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Contact across the Iranian World: curious convergences between Kurdish and Balochi

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Abstract: It has not gone unnoticed that the Balochi imperfective aspect marker *a-* is superficially similar in form to the Central Kurdish marker *a-* (*e-* in Kurdish orthography) and nearly identical in function. Micro variation shows further similarities. For instance, the way these formatives idiosyncratically attach to certain verbs: come, bring, etc. have striking similarities in both groups. Additionally, the forms of past imperfective and past conditional forms show further convergence with the Kurdish system, differing from the original constructions preserved in Gorani and Zazaki. In light of new data from Kurdish, I evaluate the prospect of a relationship between these formations and others, arguing that these constructions ultimately have different etymologies. However, their convergence is far from coincidence.

Keywords: Diachrony; Language Contact; Sound Change; Morphological Analogy.

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1. Introduction:

Balochi is a fascinating case in language contact. There are forms in Balochi that indicate contact with languages from all parts of the Iranian periphery, including Kurdish and Gilaki, Persian, and Indo-Aryan/Dravidian languages, at all historical stages. These data tell a story of nomadic migrations circling Iran from the northwest, across and down the southeast to Hindustan, back across the south of Iran, and then repeating the journey at least twice over the course of centuries. As such, it is not strange that Balochi has converged with languages following Karim's (2021) "Rubik's Cube' metaphor: moves on

one axis correspond to geographical migrations, while moves on other axes correspond to phonological and morphological changes shared by languages both genetically related and otherwise.

Examining the verbal systems of Balochi and Kurdish Zone languages, a set of superficial similarities shows convergences that set them apart from New Persian (and other varieties). A selection of these convergences is presented here in *Table 1*. Using Balochi as the base of comparison, there are a few immediately apparent patterns: The imperfective/indicative is marked by the prefix *a-*.[1] The same is true in most Northern, Central, and Southern Kurdish varieties, where the prefix is a variant of *d-, de-, e-, t-*, in Persian *mī-*, and in Most Gorani varieties *me-, m-*. Only a few varieties, e.g., Zazaki, feature a prefixless present imperfect indicative from the old active participle (< *-ant-). Some Gorani and Southern Kurdish varieties have lost these prefixes for purely phonological reasons, and Central Kurdish varieties have undergone phonological changes resulting from the loss of the initial dental consonant. However, in all varieties, even those with vastly different productive forms of the prefix, the original is preserved before h-initial verbs, e.g., 'come', 'bring', etc. Note that, although the etymon is not yet certain, the Balochi form follows the same pattern with a special imperfective formative *k-* occurring before h-initial verbs. However, in most varieties, the *k-* cooccurs with the productive *a-*. The only other parallel to this in *Table 1* is the Southern Kurdish variety of Qorwe, where younger speakers no longer associate the *t-* with the imperfective aspect and have begun to regularize the form by adding the *e-* prefix. Note that Kurdish and Balochi varieties do not use the irregular imperfective markers in the context of negation.

The other notable convergence between Kurdish and Balochi is the form of the past conditional and past imperfective, the protasis and apodosis of irreal conditionals, respectively. The past imperfective is just the simple past tense with the addition of the productive imperfective prefix, and the past conditional is the subjunctive prefix *bi-* and a suffix Kurdish *-a*, Balochi *-ên*. Note that similar strategies to these conditional forms are also found in other varieties. In Zazaki, the imperfective suffix is *-êni* and the conditional is the same with the prefix *bi-*. Likewise, Early New Persian (but not modern New Persian) had an imperfective suffix *-i*, and the conditional was the same form, optionally with the *bi-* prefix. The Gorani suffix cognate with that in Balochi,

[1] In Balochi, the imperfect markers have hitherto unknown etyma. These forms surface as the prefix *a-* in some varieties and the proposed enclitic *=a* attaching to the nearest preverbal matter in others (Nourzaei and Jahani 2012, for the geographic distribution of the particles, see). Additionally, there is a second imperfective prefix *k-* that attaches to specific verbs. Paul (2003) has suggested that there may be some relationship between the Kurdish imperfective prefix *a-* (*e-* in the Kurdish orthography) and the Balochi *a-*. Note that this assertion is not a strong claim. He merely recognizes that they are similar formatives with similar functions.

Zazaki, and Early New Persian *-ê(n)* attached to the present-tense or imperfective stem forms the past-imperfective, and, attached to the past-tense/perfective stem, forms the past conditional.

Table 1. Comparison of selected forms of the third-person singular in Western Iranic languages

	do.PRS.IND	come.PRS.AFF	come.PRS.NEG	do.PST.IPFV	do.PST.COND
NK Dihok	***ti***-*ke*	***ti***-*hê*	*na-ê*	***ti***-*kir*	***bi***-*kir*-***a***
CK Mukrî	***de***-*ka*	***d***-*ê*	*na-ê*	***de***-*kird*	***bi***-*kird*-***a***
CK Slêmanî	***e***-*ka*	***y***-*ê*	*na-ê*	***e***-*kird*	***bi***-*kird*-***a***
CK Kerkûk	***e***-*ka*	***d***-*ê*	*na-ê*	***e***-*kird*	***bi***-*kird*-***a***
SK Qorwe	***e***-*ka*	*(e-)****t***-*ê*	*na-ê*	***e***-*kird*	***bi***-*kird*-***a***
SK Kirmanşa	*ket*	***t***-*ê*	*ny-ê*	*kird-ya*	***bi***-*kird*-***ya***
Balochi	***a***-*kan-t*	*a-****k***-*ay-t*	*na-y-ay-t*	***a***-*kurt*	***b***-*kurt*-***ēn***
N Zazaki	*ker-en-o*	*y-en-o*	*nê-y-en-o*	*kerd-êni*	***bi***-*kerd*-***êni***
G Text	*ker-o*	***m***-*ê*	*ni-m-ê*	*ker-ê*	*kerd*-***ɛ***
G Pawe	***me***-*ker-o*	***m***-*ê*	*ni-m-ê*	*ker-ê*	*kerd*-***aê***
ENP	***mī***-*kun-ad*	*mī-āy-ad*	*ne-mī-āy-ad*	*kard-i*	*bi-kard-i*
NP Tehran	***mī***-*kun-e*	*mī-ā-d*	*ne-mī-ā-d*	***mī***-*kard*	*mī-kard*

The current study examines the convergence between these varieties, looking at what is known about these formatives from a historical comparative perspective. Ultimately, I demonstrate that although these formatives likely have different etyma, their superficial similarity may not be a mere coincidence. I examine the possibility of the relationship between Kurdish *e-* and Balochi *a-* (first proposed by Paul 2003) based on a proposal for the origin of the Kurdish imperfective markers in Southern Kurdish in Karim (2024). Ultimately, I reject the possibility that these are etymologically related. However, there are many similarities that point to another possible etymon, the so-called "KAR construction" (Vafaeian 2018).

These developments are relevant to the study of diachronic linguistics and Iranian languages because of what they suggest about convergence. Traditionally, language contact and 'Neo-Grammarian" sound change and morphological analogy are seen as entirely separate mechanisms of language change (following Campbell 2013). The physiology of the vocal tract leads to regular, exceptionless, phonetic developments, while psychological processes smooth out irregularities caused by those developments. The Balochi form show how languages across a large geographic area can undergo the same physiological and psychological processes, causing disparate formatives to converge in their general form and function. This can happen without direct contact, as the mechanisms that led to these mutual developments likely

began long before the relevant formatives were originally recruited into the respective verbal systems.

The proposal presented in this article is primarily based on patterns pervasive among Iranic languages that are too similar to ignore. Essentially, the same phonological changes affected broad swaths of the Western Iranian World. Different languages and varieties recruited different inherited forms for the emergent progressive construction, which underwent the progressive to imperfective cycle at varying times in their history. However, similar changes occurred to these formations due to regular sound shifts. I discuss the inherited Western Iranic forms in *Section 2* based on data from Fattah (2000), Axenov (2006), Matras et al. (2016), Belelli (2021), Mohammadirad (2020), Mahmoudveysi and Bailey (2013), Stilo (2007a), and Wal Anonby (2015). In *Section 3*, I outline the convergence of different patterns of the present tense in Western Iranic. I use the analysis of Kurdish in Karim (2024) as a template to evaluate whether the Balochi imperfective marker is likely related to the Kurdish one, and I propose a new etymon for the Balochi imperfective marker, based on the analysis that works for Kurdish but fails for Balochi (see *Section 3.5.2*). Likewise, I discuss convergence and developments of the past conditional and past imperfective following the Southern Kurdish model. Note that, thanks to Fattah (2000), we have sufficient knowledge of Southern Kurdish to observe all stages in the development from the inherited system extant in Zazaki today and in the oldest Early New Persian texts to the system in all of Central Kurdish and Balochi.

2. Previous Research

A notable pattern is evident among the verbal systems of Western Iranic languages. Each of the languages appears to have adopted the same pattern, regardless of the material recruited to perform each task. The pattern is as follows in *Table 2*. The basic template can be observed in Early New Persian: there is a single negation marker *na-* which has an allomorph *ne-* before the imperfective marker *mī*. The imperfective marker combines with the present-tense stem to form the basic indicative. It contrasts with the subjunctive, marked by the prefix *be-*, originally a marker of perfective aspect, which still serves this function in other Iranic languages, such as Pashto. The subjunctive prefix does not occur if there is any preverbal matter, i.e., a preverb, a light-verb complement, or the negation marker *na-*.

Table 2. Basic Western Iranic Verbal Paradigm with Early New Persian examples 'go'

Function	**Composition**	**ENP Example**
Non-past Indicative Affirmative	IPFV-STEM.PRS-APM	*mī-rav-ad*
Non-past Indicative Negative	NEG-IPFV-STEM.PRS-APM	*ne-mī-rav-ad*
Non-past Subjunctive Affirmative	PFV-STEM.PRS-APM	*be-rav-ad*
Non-past Subjunctive Negative	NEG-STEM.PRS-APM	*na-rav-ad*
Past Perfective Affirmative	STEM.PST-APM	*raft*
Past Perfective Negative	NEG-STEM.PST-APM	*na-raft*
Past Imperfective Affirmative	STEM.PST-IPFV-APM	*raft=i*
Past Imperfective Negative	NEG-STEM.PST-IPFV-APM	*na-raft=i*
Past Conditional Affirmative	PRF-STEM.PST-IPFV-APM	*(be-)raft=i*
Past Conditional Negative	NEG-STEM.PST-IPFV-APM	*na-raft=i*
Present Perfect Affirmative	PCPL-COP.PRS	*raft-e=ast*
Present Perfect Negative	NEG-PCPL-COP.PRS	*na-raft-e=ast*
Past Perfect Affirmative	PCPL-COP.PST	*raft-e=bud*
Past Perfect Negative	NEG-PCPL-COP.PST	*na-raft-e=bud*

The past-tense forms are built from the old past participle, now the past-tense stem. The bare stem is perfective, and it can become imperfective by the addition of the enclitic *=i* (see Lambton 1960). This form is used for recurring actions in the past, and in the apodosis of irreal conditionals. This form is also used in the protasis of irreal conditionals increasingly with the addition of the subjunctive/perfective prefix *be-*. The perfect tenses are formed by the new past participle ending in *-e* (< *-ag) and the enclitic copula.

Among the Western Iranic languages, the group that differs the most from this pattern is Gorani. In *Table 3*, the forms of Paweyane are presented. The forms of the present tense have the same structure observed in *Table 2*. Here, I refer to the non-past stem as imperfective, because all imperfective forms utilize this stem regardless of tense. Likewise, the past stem can be understood as both perfective and past. In this sense, the perfective past and the two perfect tenses are also constructed in the same way as the forms in *Table 2*. The difference lies in the past imperfective, which employs the imperfective stem with endings recognized as Middle Iranic optatives (see Skjærvø 2009; Aliyari Baboghani 2025). Just as in Middle Persian and Parthian, the optative of the copula could also combine with the perfective past stem to form the past conditional. Note that these forms are still fully inflected, i.e., not a frozen form like the *=i* of Early New Persian.

Table 3. Gorani Pawe Verbal Pardigm 'live'

Function	**Composition**	**Paweyane**
Non-past Indicative Affirmative	IPFV-IPFV(STEM)-APM	*me-jîɯ-o*
Non-past Indicative Negative	NEG-IPFV-IPFV(STEM)-APM	*ni-me-jîɯ-o*
Non-past Subjunctive Affirmative	PFV-IPFV(STEM)-APM	*bi-jîɯ-o*
Non-past Subjunctive Negative	NEG-IPFV(STEM)-APM	*ne-jîɯ-o*
Past Perfective Affirmative	PFV(STEM)-APM	*jîɯa*
Past Perfective Negative	NEG-PFV(STEM)-APM	*ne-jîɯa*
Past Imperfective Affirmative	IPFV(STEM)-OPT-APM	*jîɯ-ê*
Past Imperfective Negative	NEG-IPFV(STEM)-OPT-APM	*ne-jîɯ-ê*
Past Conditional Affirmative	IPFV(STEM)-COP.OPT-APM	*jîɯa-ê*
Past Conditional Negative	NEG-IPFV(STEM)-COP.OPT-APM	*ne-jîɯa-ê*
Present Perfect Affirmative	PCPL-COP.IPFV	*jîɯa(e)=n*
Present Perfect Negative	NEG-PCPL-COP.IPFV	*ne-jîɯa(e)=n*
Past Perfect Affirmative	PCPL-COP.PFV	*jîɯa(e)=bî*
Past Perfect Negative	NEG-PCPL-COP.PFV	*ne-jîɯa(e)=bî*

The Gorani system has undergone several developments; it can be understood as preserving the extant Middle Iranic situation in terms of imperfective and irrealis marking. The Middle Iranic optative endings were used for past-habitual actions. A periphrastic form consisting of the perfective stem (past-participle) and the optative of the copula was used for the protasis of irreal conditionals. Note that these were among the functions of the optative, dating back to the Old Iranic period.

Table 4. Optative/Imperfect: G Pawe, MP, Parthian, Zazaki

	Paweyane		**Middle Persian**		**Parthian**		**Zazaki**	
	SG	PL	SG	PL	SG	PL	SG	PL
1	*-ênê*	*-ênmê*	*-ên*	?	?	?	*-êni*	*-êni*
2	*-êşî*	*-êndê*	*-êš*	?	*-êndê*	?	*-êni*	*-êni*
3	*-ê*	*-ênê*	*-ê*	*-endê*	*-êndê*	*-endê*	*-êni*	*-êni*

Note that the forms of the imperfective in Gorani closely mirror what was observed for the imperfective/optative in Middle Persian. There are gaps in the attested paradigm for the first- and second-person plural forms, but all other forms match those of Gorani Pawe, with some phonological and analogical developments. The imperfective in Zazaki is formed with a single invariable exponent that does not inflect for person, number or gender. Despite gaps in the attested paradigm, this seems to be the system in the Middle Iranic Parthian language.

3. Mutual Developments: Imperfective prefixes

For some of the languages represented here, there is a complete historical analysis of the formatives involved in imperatives and conditionals. From that perspective, there is a clear roadmap for understanding the convergence in Balochi, which lacks the rich dialectal description that Kurdish has. Data from over 100 varieties (sourced from Matras et al. 2016; Fattah 2000) have preserved almost every stage in the development of these forms. I explore these convergences here.

Beginning with the present-tense forms. All of these varieties have begun with some variant of the common Western Iranic model described in *Section 2*: (NEG-)IPFV-STEM.PRS.APM. As the present tense is the exclusive domain of imperfectivity, the imperfective marker, after losing its original progressive meaning, is essentially bleached of all meaning. The only other present-tense forms are subjunctive, marked with the old perfective prefix *bi-*. As such, the only meaningful contrast was not aspectual but rather modal: indicative vs subjunctive. The various languages had imperfective markers from the locative, e.g., Kurdish *de-* and adverbials, e.g., Persian *mī-*, Gorani *me-*, etc.

In some of these languages, subsequent phonological changes led to the loss of the prefix in Certain contexts. These contexts are most clear in Gorani, where the changes only took place in the Hewramî core, and the stages have been preserved in the periphery (see Karim and Mohammadirad forthcoming). Some of these changes were shared by nearby Southern Kurdish and North Eastern Neo-Aramaic varieties (NENA). Additionally, the imperfective prefixes in these varieties share a common phonological shape CV-: NENA *ka-*, Kurdish *de-*, and Gorani *me-*.

3.1. Pretonic reduction

In Hewramî (Gorani) and Southern Kurdish, there was a pretonic reduction of the vowel *e, reducing to zero in open syllables or *i*, the epenthetic vowel, in closed syllables (Karim and Mohammadirad forthcoming; Karim 2024). Note the proto forms in (1). For each variety, I show an h-initial and another non-h C-initial root: Kurdish *ke-* 'make/do' and *hê-* 'come,' NENA *doq-* 'hold' and *hol* 'make/do,' and Gorani *ker-* 'make/do' and *(h)ar-* 'bring.'[2]

(1)	Kurdish		NENA		Gorani	
	*de-ke-m	*de-hê-m	*ka-doq-na	*ka-hol-na	*me-ker-û	me-(h)ar-û

Southern Kurdish, NENA Sanandaj and Hewramî underwent pretonic reduction (2). In a word-initial syllable that is unstressed, the vowel *e

[2] Note that the *h in the Gorani form is etymological ultimately going back to a PIE second laryngeal H_2.

reduces to *Ø* unless a triple consonant cluster is created, then the epenthetic vowel *i* appears.

(2)	Southern Kurdish		NENA		Gorani	
	*d-ké-m	*d-hế-m	*k-dóq-na	*k-hól-na	*m-ker-ű́	m-(h)ar-ű́

3.2. Cluster reduction

Then, the initial consonant clusters were reduced. *Ch became C (devoiced), and other C_1C_2 reduced to C_2. These changes can be understood in terms of regular sound changes and relative chronology

1. voicing assimilation: a preceding consonant takes the voicing value of the following consonant.

2. non-initial *h loss: word-medial *h is lost.

3. cluster reduction: word-initial consonant clusters are reduced to single consonants.

The result was no imperfective marker on the vast majority of verbs, but remnants of the old marker on h-initial verbs; see (3).

(3)		SK Kermanşa		NENA Sanandaj		Gorani Hewraman Text	
		*dké-m	*dhế-m	*gdóq-na	*khól-na	*mker-ű́	*mar-ű́
	1	*tké-m	*thế-m	*gdóq-na	*khól-na	*mker-ű́	*mar-ű́
	2	*tké-m	*tế-m	*gdóq-na	*kól-na	*mker-ű́	*mar-ű́
	3	*ké-m*	*tế-m*	*dóq-na*	*kól-na*	*ker-ű́*	*mar-ű́*

3.3. Stress attracting prefixes bleed pretonic reduction

Note that in the Iranic varieties, negative prefixes are stress-attracting, making the imperfective prefixes *de-* and *me-* non-pretonic and thus bleeding the conditioning context. In (4), I show the relevant changes. In the negative forms, the imperfective markers remain intact. Subsequently, the stress from the negation prefix shifts to the full stem vowel, and there is a post-vocalic lenition of *d in Kurdish. The *nm cluster in Hewramî reduces to *m*, but the dy (consonant-glide) cluster in Southern Kurdish remains. This creates the famous cheshirization of the negative marker in Hewramî: the segmental features of the morpheme are lost, while the suprasegmental property of stress remains hosted by the imperfective marker, lost in most other contexts (Karim and Mohammadirad forthcoming).

(4)	**SK Kermanşa**		**NENA Sanandaj**		**Gorani Hewraman text**	
	*de-ké-m	*ní-de-ke-m	*ka-doq-na	*la-ka-doq-na	*me-ker-ú́	*ní-me-ker-û
	*d-ké-m	*ní-de-ke-m	*k-doq-na	*la-k-doq-na	*m-ker-ú́	*ní-me-ker-û
	*d-ké-m	*n-yé-ke-m*	*k-doq-na	*la-k-doq-na	*m-ker-ú́	*n-mé-ker-û
	ké-m	*n-yé-ke-m*	*doq-na*	*la-doq-na*	*ker-ú́*	*mé-ker-û*

3.4. Leveling of allomorphy

In Kurdish varieties where the original negation marker did not have the allomorph *ni-* before the imperfective marker *de-*, the affirmative *di- [IPFV-] alternated with negative *ne-ye- [NEG-IPFV-], in some Southern Kurdish varieties. Some of these varieties generalized the proto-tonic version of the imperfective prefix (that in the negative context) just like in Old Irish (Russell 2017, 1286).[3]

3.5. Leveling of allomorphy

There are surface developments that are indicative of the changes described here: a present indicative marker is used only with h-initial verbs. In the case of both Kurdish and Gorani, the existence of varieties that preserve the original marker in all contexts shows that these are remnants of the original marker. All other verbs either have no marker or a reduced form due to sound change and morphological analogy. In Balochi, there is a regular imperfective/indicative marker, the prefix *a-* or the preposed enclitic *=a*. However, h-initial verbs also have a different marker only on those verbs; see *Table 5*.

Table 5. Balochi h-initial verbs

	PRS.IND.3SG	PRS.SBJV.3SG	INF
come	*(a-)ḵ-ey-t*	*b-ey-t*	*hātin*
bring	*(a-)ḵ-ār-īt*	*by-ār-īt*	*hāwurtin*
wait	*(a-)ḵ-ōšt-īt*	*b-ōšt-īt*	*hōštātin*
etc.			
do/make	*a-kan-t*	*b-kan-t*	*kurtin*

[3] In Old Irish, there were two different verbal stems: in the affirmative, the stress was on the stem, while in the negative, the stress was on the negation marker. The result was two different voicing patterns, e.g., *do·beir* 'gives' and *do·gaib* 'seizes,' vs. *ní tabair* 'doesn't give' and *ní digaib* 'doesn't seize.' For some verbs, the reduction creates truly suppletive forms, e.g., *do·sluindi* 'denies' vs *ní diltai*. In modern Irish, it is the so-called proto-tonic stems, the ones used in the context of negative, that were leveled to affirmative contexts, e.g., *díltaid*: *diúltaíonn sé* 'he refuses' *ní dhiúltaíonn sé* 'he doesn't refuse' (Russell 2017, 1286).

Unlike the vast majority of Southern Kurdish, the now productive marker *a-* can co-occur with the prefix *k-*. That being said, there are Southern Kurdish varieties where the *t-* marker with h-initial roots has been reanalyzed by younger generations as part of the imperfective stem, to which the productive marker can be added, e.g., Qorwe *e-tê-m* [IPFV-come.PRS.IPFV-1SG] by speakers under 30 and *tê-m* [come.PRS.IPFV-1SG] by older speakers (Mohammadirad and Karim 2025). This is clearly a recent innovation, representing a likely analogical progression: an opaque form is augmented or replaced by a productive form. Likewise, there are Balochi varieties where it seems that the regular marker *a-* does not cooccur with *k-*, e.g., some Coastal Balochi varieties.

Unfortunately, a consistent corpus of Balochi would be required to confirm this, which is not available. Many early Balochi scholars like Barker and Mengal (1969, 149) dismissed the prefix as a "meaningless" element and did not consistently mark it. Additionally, in some varieties, the prefix is lost if the preceding word ends with a vowel. Even a well-annotated and transcribed Balochi study could give the incorrect impression. There is one possible example of a variety where the markers *k-* and *=a* are incompatible from the Coastal Balochi variety of Korsar. The first text in Nourzaei (2017, appendix A) *Bādšāhay J̌anek* 'The King's Daughter,' recounted by a 45-year-old female speaker of Coastal Balochi, Zinat Jadgal from Korsar, never uses the two imperfective markers together in 181 lines (see 5). The second text from Coastal Balochi in Nourzaei (2017, appendix A) *Rahimbakshe Kessaw* 'The Story of Rahimbaksh,' recounted by a 58-year-old male speaker of Coastal Balochi, Rahim Shakalzahi from Nobandiyan, uses the markers together consistently.

(5) a. *mollā* *wat* *k-ay-Ø*
Mullah REFL IMPF-come.NPST-3SG
'the Mullah himself comes' (Nourzaei 2017, KD.f: 28b)

b. *edā* *k-ay-Ø* *hawrok-ayā*
here IPFV-come.NPST-3SG hawrok-LOC
'she comes there (lit. here) to Hawrok's [place]' (UT, Nourzaei 2017, 44)

c. *ē* *ǰanēn* *dar-k-ay-Ø* *raw-t*
DEM.PROX woman PV-IPFV-come.NPST-3SG go.NPST-3SG
otī *sar-ā* *zīr-ī*

REFL.GEN head-OBL take.NPST-3SG

'this woman went all alone (lit. went took her head)' (KD.f.CoB: 88a–88b, Nourzaei 2017, 130)

d. *dā̆ke ē ǰanēn k-ay-Ø*

you.know DEM.PROX woman IPFV-come.NPST-3SG

'You know, this woman keeps coming' (KD.f: 90–91c, Nourzaei 2017, 199)

Other varieties may prohibit the use of the *=a* and *k-* markers. Example (6) from a 60-year-old female from Bahukalat, clearly should have the marker *=a*, However, it is the only example from this variety:

(6) *ǰalā'hī baz'zag 'k-ay-t=ẽ*

Jalahi poor IPFV-come.NPST=cop.NPST.3=SG

'Poor Jalahi returns' (HA.f: 4–5), Nourzaei 2017, 206)

The texts from Nourzaei (2017) suggest that there is an incompatibility of *=a* and *k-* in some varieties. This introduces the possibility that, like Kurdish, where the dental prefix *d-/t-* and the productive *e-* prefix have the same etymon *de, the Balochi *a-* and *k-* prefixes are related, perhaps *ka-.

3.5.1. Parallel pathways from *Car to suppletive stems

According to Karim (2024), the Kurdish prefixes ultimate have their roots in the locative marker *de-* < Old Iranic *antara Middle Persian *dar*. This surfaces in the adpositional system of Central and Southern Kurdish varieties as the preposition *de*, identical to the imperfective prefix in northern Central Kurdish varieties. In some Southern Kurdish, the form *e* matching the prototonic allomorph also occurs. It also surfaces as the postposition *da* featuring a different vowel quality and the post-vocalic allomorph featuring the lenition of the *d in *da*. These are often combined as the circumposition *de* NP *da*.

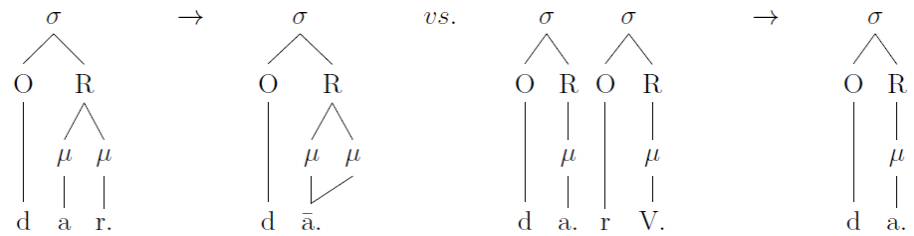
3.5.1.1. Parallel pathways from *Car to suppletive stems

There are some foundational assumptions required to arrive at the extant forms of the adpositions and the imperfective affixes as proposed by Karim (2024). It is generally recognized that the circumposition *de...da* consists of two elements that are the reflexes of the same etymon *antara. The development of this form must have gone through several well-documented

changes: (1) post-nasal voicing *andara; (2) the "rhythmic law" where final codas were lost *andar, and as in most Iranic languages (3) clipping to *dar. In the Hawar Kurdish orthography, this form would be *der*. Up to this point, all these changes are attested in other Iranic languages, including Persian.

In order for *der to develop into the extant postpositive element *da*, the final *r must have been lost with compensatory lengthening of the preceding vowel. In contrast, the prepositive element *de* the *r must have been lost without compensatory lengthening. We can understand the concept of compensatory lengthening in terms of Moraic theory (Hayes 1989). Essentially, syllabic nuclei and coda consonants carry moras while onset consonants do not.

Figure 1. Compensatory lengthening as moraic reasignment (σ: syllable; μ: morah; O: onset; R: rhyme)



The examples in Figure 1 show two different types of changes. The first shows the sequence *dar, which occurs at a syllable boundary. If a regular sound change causes the final coda consonant *r to be lost, the mora must be reassigned to the previous vowel. In contrast, if the final consonant is followed by a vowel, it resyllabifies as the onset of the following syllable. If that *r is lost, no moraic reassignment is possible. One possible reason for such a change is boundary reanalysis, where a formative is reinterpreted as part of a different morpheme. Examples from English include *a napron > *an apron*, *an ewt > *a newt*, etc.

Regardless of one's ultimate conclusion about the source of the Kurdish imperfective prefixes (for which no viable etymon has been proposed other than that in Karim 2024), these developments must be assumed to explain the prepositive and postpositive elements of the locative circumposition *de...da*. Additional changes are necessary to explain the form of the indicative/imperfective prefix *e-* (also the preposition *e* found in some Southern Kurdish varieties).

3.5.1.2. Deriving two formatives from one etymon

Recall that there are two reflexes of *dar (< *antara) in Kurdish, the preposition *de=* and the postposition *=da*. The latter lost its final *r with compensatory lengthening and the former without; see *Figure 1* in *Section 3.5.1.1*. In order for the form in Balochi to occur as *a-*, we must assume that the final *r was lost through boundary reanalysis, i.e., not conditioning compensatory lengthening. If this were true, the only possible trace of the original *r would be non-etymological *r*s at the beginnings of words. Note that Karim (2024) makes this assumption for Kurdish without giving examples, and the absence of proof is not proof of absence.

In Balochi, there is a clear possibility that points to this boundary reanalysis in the Minabi and Koroshi varieties (Nourzaei and Jahani 2012). In both Koroshi and Minabi, the imperfective marker is typically *a-* as in (7a). However, when a verb begins with *r*, instead of the typical marker *a-*, the imperfective marker *ar-* is employed; see (7b) and (7c).

(7) **a.** *a-žan-ant*

IPFV-arrive.PRS-3PL

'they arrive' (Koroshi, Nourzaei and Jahani 2012, 175, edited)

b. *ar-rapt-ad=en*

IPFV-go.PST=COP.PST-1PL

'we went' (Minabi, Nourzaei and Jahani 2012, 178, edited)

c. *ar-r-ant*

IPFV-go.PRS-3PL

'They go' (Koroshi Nourzaei and Jahani 2012, 174, edited)

This gemination points to two possibilities: (1) assimilation, (2) reanalysis. In the table of common Balochi sound changes described in Korn (2003, 71–75), there is no documented assimilation resulting in geminate *r*s. According to Korn (2003, 55), the majority of geminate clusters in Balochi come from foreign borrowed words. However, they can occur in native vocabulary through assimilation or "isometric substitution" where a long vowel is shortened, and its mora is reassigned to the following consonant, e.g., *jūrāb > *jurrāb* (Korn 2003, 209). Based on the presumption of a *dar-like formative which had the short vowel *a, we must reject "isometric substitution" as a possibility.

The existence of the *r* formative here should be taken as part of the likely etymon, as there are no known sources of the *rr* cluster that would produce

it in this environment. This formative could then, in principle, be reanalyzed as part of the *r-* initial roots. Nourzaei and Jahani (2012) also shows another allomorph in Koroshi Balochi. The form of the prefix with a long vowel *ā-* occurs sporadically in Nourzaei and Jahani's (2012) description before verbs beginning in *k*. This could, in principle, be a compensatory lengthening of the vowel after the loss of a coda consonant, which does occur in Balochi. However, this is uncertain especially as Nourzaei and Jahani (2012, 175–76) shows identical examples *a-k-āy-ant* and *ā-k-āy-ant* [IPFV-IPFV-come.PRS-3PL]. It is unclear if there is a systematic rule that explains this allomorph. In its occurrence with *h*-initial roots, there is another possibility. There are copious examples of k-fricative clusters undergoing metathesis *ks > *sk*, *kš > *šk* (see Korn 2003, 172–73 and corresponding sections). If this metathesis occurred with *h as well, the resulting *the sequence would become *āk* through regular sound changes (see Korn 2003, 252). This formative is not used consistently according to Nourzaei and Jahani (2012), and it is used with verbs with etymological *k*s as well as *h*-initial roots. As such, I refrain from making any claims regarding its provenance, except that there are these possibilities.

Due to the geminate *r*s in (7), I continue to entertain the possibility that the ultimate etymon ended in the consonant *r. In other words, it is possible that a proposed *C**ar*** could have become *C**a*** through the reanalysis of a morpheme boundary. Note that this must have been the case in Kurdish, where the etymology of the *de-* prefix is known, but it is also supported by these facts in Balochi.

3.5.1.3. Unimorphation

Recall that in Kurdish, the form of the imperfective prefix, *de-* in some varieties and *d-* in others, unimorphates with *h*-initial stems. This occurs in two ways, either with the *h deleted intervocalically (Central Kurdish) or with the *d devoicing in contact with the following *h (Southern Kurdish).

In the vast majority of Balochi varieties, *h*-initial roots get an imperfective prefix *k-*, which may be interpreted as a part of a suppletive imperfective stem. The Balochi verbs that commonly take the *k*-type imperfective marker are *(k)āyag* 'to come,' *(k)ārag* 'to bring,' *(k)illag* 'to leave, abandon, let go,'

(k)oštag[4] 'to stand,' *(k)andag*[5] 'to laugh,' and *(k)uškinag*[6] 'to listen, hear' (Barker and Mengal 1969, 133–34). The first three of these verbs in Balochi correspond nicely to the set of verbs in Kurdish that have developed suppletive imperfective forms, e.g. *hatin/tê-* 'to come,' *hil-* 'leave (it),' and *hawirdin/têr-* 'to bring.' With the exception of the forms that are not cognate, the Balochi *k*-stems are parallel to the Kurdish suppletive *t-/d*-stems.

From the perspective of the suppletive imperfective stems in Kurdish, it is not possible that the Balochi *k-* has descended from *dar. There is no evidence in Balochi of a pretonic shortening (*dehê- [come.IPFV.PRS-] > *dⁱhê-), eventually leading to the devoicing of the *d element (*dhê- > *tê-*) like that of Southern Kurdish. As such, we must assume a *k formative, not a devoiced *g or similar form. A prefix *ka could, in principle, have fused to the stem with the loss of the *h* intervocalically. Note that this is what happened in Central Kurdish varieties, where there was no pretonic shortening, creating the conditioning environment for voicing assimilation. For example, CK Kerkûk has *dê*. The loss of intervocalic *h that led to *deê (h → Ø / C,V__) and the vowel hiatus resolution strategy (e → Ø / __V, V__) are well attested in Central and Southern Kurdish. A similar development in Balochi is possible, e.g., *kaheyt > *kaeyt > *keyt*.

At this point, we must reject the *dar etymon (which was never really a possibility). However, we can reevaluate this as *kar. The same structures that allow Kurdish *dar to become the forms *e-* and *d-* allow for *kar to become Balochi *a-* and *k-*.

3.5.2. The etymon *kar

In this section, I propose a new possible unified etymon for the Balochi imperfective markers *=a*, *k-*, *a-*, and *ar-*. It should be clear that this proposal

[4] The Kurdish verb *standin/sta-* lacks a suppletive present-tense form, and its past stem does not begin with *h*. According to Korn (2005) and Cheung (2006), *aa-staH is the source of Balochi *ōšt-*. The preverb *aa ultimately derives from PIE *H_2eu (Beekes 2011, 247), consistent with Kümmel (2014), who reconstructs *h* as the Balochi reflex of PIE *H_2 in initial position (e.g. Balochi *hīz* 'leather' < *H_2iĝ-). By contrast, the Kurdish equivalent with the *Haa- prefix, *westan* 'to stop', loses the initial syllable and does not preserve the laryngeal.

[5] Balochi *(k)andag* 'to laugh' corresponds to Kurdish *kenîn* and Persian *xandan* (Cheung 2006, 443). From this comparative evidence, it is unlikely that the Balochi form would feature an etymological *h*. If this line of reasoning is sound, it is possible that a verb with an inherited initial *k-* could be reanalyzed in this class of verbs. Korn (2005) has both *kand* and and *hand* as variants which points to this type of reanalysis.

[6] Balochi *(k)uškinag* 'to listen, hear,' (Korn 2005) suggests that the verb is built from the word for 'ear' Av. *us* (Korn 2005, 350). This word ultimately goes back to *H_2us-; the laryngeal consonant corresponds to an *h* in both Balochi and Kurdish (Kümmel 2014).

matches parallel developments found in Kurdish and respects the internal diachronic phonology of Balochi. However, it is based on limited data. Unfortunately, as stated in *Section 3.5*, many early Balochi scholars like Barker and Mengal (1969, 149) did not consistently mark the imperfective marker. Despite the paucity of reliable data, recent documentary work by Maryam Nourzaei has enabled tentative reconstructions.

The most common form of the imperfective marker is the prefix *a-* (or the proposed enclitic *=a*. Sometimes this marker appears as the long allomorph *ā-*. Based on these facts, we can reconstruct *ă as the original formative without specifying the length. Based on the findings of Korn (2003), there are phonological contexts where a long *ā could be shortened and where a short *a could be lengthened.

In addition to the *a, there is a secondary imperfective marker used with h-initial verbs. Recall that h-initial roots in Kurdish have integrated the dental of modal origin into the imperfective stem (Fattah 2000, 399). However, where the Kurdish forms integrate a dental *t-* or *d-*, Balochi varieties incorporate a *k-*. Due to the absence in Balochi of pretonic shortening that resulted in the Kurdish *d* forms becoming *t*, it is safe to assume that there was formerly a *k formative that was part of the imperfective marker: *ka or *ak. The simplest explanation would be an original *ak formative as both *a-* and *a-* coexist in this order in many varieties. However, preservations in Kurdish have shown us how the suppletive imperfective prefix *t-* unimorphates with the present tense stem: Qorwe (> 35) *t-ê-d* [IPFV-come.PRS-3SG] *tê-d* [come.PRS.IPFV-3SG]. In younger generations (< 35 years), the regular imperfective marker of the same origin is added back to this now opaque form: *tê-d* [come.PRS.IPFV-3SG] *e-tê-d* [IPFV-come.PRS.IPFV-3SG]. The "smoking gun" that would allow us to decide between *ka and *ak would be a Balochi variety where *k-* and *a-* were incompatible. There is no reason why these formatives would be incompatible unless they were from the same etymon with different allomorphs in different contexts, as in Kurdish. The regularization of the more common allomorphs to what is now a suppletive imperfective stem represents a leveling restoring regularity to the system. However, the lack of a variety with this incompatibility does not point to *ak in the same way that the existence of such a variety would point to *ka. See *Section 3.5* for a possible example of a variety where these formatives are incompatible.

In order to produce the most commonly used marker *=a/a-*, we must assume the loss of the *k in *ka-*. There is no phonological rule that would account for the following descriptions from Korn (2003). One might assume, as (Kolyâi, Qorwa (C.D.G.), and Bayray Fattah; 2000, 372) proposed for certain Southern Kurdish varieties, that there was an additional boundary reanalysis that fused the initial consonant of the prefix to the preceding word;

see the Southern Kurdish example (8), showing *=y* the post-vocalic allophone of the prefix *d-*. However, in Balochi, there are a massive number of non-etymological final *k*s. It is not possible to determine if they have come about through boundary reanalysis or by suffixation of the diminutive/evaluative *-k*. However, it is possible.

(8) *xormâ=y* *xwa-m* (Bayray: Xayrsuni & Musi)
date=IPFV eat.PRS-1SG
'I eat dates' (Fattah 2000, 372)

The existence of termination with *r*-initial verbs in Koroshi may give us a clearer idea of the shape of the original formative. I propose that the original *kar formative underwent a boundary reanalysis where the geminate cluster was created, which was interpreted as part of the stem, reduced to a single *r* when the prefix was removed. Similar evidence was used to reconstruct the Semitic definite article from the presentative [particle], or its reflexes *han/hal* (Pat-El 2009, 47). Both the Hebrew and Arabic definite articles *hā-* and *al-* assimilate the final n/l to a following consonant. As the Balochi form is restricted to doubling only /r/s, I tentatively propose /r/ as the original formative.

The *kar proclitic is attached to the *r*-initial stem. Subsequently, reanalysis of the morpheme boundary resulted in the loss of/r/from the proclitic. This is well attested in the world's languages. E.g., English *an apron* < *a *napron and *a newt* < *an *ewt.[7]

Let us assume an original *kar formative as the source for the Balochi imperfective markers. In that case, there is a likely template for the development from the verb 'to do' to a marker of progressive aspect (and ultimately imperfective aspect, following Deo 2015). In fact, *kar 'do' as a source of a progressive/imperfective marker is attested in the Caspian region among languages with which Balochi is known to have been in contact. For instance, among the Caspian languages, there are two common patterns for marking progressive and imperfective aspects (as well as proximative): the DAR and KAR constructions (Vafaeian 2018). The DAR construction is from the locative marker (just as Karim 2024, proposed for Kurdish), and KAR construction is from the verb 'to do.' According to (Stilo 2001), different Gilaki varieties form their progressive aspect with various strategies: a locative suffix (e.g. 9a and 9d), an invariable prefix *kəra* (9b), and a compound formation consisting of both (e.g. 9c and 9e). According to Korn (2019), Balochi features some grammatical convergence with Gilaki.

[7] In English, this boundary shift and others like it are likely the reason for the allomorphy between *a* and *an*, as the loss of /n/ is not a regular sound change.

(9) **a.** *gift-án-dər-əm*
take-INF-LOC-1SG
Western Gilaki: 'I am taking' (Stilo 2001)

b. *kəra gir-ám*
KAR take.PRS-1SG
'Western Gilaki: 'I am taking' (Stilo 2001)

c. *kəra gift-án-dər-əm*
KAR take-INF-LOC-1SG
'Western Gilaki: 'I am taking' (Stilo 2001)

d. *git-é-dər-əm*
take-INF-LOC-1SG
Eastern Gilaki: 'I am taking' (Stilo 2001)

e. *git-e-ká-dər-əm*
take-INF-KAR-LOC-1SG
Eastern Gilaki: 'I am taking' (Stilo 2001)

The Balochi imperfective marker could be a retention of part of an original proclitic *kar=* that reanalyzed its *-r* to be part of or conditioned by the following word, leaving a marker *ka=* in its place. A hypothetical Balochi imperfective marker *ka= was assimilated to *h* initial verbs just as Kurdish *de-* was assimilated to a subset of the same verbs. In Kurdish, there was a sandhi variant of *de* which appeared as *(y)e-* after the negative marker or even vowels more broadly. This sandhi variant was extended to non-applicable contexts. This is a bit speculative for Balochi. However, the negated forms of the present indicative never feature the *k* formative, e.g., Koroshi Balochi *a=nay-ay* [IPFV=NEG-come.PRS.3SG] *nay-aškont-a* [NEG-hear.PST-PCPL] (Nourzaei et al. 2015, 137, 227). This, coupled with the fact that the negative marker does not precede the imperfective marker (e.g. *a=na-twān-t* 'it cannot' [IPFV=NEG-can.PRS-3SG]) (Nourzaei and Jahani 2012, 175), lends some weight to the possibility that the two imperfecives *a-* and *k-* have the same etymon, the unimorphation of the imperfective prefix and the stem being blocked by an intervening negative marker. This word order is consistent with what is observed in Gilaki, e.g. *kára bišt-án-deí-yə* 'he is frying [KAR fry-INF-LOC-NEG-COP.3SG]' (Stilo 2001).

The development from *kar to Balochi *a-* and *k-* is parallel to what Karim (2024) proposed for Kurdish: (1) The original form *kar loses the *r through boundary reanalysis. Koroshi and Minabi Balochi give us the possible

conditioning context for this, r-initial verbs: *kar + *rant *kar.rant give us *ka.řant, separable into *ka and *(r)rant. Note that in many Caspian varieties this is the final stage in what Stilo (2018) calls short-form progressive, e.g., *zü=mun* ***ko*** *š-e* [early=1PL PROG go-INF]. (2) The *ka formative merges with h-initial roots: *ka + *(h)ayt *kaayt becomes *kayt* because of h syncope and vowel hiatus resolution. This *ka-zant 's/he knows' *kayt* 's/he comes' stage is parallel to CK Mukrî *de-zanê* '*s/he knows' dê* 's/he comes'. (3) The varieties with separable *ka- prefixes would then have to lose their *k through another boundary reanalysis, i.e., with a preceding k-final word. Balochi nouns ending in *k* are common and plentiful: *bačak + *ka + *rawt 'the boy goes' could easily group *bačak-ka *rawt, leading to a reanalysis *bačak-ka [boy-IPFV] > *bačakk-a* [boy-IPFV]. This possibility is bolstered by the fact that this set of nouns features a geminate final *kk*, e.g., *bačakk* 'boy,' *jinikk* 'girl,' *kuçekk* 'dog,' *tupekk* 'gun,' etc. Korn (2005: 169) states that the suffixes with the geminate *kk* still need to be explained and that they likely come from something like *a-ka-ka [THEME-DIM-DIM], presumably with the second *ka being a second diminutive/evaluative ending. Phonologically this works for my proposal as well, i.e., *a-ka-ka [THEME-DIM-PROG].[8]

If the adaptation of the *kar construction is a result of contact with the Caspian languages (as suggested for the case system by Korn 2019), it must have happened very early in the development of Balochi, i.e., early enough to have affected all varieties and subgroupings. The linguistic genealogy of Balochi is clear. It is a so-called "northwestern" Iranian language. Its nearest modern relatives are Kurdish, Tati, Ṭāleši (Elfenbein 1989) According to Elfenbein (1989), "the Baluch tradition of a migration to their present habitat from the west in the 7th-8th centuries a.d. has an echo of history in it, strengthened by the linguistic connections of Baluchi, and one is led to the assignment of the original home of the Baluch to somewhere just east or southeast of the central Caspian region". I caution against the use of historical data, which is in its nature more malleable than linguistic affiliation. However, historical works such as Dashti (2012) locate the Origins of the Baloch similarly in the Caspian, suggesting a connection with Bālāsaāgan in present day Azerbaijan, suggesting a migration through the Caspian region from West to East passing through all the relevant genealogically related contact languages.

The *kar construction is well attested as a preverbal formative in Tati: Kelasi, Koluri, Gandomabi, Shali, Hezarrudi; Gilaki: Rashti; and Taleshi: Masulei

[8] The Balochi boundary reanalyses that I propose are similar to the way that the English indefinite article *an* lost its nasal to vowel-initial words, becoming *a* or the possessive *mine* [main] lost its nasal to the Nicknames *Ed* and *Elly*, rendering *my* [mai], *Ned*, and *Nelly*.

and Masal-Sandermani, etc. (Vafaeian 2018). This is exactly the proper syntactic prerequisite for the developments I have proposed here for Balochi. There are even varieties in the Caspian that have gone through some of the reductions that must have taken place in Balochi, e.g., Charozh Talyshi: *æmæ zü=mun* ***ko*** *š-e* [we early=1P1 PROG go-INF]. However, the absolute chronology is unclear, and independent innovation is possible. The development of the verb 'to do' into a marker of progressive aspect is attested independently in other languages, e.g., Tucano (Brazil; see Bybee et al. 1994; West 1980, etc.).

If this is indeed contact, Caspian to Balochi, the *kar type progressive was active in the region before the Balochi left the Caspian which must have been in the late Sassanian period as, following Elfenbein (1989), "many areas of Kermān and Sīstān may have been at least partially occupied by Baluch migrants by the 8th century, for at the time of the Arab conquest of Kermān in 644, it is stated by later geographers that they came into contact with large numbers of Qwfṣ and Blwṣ, "Kōč and Balōč"". At this point, it is impossible to tell whether contact or independent developments are more likely. If further study identifies more lexical or morphological contact phenomena, the case for contact will be strengthened significantly.

4. Mutual developments: past-Imperfective and conditional forms

The next point of convergence is the relationship between the past-imperfective and conditional forms. In the relevant languages, these formatives are often constructed from the same material. For instance, in Goranî, the same suffix that marks imperfective aspect when attached to the present tense stem marks conditional when attached to the past stem, e.g., Paweyane: *d-ê* [give.prs-pst.ipfv.3sg] 's/he used to give' vs. *da-ê* [give.pst-pst.ipfv.3sg] 'has (smn.) given s/he/it'. Likewise, in Southern Kurdish varieties that distinguish imperfectve stems, they match the conditional, e.g., Qesiri Şîrîn: *der-hat-ya-n* [out-come.PST-IPFV-3PL] 'I used to emerge' vs. *der-bi-hat-ya-n* [out-SBJV-come.PST-IPFV-3PL] 'had I emerged.' Other varieties have lost the stem identity in favor of the imperfective prefix discussed above, e.g., Qorwe: *e-hat-in* [IPFV-come.PST-3PL] vs. *bi-hat-a-n* [SBJV-come.PST-IPFV-3PL]. As such, the developemnt of the imperfective prefix and the past conditional markers are intrinsically linked.

As we have seen in *Section 1*, the past-imperfective and past-past conditional originally had the same form. This was true of the Old and Middle Iranic optative, and it carried over into New Iranic languages. This is in its original form in Gorani, where the imperfective stem combines with the optative endings, creating the imperfective, used for irrealis and habitual past actions.

The optative of the copula combines with the past-perfective stem to create the past conditional, used in the protasis of irreal conditionals; see (10).

(10) Hewram Text

eger *řeza=şa* *ne-bî-ɛ*

if satisfaction.F=3PL:NC NEG-be.PST.COND.3SG:S

ne-đ-ênê

NEG-give.PRS-IPFV.3PL:A

'If they didn't agree, they wouldn't give her.' (Mohammadirad forthcoming, 294)

4.1. Persian developments

In the Middle Iranic Parthian language, the form of the optative became a single invariant form *-ende*. By Early New Persian, the form of the optative, already rare in Middle Persian, had lost most forms of its conjugation, becoming a frozen particle *=i*, and it only attached to the fully inflected past stem. See (11), where the form ending in the particle *=i* marks past habitual action, past conditionals, and irrealis.

(11) Early New Persian (Lambton 1960, 161)

gar *ān-hā* *ke* *mī-goft-am=i* *kard-am=i*

if DEM.DIST-PL REL IPFV-say.PST-1SG=HAB do.PST-1SG=COND

neku_sirat *o* *pārsā* *bud-am=i*

good.of.character and pious be.PST-1SG=IRR

'If I had done those things which I used to say, I would have been of good character and pious.'

At some point, this form becomes compatible with the perfective prefix *be-* (later the subjunctive prefix) to emphasize the conditional reading; see (12).

(12) Early New Persian (Lambton 1960, 162)

tā *be-dānest-am=i* *ze* *došman* *dust*

to PFV-know.PST-1SG=COND from enemy friend

zendegāni *do* *bār* *bāyest=i*

life two times must.PST.3SG=IRR

'Life would be needed twice over to know friend from foe.'

In modern New Persian, this construction has been replaced by the simple past tense with the imperfective prefix *mī-*; this is used in all functions: past imperfective, past conditional, and irrealis; see (13).

(13) New Persian (Rubinčik 2001, 245)

agar mī-dānest-am be šomā mi-goft-am

if IPFV-know.PST-1SG to 2PL IPFV-tell.PST-1SG

'If I had known, I would have told you.'

4.1.1. Zazaki forms

In Zazaki, we observe a state of affairs that closely matches that of Early New Persian. The past imperfective, irrealis, and conditional are all marked by the simple past form, with an invariable suffix *-êni*. The subjunctive prefix *bi-* is mandatorily added to this form when it is used as a conditional; see (14).

(14) Şeyxan Zazaki (Paul 2003, 181)

yûwerna bi-vat-êni mi nê-rot-êni

someone SBJV-say.PST-IPFV 1SG.OBL NEG-sell.PST-IPFV

'If someone else had said so, I would not have sold it.'

4.1.2. Kurdish developments

The Zazaki situation closely mirrors the Southern Kurdish forms. In *Table 6*, these stages can be observed changing away from a Zazaki-like system. Many Southern Kurdish varieties have an inherited system in which the past imperfective/irrealis form retains the inherited ending. The past conditional is identical in form, with the addition of the *bi-* prefix; see examples from Arkewazî Xaneqîn, Qesri Şîrîn, Kirmanşa, and Şerwan Kileway.

The verb 'to be' cannot typically occur with the *bi-* prefix (although this has changed in some varieties). See the Qasri Şîrîn example where the forms of the past imperfective and conditional are identical. In other varieties, the ambiguity of form is corrected by adding a second imperfective suffix to the conditional form, e.g., Bîlewar. Note that the Bîlewar imperfective is doubly marked for imperfectivity with the prefix *e-* causing the post-vocalic lenition of *b.

Other varieties have replaced the suffixed form of the imperfective with the simple past stem and the imperfective prefix from the present system. In these varieties, the suffix only remains as part of the conditional form, as in Wermizyar and Melikşay Rasulwan. However, some of these varieties have

retained the form from the formally ambiguous roots with a reduplication of the conditional marker, e.g., Melikşay Xamîs.

Table 6. Evolution of Kurdish forms Conditionals

		PST.IPFV	**PST.COND**
Arkewazî Xaneqîn	'emerge'	*der=çig-ya-n*	*der=bi-çig-ya-n*
		out=go.PST-IPFV-3PL	out=SBJV-go.PST-IPFV-3PL
Qesri Şîrîn	'emerge'	*der=hat-ya-n*	*der=bi-hat-ya-n*
		out=go.PST-IPFV-3PL	out=SBJV-go.PST-IPFV-3PL
Kirmanşa	'cut'	*biř-ya-n*	*buř-ya-n*
		cut.PST-IPFV-3PL	cut.SBJV.PST-IPFV-3PL
Şerwan K	'do'	*kird-ya-n*	*bi-kird-ya-n*
		do.PST-IPFV-3PL	SBJV-do.PST-IPFV-3PL
Qesri Şîrîn	'be'	*bî-ya-n*	*bî-ya-n*
		be.PST-IPFV-3PL	be.PST-IPFV-3PL
Bîlewar	'be'	*e-ü-a-n*	*bü-a-t-a-n*
		IPFV-be.PST-IPFV-3PL	be.PST-IPFV-HI-IPFV-3PL
Wermizyar	'come'	*di-hat-in*	*b-at-a-n*
		IPFV-come.PST-3PL	*SBJV*-come.PST-COND-3PL
Melikşay R	'throw'	*di-xist-in*	*bi-xist-a-n*
		IPFV-throw.PST-3PL	*SBJV*-throw.PST-COND-3PL
Melikşay X	'throw'	*di-xist-in*	*bi-xist-a-g-a-n*
		IPFV-throw.PST-3PL	*SBJV*-throw.PST-COND-HI-COND-3PL
CK KerKûk	'come'	*e-hat-in*	*bi-hat-in-a-ye*
		IPFV-come.PST-3PL	SBJV-come.PST-3PL-COND-COP.3SG
NK Pertek	'hold'	*di-girt-in*	*bi-girt-a-n-a*
		IPFV-hold.PST-3PL	SBJV-hold.PST-COND-3PL-COND-

Moving northward through Central Kurdish, the secondary addition of the particle *-a* takes place after the personal endings (like Early New Persian *=i*), and there is a frozen third-person singular form of the copula added *-a-ye* on the past conditional. In Northern Kurdish, the past conditional ending *-a* is followed by personal endings, just as in Southern Kurdish, but the secondary addition of the particle also occurs, yielding multiple exponence *-a*-APM-*a*. The imperfective is formed by adding the present-tense imperfective endings to the simple perfective past stem in all Northern and Central Kurdish varieties. There is only one possible exception to this development. In an

unknown Northern Kurdish variety documented by Bulut (2000), the imperfective still occurs with the suffix *-a*; see (15).[9]

(15) Northern Kurdish (Bulut 2000, 158)

mişk	*nan-ê*	*me*	*di-xwar-a*
mouse	bread-EZ.M.SG	1PL.OBL	IPFV-eat.PST-IPFV.3SG

'The mouse was eating our food.'

4.1.3. Balochi forms

In Balochi, there is little documented variation between imperfective forms and conditional forms. These forms are comparatively rare in the languages, and they are notoriously difficult to elicit. The forms in Matras et al's (2016) Kurdish dialect corpus variably show the forms of the past conditional and the past-perfect conditional, i.e., the past stem with the past conditional of 'to be.'

There are, however, some assumptions we can make based on the forms in Balochi. Firstly, the past conditional is formed by the past stem, e.g., *šut* [go.PST], the subjunctive prefix *b-*, the reflex of the old optative suffix *-ēn*, and affix person markers: *b-šut-ēn-un* [SBJV-go.PST-COND-1SG] (Axenov 2006, 199). However, this form can also occur without the prefix; see (16).

(16) Balochi Turkmen (Axenov 2006, 191)

aga	*zānt-ēn-un*	*šmā-rā=a*	*gušt-un*
if	know.PST-COND-1SG	2PL-OBL=IPFV	tell.PST-1SG

'If I had known, I would have told you.'

Assuming that the form came into Balochi with all of its inherited Middle Iranic functions, it stands to reason that the conditional form without the subjunctive prefix once had irrealis and habitual function. That being said, there are no known Balochi varieties that have an imperfective ending in *-ēn*. Of course, the same could have been said about Kurdish before Fattah's (2000) study of Southern Kurdish dialects, showing the full evolution from COND = SBJV-IPFV(STEM) to a system where COND = SBJV-IPFV(STEM) but the innovative IPFV = IPFV-PST(STEM).

[9] While the dialectal provenance remains unclear, this example from Bulut (2000) suggests that the suffixal imperfective may be more widespread in Northern Kurdish than currently documented, warranting future investigation.

Table 7. Stages of past imperfective and conditional by language

IPFV	COND	
IPFV(STEM)-OPT	PFV(STEM)-OPT	Gorani
PFV(STEM)-OPT	SBJV-PFV(STEM)-OPT	Zazaki, Southern Kurdish
IPFV-PFV(STEM)-OPT	SBJV-PFV(STEM)-OPT	Southern Kurdish (Northern Kurdish?)
IPFV-PFV(STEM)	SBJV-PFV(STEM)-OPT	Northern, Central, and Southern Kurdish, Balochi
IPFV-PFV(STEM)	IPFV-PFV(STEM)	Modern New Persian

These convergences are shown in *Table 7*, where I use IPFV(STEM) to refer to the non-past stem and PFV(STEM) to refer to the past-tense stem. This reflects the etymology of these forms, but it is also synchronically true in the Gorani group. In other varieties, such as Kurdish, Persian, and Balochi, where the division is temporal (past/non-past) rather than aspectual (perfective/imperfective), I continue to use this language to reflect the use of the same forms. Additionally, I use OPT to refer to the suffixes used in these forms, although the Kurdish forms, for instance, do not necessarily have the same etymon. Note that the etymological account of Skjærvø (1997) leads much to be desired for the origin of the *-ēn* marker, and this disagrees with Karim (2024) who proposed that the Kurdish suffixes are originally locatives ultimately from the same etymon as the prefix forms: *de-* and *-ya* from *dar. None of these etymological considerations is relevant to the pattern discussed in this section.

5. Summary of changes

- Iranic languages have an imperfective marker that attaches to the past-tense stem of a verb to distinguish the perfective [PST.PFV-AGR] from the imperfective [**IPFV-**PST.PFV-AGR]. This marker is present in all varieties in *Table 8* as *mî-*, *de-*, *e-*, *e=*, *=e*, *me-*, or *=a*. It is missing from SK Sencewî and the Goranî varieties of Hewreman Text and Zerde, where the stem or stem extension differentiates the imperfective from the past perfective.
- In the present tense, being the exclusive domain of the imperfective, the same imperfective marker does not contrast the perfective but rather the subjunctive: [SBJ-PRS-AGR] vs [IPFV-PRS-AGR]. Note that the subjunctive prefix is fairly uniformly *bí-*, *be-*, or *b-*. The indicative prfix matches the past imperfective with a few variations The Gorani variety of Zerde has this marker in the present tense *me-* but not in

the past. In the Goranî of Hewreman Text, phonemic stress placement alone signifies mood in the present tense The stem *ker-* without stress is indicative, and *kér-* with stress is subjunctive. According to Karim and Mohammadirad (forthcoming), this stress placement is the result of "Cheshirization" of the prefix *bí-* on the subjunctive. In other words, regular sound changes led to the loss of all segmental features of *bí-*, leaving only its suprasegmental features, i.e., stress.

- There are various imperfective markers generally falling into several types: (1) a dental type with *t* or *d*, an *m* type, usually with *mî-* from *ham-aiwa 'always, same time, one time' (Windfuhr 2009, 26) or *ma-* from *ham- with the augment *a- (Yoshida 2009, 296).

- Some varieties, closely related to those with dental forms (*t* or *d*), have, instead, vocalic markers *a-, e-,* etc. This is most striking in *Table 9* CK Germiyanî, SK Qorwe, SK Sencawî, and Balochi, where there are regular vocalic markers or even no regular marker as in SK Sencawî. However, each of these varieties has either a remnant of the original dental marker *t/d*. To these, we may add the Balochi *k-*, possibly from *kar 'do.'

Table 8. Imperfective contrasts 'do'

	[PST.PFV.1SG]	[**IPFV**.PST.1SG]	[SBJ.PRS.1SG]	[**IPFV**.PRS.1SG]
NP (Tehran)	*kærd-æm*	***mî**-kærd-æm*	*be-kon-æm*	***mî**-kon-æm*
CK (Mukrî)	*kird=im*	***de**=m kird*	*bi-ke-m*	***de**-ke-m*
CK (Germiyanî)	*kird=im*	***e**=m kird*	*bi-ke-m*	***e**-ke-m*
SK (Qorwe)	*kird-im*	***e**-kird-im*	*bi-ke-m*	***e**-ke-m*
SK (Sencabî)	*kird-im*	*kird-**ya**-m*	*bi-ke-m*	***Ø**-ke-m*
L (Hersîn)	*kird-im*	***=e me**-kird-**ya**-m*	*bi-ke-m*	***=e me**-ke-m*
G (Zerde)	*kerd=im*	*ker-**ên**-ê*	*bi-ker-û*	***me**-ker-û*
G (Text)	*kerd=im*	*ker-**ên**-ê*	*Ø-kér-û*	*Ø-ker-**ű***
B (Turkman)	*kurt-un*	***=a** kurt-un*	*b-kan-īn*	***=a** kan-īn*

- Varieties with consonantal forms and their sisters with vocalic markers alike preserve the consonants with *h*-initial verbs.

- In a small set of varieties where the general imperfective marker differs from the form of the imperfective marker preserved on *h*-initial verbs, the regular imperfective marker is added back to synchronically opaque form: [IPFV-PRS-AGR] > [PRS.IPFV-AGR] > [IPFV-PRS.IPFV-AGR]. Table 9:

Table 9. Imperfective contrasts 'come'

	[PST.PFV.1SG]	[IPFV.PST.1SG]	[SBJ.PRS.1SG]	[IPFV.PRS.1SG]
CK (Mukrî)	*hat-im*	***de**-hat-im*	*b-ê-m*	***d**-ê-m*
CK (Germiyanî)	*hat-im*	***e**-hat-im*	*b-ê-m*	***dê**-m*
SK (Qorwe: > 35)	*hat-im*	***e**-hat-im*	*b-a-m*	***t**-ê-m*
SK (Sencabî)	*hat-im*	*hat-**ya**-m*	*b-a-m*	***tya**-m*
SK (Qorwe: < 35)	*hat-im*	***e**-hat-im*	*b-a-m*	***e-t**-ê-m*
B (Turkman)	*āt-un*	***=a k**-āt-un*	*by-ā-īn*	***=a k**-ā-īn*

There are several key points from *Table 8*. In the present tense, the most common way to express indicative/imperfective is by a prefix. The only exceptions here are the Hewramî (Gorani) variety of Text and the Southern Kurdish variety Sencewî, which features zero marking. According to Karim (2024), this is the result of regular sound changes: pretonic reduction *dekem > *d^{i}kem followed by cluster reduction *d^{i}kem > *kem*. Note that the same thing happens in the neighboring Hewramî varieties, e.g., G Text: *mekerű́ > m^{i}kerű́ > *kerű́*. However, since the same change affects the stressed subjunctive marker as well, both forms are rendered without prefixes. The result is that stress placement is the only marker of indicative/imperfective in the present tense (see Karim and Mohammadirad forthcoming). In the past tense, the general strategy for imperfective marking is also a prefix. However, there are varieties with suffixes like SK Sencewî, G Text, and G Zerde, as well as those with both prefixes and suffixes, such as the Laki variety of Hersîn.

There are several differences between what is observed in *Tables 8* and *9*. For past tense forms, there are essentially no differences except for in Balochi, where, in addition to the typical preposed enclitic marker *=a*, there is an additional marker *k-*. This *k-* formative only occurs with *h*-initial roots. In the present tense, the situation is a bit more interesting. Balochi shows the same pattern seen in the past tense, featuring the imperfective formative *k-* which only occurs in the imperfective, cf. the simple past tense *āt-un* 'I came' and present subjunctive *by-ā-īn* '(that) I come.' However, in Central Kurdish varieties, there is no pretonic reduction of vowels, as observed in Southern Kurdish. Central Kurdish varieties exhibit the regular contraction of the sequence *dehê- to *dê-*, characterized by the loss of intervocalic *h and vowel coalescence. In Southern Kurdish varieties, there was the pretonic reduction of the vowel of the indicative marker. In these varieties, the sequence *dhê- resulted in the devoicing of the *d *tê-*. This occurs in all varieties regardless of whether or not subsequent changes cause the original marker *de-* to change form on all other verbs.

Note that all varieties have what is essentially a suppletive imperfective stem with h-initial verbs beginning with *d-, t-,* or *k-*. There is one additional odd development in the Southern Kurdish variety of Qorwe, where the suppletion is beginning to be regularized. Speakers from younger generations have begun to extend the regular imperfective marker *e-* to the stems with the dental reflex (from the same etymological source, following Karim 2024), becoming *etim* 'I come' where older generations maintain the suppletive *tim*. Without knowing anything else about the system, it is clear that there is at least a superficial similarity between what is observed in Qorwe and Turkman Balochi: both have a regular imperfective marker, *=a* in Qorwe and *e-* in Turkman Balochi, respectively. There is a suppletive marker on a small subset of verbs *k-* and *t-*, respectively. These markers occur together in these varieties *=a k-* and *e-t-*. The Kurdish data make it clear that the combination *e-t-* is an innovative feature and not a reconstructable part of the etymon.[10] The development of an imperfective stem or even a present-tense stem with the remnants of the imperfective/indicative marker is a widespread feature in Iranic languages, e.g., 'Jowš. *a-pic-am* 'I twist,' *but a-t-ār-am* 'I bring'; Qohr. *a-k-ūn* 'I fall,' but *a-t-ār-ūn* 'I bring'; Tāri. *a-ker-ō* 'I do,' but *a-t-ār-ō* 'I bring'; Aby. *e-kar-ān* 'I do,' but *e-t-özmar-ān* 'I count'; Ards. *e-ker-ō* 'I do' but *e-t-oroš-ō* 'I sell.' See discussion in Windfuhr (1991, 249–50); Krahnke (1976, 182–87) also comes to a similar conclusion. Just as the move Southward in the Kurdish-speaking region, Stilo (2007b) shows that moving Eastward amongst the Provincial Dialects, the imperfective/indicative marker disappears in most contexts, e.g., '*biri, biri, bira* 'I, you, he takes/carries away,' or *der-k-i, der-k-i, der-k-a* 'I, you, he falls,' but the original *-t* still shows up as a remnant before vowels (in the durative tenses): (present) *tāri, tārém (= t-ār-i, t-ār-ém)* 'I, we bring' or *tosi (= t-os-i)* 'I get up' and imperfect *ši-t-ārt* 'he would bring.' These should be parsed as *a-t-ār-am* [IPFV-IPFV-bring.PRS-1SG.A] or even more accurately as *a-tār-am* [IPFV-bring.PRS.IPFV-1SG.A] with the *t* now part of a present imperfective stem. This analysis is additionally suggested by further examples that show the dental form becoming part of the present-tense stem regardless of aspect or mood, e.g., 'Qohrudi *tengas-*

[10] Central Kurdish varieties allow clitic person markers to intervene between the prefix and the verb, marking the direct object of a transitive verb. As such, the opportunity for the prefix and the h-initial stem to unimorphate was diminished in Central Kurdish transitive verbs. I refer to the increased likelihood for words and paradigm cells with high token frequency to be irregular. See Bybee (2003; 2002), Corbett et al. (2001) for a discussion of the role of type/token frequency in preserving suppletion. This is approximately parallel to the wat that the merger of the *k-* prefix with the stem did not occur in the context of negation where the proximity was blocked syntactically. Note that in Southern Kurdish, where no intervening clitic is possible, transitive and intransitive verbs alike show this suppletive imperfective stem, e.g., *hawirdin* 'to bring' Šėrwân Kıļâwây *tyar-*, Warmâwa *tyâr-*, and Zurbâtya, *d(ı)yârım*.

/tangašt vs. Meyme *enges-/angašt* 'look,' Soi *angis-* [pres.] ... Thus while the Qohrudi present tense is *a-tangisun* 'I look,' almost identical to Soi *a-t-angisom*, the Qohrudi subjunctive, *bátengisun* (*bá-tengis-un*) and the preterit *batangaštun* (= *ba-tangašt-un*) show that the initial *t-* is now part of the root (but not in Soi).' More recent data from Meym. shows the same developments observed in Qohrudi, e.g., *be=ş-ter-da* [SBJ=3SG-bring.PRS-2PL], where the *t* of *ter-* [bring.PRS-] is not etymological.

This pattern is pervasive and requires explanation. As it happens, Kurdish varieties are among the best-documented, despite also being understudied. Works such as Fattah (2000) and corpora like Matras et al. (2016), despite their flaws, allow for a considerable degree of certainty in commenting on the development of these formations. The findings from Karim (2024) are summarized in *Section 3.5.1* as a template for exploring the Balochi developments.

- The forms of the past imperfective likely started out as the inherited forms of the optative or similar construction covering habitual and irrealis functions when attached to the imperfective stem, and conditional functions when attached to the perfective stem.
- The shift from an aspectual split to a tense-based split caused the conditional form to be used for both imperfective and conditional functions.
- The perfective prefix *bi-*, later subjunctive, was then added to distinguish the conditional functions and innovative imperfective prefixes, e.g., *dar, *kar, *ham, *ham-ēw, to distinguish imperfective.
- The form of the past imperfective loses its suffixal form, remaking the imperfective on the basis of the past stem with imperfective prefixes alone.
- The form of the conditional is lost, its functions subsumed by the past imperfective.

6. Conclusion

Paul (2003) suggested that the Balochi imperfective prefix *=a/a-* is possibly related to the Central Kurdish imperfective marker *e-*. This statement has provided me with a set of changes based on which I could evaluate the Balochi formatives. My conclusion is that they are not possibly related. However, the proposal has failed in certain ways that point to the ultimate etymon.

Balochi is a Northwestern Iranic language related to Kurdish, Gilaki, Zazaki, Tati, Talyši, etc. Their nomadic history has led to their current location in the far southeast of the Iranic-speaking zone. However, there have been several waves of contact with and borrowing from other (North)western Iranic languages. These proposed borrowings include developments in the nominal system, e.g., the Balochi and Gilaki case system (following Korn 2019). However, the borrowings may include the developments in the verbal system described here, i.e., the imperfective marking from the *KAR construction of Vafaeian (2018) and the relationship between imperfective and conditional stems.

Linguistic data point to an original Balochi homeland in the far northwest of the Iranian world, and historical accounts point to modern-day Azerbaijan on the Caspian coast (see Elfenbein 1989 and Dashti 2012). Their migration followed in clockwise fashion, beginning in the late Sassanian period, just predating the Arab conquest. It was in the time immediately preceding this migration that the contact between Balochi and the Caspian languages could have been sufficient for the *KAR construction to spread between the languages: Gilaki, Tati, Talyši, and Balochi.

Because of this shared history and history of contact, it is not unreasonable to propose a contact-induced transfer between Caspian languages or even Kurdish at an early point in their development. I addressed these possibilities in *Section 3.5.2*. Another approach is that of mutual independent developments, a possibility that is strengthened by their genealogical closeness. A set of related languages may be, as I have informally referred to it, “cooking with the same ingredients”. In a recruitment cycle such as the progressive-to-imperfective cycle (Deo 2015), the initial stage is an optional progressive periphrasis that specifies an act-in-progress reading. It could exist alongside what Hopper (1991) refers to as layered forms: more than one gram to express the same function, e.g., English *will* vs *gonna* [FUT]. *DAR, *KAR, *HAM, and *STAN (not discussed here) progressives were likely present in the early ancestors of these varieties. Each of those types occurs in multiple regions across the Iranian world. Varieties of Tajik and Southern Kurdish had a *STAN progressive, the modern reflex of which cannot be confused with the *DAR, *KAR, and *HAM types (see Jeremiás 1993). Likewise, varieties with *HAM markers, New Persian, Laki, Gorani, etc., cannot be confused with the *DAR, *KAR, and *STAN types. Only what I propose are *DAR and *KAR types become superficially similar because of their close phonological shape. The base word order and any other sound changes that took place, e.g., consonant lenition, boundary reanalysis, hiatus resolution, etc., were in the DNA of all the groups.

I propose that the Balochi imperfective marker is the so-called “kar construction” discussed by Vafaeian (2018). There are a few issues that seem

to stand in the way of that proposal: (1) Multiple markers can stack in what seems to be the wrong order, e.g., nazzīk-a k-ayt [near-IPFV IPFV-come.PRS.3SG] (Axenov 2006, 247). However, this is not problematic, as can be observed in Kurdish forms that have reanalyzed the prefix as the imperfective stem, e.g., Qorwa *e-t-ê-m* [IPFV-IPFV-come.PRS-1SG]. Parsing this as two imperfective markers is diachronically accurate, but a better synchronic parsing is *e-tê-m* [IPFV-come.PRS.IPFV-1SG] with the productive *e-* prefix attaching to a suppletive imperfective stem. This is not unlike the English word *child-r-en*, which, from a diachronic perspective, features two plural markers [child-PL-PL]. Given the diversity of forms observed in Kurdish, it would be unsurprising to find some Balochi varieties where *=a* and *k-* could not cooccur (further research necessary).

(2) The Balochi imperfective marker is, at least in some dialects, a discontinuous morpheme compared to the prefix in Kurdish. Paul (2003) shows the imperfective marker as the prefix *a-* while Barker and Mengal (1969) and Korn (2005) have the preposed enclitic *=a*. (Nourzaei and Jahani 2012) show that the proclitic is more common in Balochi, with the enclitic becoming more common in Eastern varieties. However, this is not an issue as the Southern Kurdish varieties of Bisıtun, Cıhr, Harsin, Pâyrawand feature discontinuous imperfective marker *=a* alongside the prefix *ma-*.

The extant evidence for the origin of the Balochi construction is limited. Based on the *k-, ar-, a-,* and *=a* variants, it seems that a locative origin may not work for Balochi. Assuming that a *k* initial prefix is the ultimate root of both parts of the Balochi imperfective construction, some version of the "*kar* construction" found in the Caspian languages like Gilaki is a good possibility. There is no clear evidence for an etymological link between the Kurdish and Balochi constructions. However, it is an interesting coincidence that the Kurdish verbs that broadly bear the suppletive imperfective marker *t-* are cognate with a subset of the Balochi verbs that bear the suppletive imperfective marker *k-*. This is likely a phonological phenomenon and a coincidence. However, this coincidence could be the only clue to the ultimate origin of the construction *kar.

In Kurdish, the "Smoking Gun" pointing to a unified etymon for the imperfective prefixes *de-* and *e-* is the fact that they are incompatible on verbs that preserve the d formative in some environments, e.g., CK Kerkûk *e-ke-m* [IPFV-do.PRS-1SG] vs. *d-ê-m* [IPFV-come.PRS-1SG]. This is bolstered by the fact that the places where they do occur together are few and favored by younger speakers, e.g., SK Qorwe *e-t-ê-m* [IPFV-IPFV-come.PRS-1SG]. These are obviously the innovative forms. In Balochi, the system is the opposite. In nearly all known varieties, the affixes occur together, e.g., Turkmen Balochi *-e k-e-yt* [-IPFV IPFV-come.PRS-3SG], reflecting a longer time depth since the grammaticalization of these forms that matches what is currently understood

about Balochi migration. However, my search for a "Smoking Gun," a variety that doesn't allow both imperfective markers, was successful. Unfortunately, this was only a single speaker of Coastal Balochi from Korsar. That speaker uses the regular marker with all verbs except for the set with the *k-* prefix. It is unlikely that this is an idiosyncrasy of this speaker, as there is no reason to exclude a marker only with these verbs if they were there originally. However, a description of this variety, with data from multiple speakers, is necessary to confirm that it is systematic.

In a recent study of the t-form prefixes across Iranian languages, Aliyari Babolghani (2025) recognizes many of the developments described here: (1) the longtime depth of the related construction; (2) combinations with the old imperfective/optative forming the new past imperfective and conditional; (3) the Balochi forms *-a/a-* are likely not related and show no trace of dental elements; etc.[11]

The forms of the past conditional in Balochi and Kurdish exhibit a development already well-documented in the history of New Persian, as well as in Zazaki and Gorani. The past conditional is the form of the imperfective/irrealis with the addition of a perfective/subjunctive marker. However, the original form of the imperfective has been replaced synchronically by a productive imperfective marker and the regular unaugmented past-tense stem. There is no known relic of the use of the past-tense stem with the *-ēn* suffix for imperfective in Balochi. However, some relics show this cline of development in Kurdish, and the pattern is robustly attested across the Iranian World. I would not be surprised if a wide-ranging corpus study of Balochi varieties would reveal remnants of the older construction, as recently discovered in Southern Kurdish and possibly in Northern Kurdish by Bulut (2000). Obviously, further documentary work on Balochi dialects is necessary. Additionally, the theoretical motivations for these developments require clarification. The semantic motivation for a marker of imperfective combining with a perfective/subjunctive marker to specify a conditional is not clear. Additionally, it is unclear whether

[11] Aliyari Babolghani (2025)'s analysis differs from Karim (2024)'s only in the etymology of the t-form markers. Karim (2024) notes for places like Qorwe older forms like *tê* 'he comes' get regularized by younger speakers to *e-tê* featuring the productive imperfective marker next to the historical one. a Flattened description of the language gives the false impression that the eymon should have been *Vt not *tV. This led or misled Noorlander and Stilo (2015) to assume an original *at-, and the same logic has led Aliyari Babolghani (2025) to propose the preposition *ati as the ultimate etymon. I reject Aliyari Babolghani (2025)'s etymology based on phonological (*ati would render *hê* through regular sound changes) and semantic development issues ('through' > PROG is not a documented cline for emergent progressive periphrases). However, a long rebuttal of his analysis is beyond the scope of the current article. What is important to the current article.

morphological leveling alone is responsible for the formative losing its imperfective function in favor of the conditional.

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