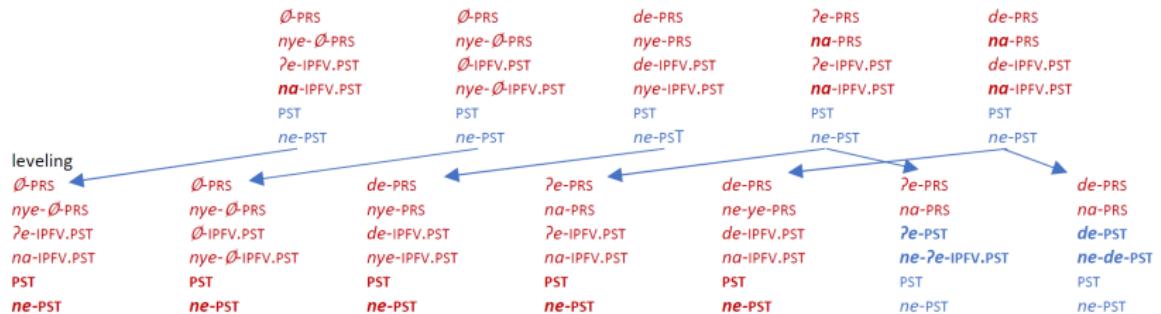
Proposed Changes V



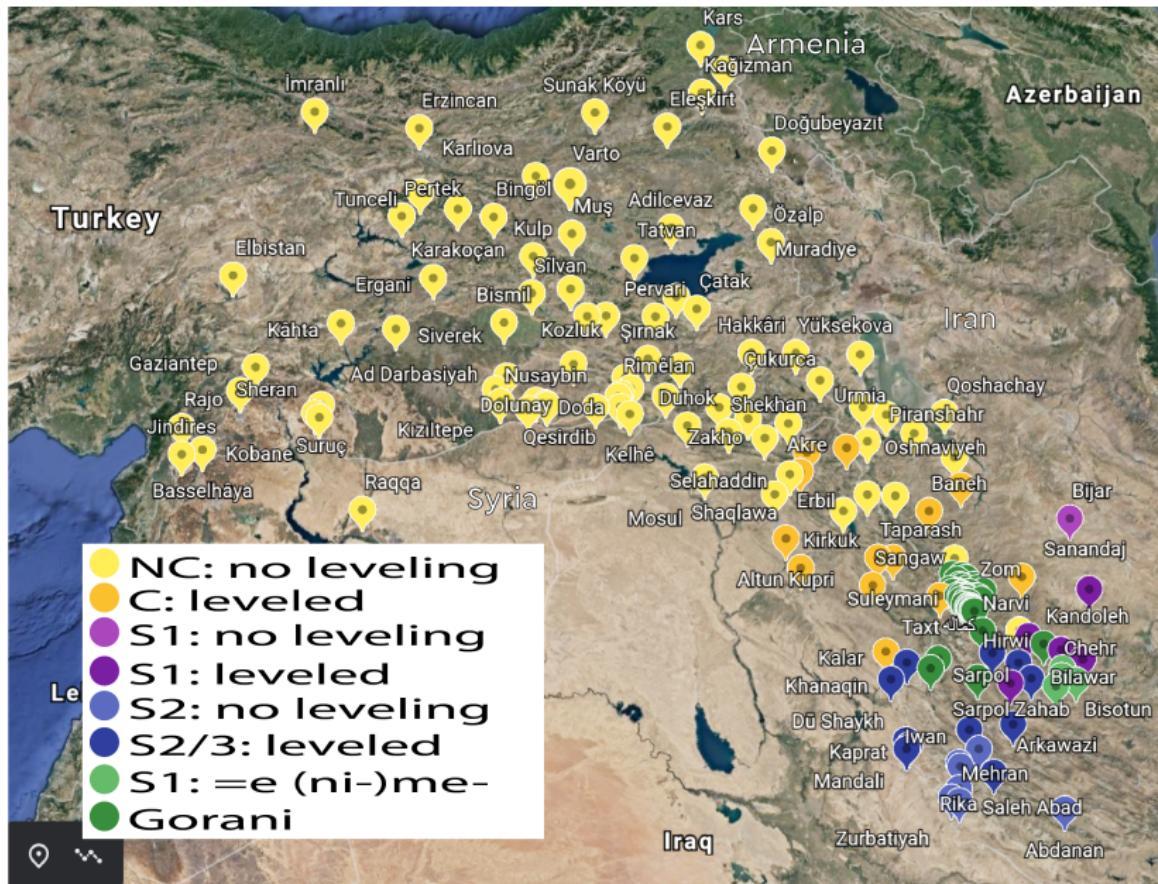
Proposed Changes VI

	Ø-PRS	Ø-PRS	de-PRS	ʔe-PRS	de-PRS
	nye-Ø-PRS	nye-Ø-PRS	nye-PRS	ne-(y)e-PRS	ne-ye-PRS
	ʔe-IPFV.PST	Ø-IPFV.PST	de-IPFV.PST	ʔe-IPFV.PST	de-IPFV.PST
	ne-(y)e-IPFV.PST	nye-Ø-IPFV.PST	nye-IPFV.PST	ne-(y)e-IPFV.PST	ne-(y)e-IPFV.PST
	PST	PST	PST	PST	PST
	ne-PST	ne-PST	ne-PST	ne-PST	ne-PST
eye > a	↓	↓	↓	↓	↓
	Ø-PRS	Ø-PRS	de-PRS	ʔe-PRS	de-PRS
	nye-Ø-PRS	nye-Ø-PRS	nye-PRS	na-PRS	na-PRS
	ʔe-IPFV.PST	Ø-IPFV.PST	de-IPFV.PST	ʔe-IPFV.PST	de-IPFV.PST
	na-IPFV.PST	nye-Ø-IPFV.PST	nye-IPFV.PST	na-IPFV.PST	na-IPFV.PST
	PST	PST	PST	PST	PST
	ne-PST	ne-PST	ne-PST	ne-PST	ne-PST

Proposed Changes VII



Kurdish varieties (114)



Additional noise

- Vowel-final verbs: çû → çwa; barî → barya cf. kirdda → kird(ya)
- extension of -ya: three types *barya/kird*, *barî/kird*, *barya/kirdya*
- selection of negative allomorph for rebuilt past *ne-* vs. *na-*

<1>(1) Pretonic reduction: dekém → dikem

(2) Laki-Gorani *ni-*: nedidem → nidikem

(3) Zd: nidikem → nîkem :: nedikem → nêkem (< *neykem)

<2> retrogressive voice assimilation: d → t / _C_v

<3> sandhi extension: d(i)- → t(i)-

Types I

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

NCd: Forms with the categorial loss of the imperfective stem

Mosul, İmranlı, Tatvan, Çukurca, Uludere, Muradiye, Pertek, kâhta, Nusaybin, Dolunay, Qamishly, Sabahiya, Duhok, Kobane, Zakho, Basselhâya, Akre, Chiay Syan, Kanyder, Bismil, Kulp, Karlıova, Kur-talan, Özalp, Kağızman, Kozluk, Siverek, Digor, Kızıltepe, Ergani, Doğubeyazıt, Karakoçan, Suruç, Şemdinli, Muş, Varto, Erzincan, Bingöl, Sunak Köyü, Eleşkirt, Doda, Ad Darbasiyah, Raqqa, Qe-sirdib, Xırbe Cıhwa:

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Types II

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

di- *na-* *di-* *nedi-*

Jindires, Rajo (Syria):

di- *na-* *di-* *nedu-*

Elbistan:

di- *na-* *di-* *na-*

Bahçesaray, Sersink:

ti(/*di*)- *na-* (*ti*)*di-* *ne-ti*(/*di*)-

Beroj, Tepkê:

t- *na-* *t-* *na-*

Sewîdiyê:

t- *na-* *ti-* *nedi-*

Kelhê:

ti- *na-* *di-* *neti-*

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Types III

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Erbil, Mahabad, Urmia, Oshnaviyeh, Marivan, Qoshachay, mīyān-doāb, qalat Dizah, Khalakan:

de- *na-* *de-* *nede-*

Naqadeh:

de- *na-* *de-* *ned(i)-*

Kamyaran:

de- *na-* *de-* *nad(i)-*

NC: Forms with the categorial loss of the imperfective stem

Sulaymaniyah, Kirkuk:

e- *na-* *e-* *nee-*

Khalifan, Baneh, Choman, Halabja, Sangaw:

e- *na-* *e-* *nae-*

S1d: Forms with neither the categorial loss of the imperfective stem nor the Gorani negative marker *ni*

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Types IV

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Bijâr

di- *nî-* *di-...-ya* *nî-...-ya*

S1: Forms with neither the categorial loss of the imperfective stem nor the Gorani negative marker *ni*

Dinawar, Bilawâr, Sahana:

e- *na-* *e-...-ya* *na-...ya*

Kolyâi, Qorwa (C.D. .), Bayray:

=y#e- *na-* *=y#e-...-ya* *na-...ya*

S1: Forms with the Gorani negative and imperfective markers as a later development alongside the inherited imperfective marker *=e*
ni-me-PST.IPFV-

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Types V

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Bisitun, Cîhr, Harsin, Pâyrawand:

=e *me-* =e *nime-* =e *me-...-ya* =e *nime-...-ya*

S2: Forms with the Gorani negative marker *ni-* only in the present

Xânaqin:

Ø- *nye-* e- *nee-*

S3d: Forms with the Gorani negative marker *ni-* regardless of tense

Malîkshâhi

(*di*)Ø- *nye-* *di-* *nye-*

S3: Forms with the Gorani negative marker *ni-* regardless of tense

Myaxâs, Ilâm, Mîhrân, Rikâ (Sarna), Sâleh âbâd, Warmîzyâr, Zur-bâtiya, Kordali:

Ø- *nye-* *di-* *nye-*

Kałhor (Shahabad), Camcamâl, Harasam, Kîrmanşâh, Qasırışirin, Sanjabi, Xâlesa:

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Types VI

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

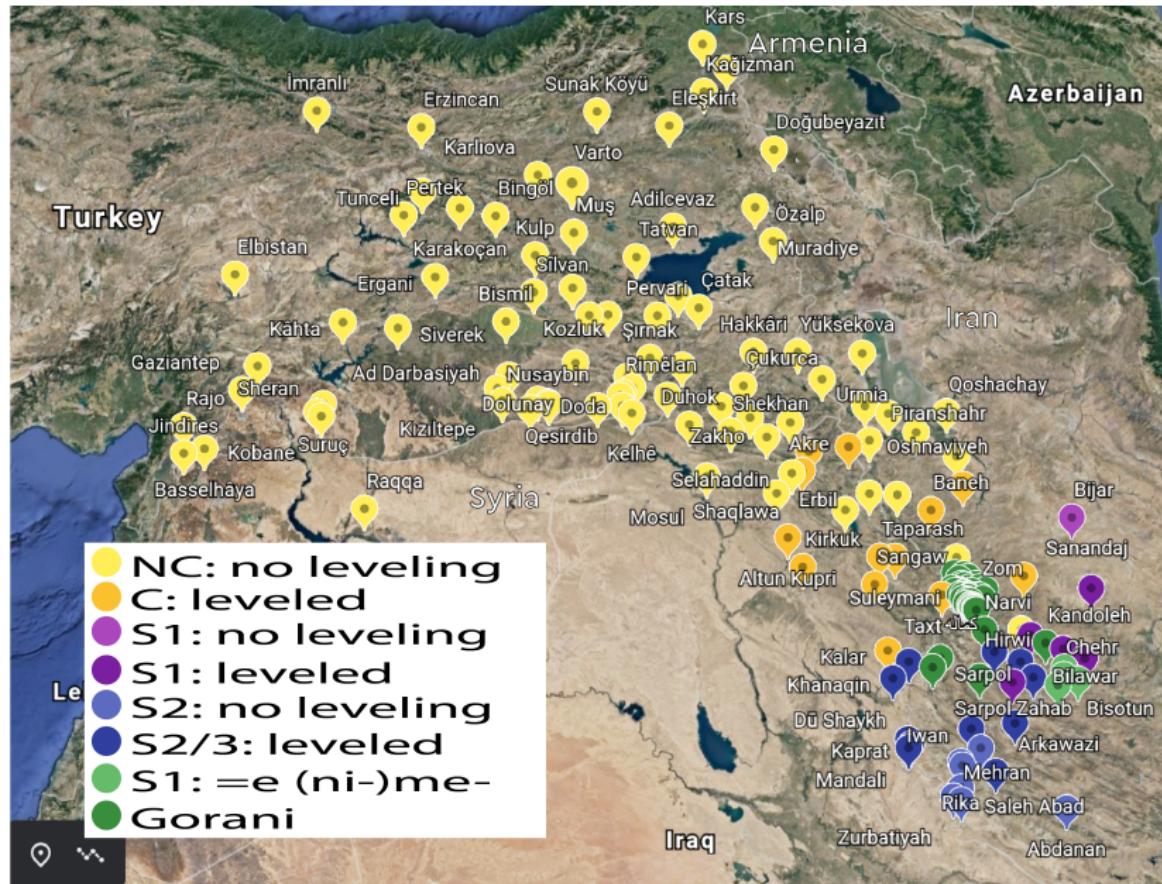
\emptyset - *nye-* \emptyset -...-ya *nye*-...-ya

Arkwâzi, Dušayx, Iwân, Kaprât, Mandili, Sarpol, šerwân:

\emptyset - *nye-* = PST.PFV

PRS.IPFV PRS.IPFV.NEG PST.IPFV PST.IPFV.NEG

Kurdish varieties (114)



Zor supastan ekem!

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