

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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There are many systems for marking the imperfective, including the present tense (the implicit realm of the imperfective), aspect in Northern, Central, and Southern Kurdish varieties. The most common strategies for marking the imperfective are prefixes *d(e)-* and *[ɾ]e-*. However, there are many different strategies involving prefixes, suffixes, circumfixes, and preposed enclitics. Imperfective prefixes surface variably as *d-*, *de-*, *[ɾ]e-*, *me-* and \emptyset -; preposed enclitics surface as *=y* and *=e*, and suffixes surface as *-a*, *-ya*, and *-wa*.

According to Author's (forthcoming) proposal, these formations, despite their inherent diversity, all trace back to a single etymon Proto-Iranian **antara* 'in.' The locative is recruited, as it is in many languages (see Bybee et al., 1994), as the emergent progressive in the progressive-to-imperfective cycle (following Deo, 2015).¹ Additionally, each Kurdish sub-group, whether Northern, Central, or Southern, went through the same set of changes: sound change and paradigm leveling. The immense diversity observed in Kurdish varieties results from vowel reduction that took place early on in Southern Kurdish, likely due to contact with the neighboring Gorani languages (Hewramî). When the same set of Sound Changes and Analogical changes were applied to the forms differing only marginally, radically different forms resulted.

An outline of the stages is thus: (1) All words lose word-final codas: **antara* > **antar*. (2) Post nasal voicing: **antar* > **andar*. (3) Loss of the pretonic initial syllable: **andar* > **dar*. (4) As a postposition, *r* → *:* / *V_#*: **dar* > *dā*. (5) As a preposition, *r* → \emptyset / *#_*: **dar* > *da* (boundary reanalysis?). (6) Prepositions and postpositions > circumpositions: *da*=NP=*dā*. (7) LOC=PTCP=LOC > PROG: **da*=wārī=*dā* 'in the raining' > 'was raining.' (8) **d* becomes a homorganic glide before a vowel, coalescing with high vowels (McCarus, 2009): *da*-wāryā / (y)*a*-wāryā. (9) allomorphy is reduced due to leveling: *a*-wāryā (Fattah, 2000, 378).

There are several locative constructions in Kurdish varieties, including the Mukriyanî locative circumposition *de* NP=*da*, which Author (forthcoming) has identified as a possible source for the Kurdish imperfective markers. This locative circumposition is found in Northern and northern-Central varieties where the imperfective marker is *de-* or *d-*. In contrast, the locative markers in other varieties are the same set of possible formatives as the imperfective prefixes and suffixes with the exceptions of the borrowed *ma-* prefix (with a different etymon). (see Fattah, 2000, 583-642).

The main source of variation comes from contact with the Gorani languages. In Gorani, the typical negation marker is *na-*. However, the present-imperfective form is negated with the prosodically reduced marker *n-*, only occurring before the imperfective marker, e.g., *n-ma-*. According to Author's (forthcoming) proposal, Kurdish varieties that adopted this construction had a negative imperfective **m*=*da-*, which became *nya-* in stage (8) above, eliminating the segmentability between the negative and imperfective markers. The typical negation marker *na-* reduced differently, i.e., **na*-*da-* > *naya-* or *nā-*. Each variety was left with imperfective allomorphy, the initial/postconsonantal *da-*, the postvocalic (y)*a-*, or the post negative (*nya-*) \emptyset -. Every Kurdish variety leveled the imperfective by choosing one of these forms, except for the Mahlşay, who leveled the post-negative version as the imperfective but retained the initial form as the progressive.

In this study, I continue Author's (forthcoming) argument, based on data from the Manchester Kurdish dialect corpus (Matras et al., 2016) and Fattah's (2000) exploration of Southern Kurdish varieties, to show how minute variation in the initial conditions cause exponential diversity at each phase of change. As in Author (forthcoming), I do not propose any new Sound Changes or Analogical changes. Rather, I show that all the well-documented changes throughout the system are the only changes necessary to explain the rich diversity in this aspect of the verbal system. Furthermore, I show that this is a powerful illustration that the diachrony of language features the sensitive dependence on initial conditions that is indicative of all complex systems.

¹Throughout the progressive-to-imperfective cycle, an innovative, progressive construction becomes categorical (it must be used when there is an act-in-progress reading), and subsequently, the progressive construction becomes a generalized imperfective. This may repeat throughout the history of a language.

References

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