

## On Metaphor, Metonymy, and Synecdoche: A Glance at Semantic Change in Berber

### Sur la métaphore, la métonymie et la synecdoque: un regard sur le changement sémantique en berbère

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#### Abstract

The aim of the present paper is to cast some fresh light on the subject of semantic change in Berber. The scope of the study is narrowed to the effects of three major mechanisms, metaphor, metonymy, and synecdoche. The latter is understood, following some of the recent works in cognitive semantics, as a concept that is independent of metonymy. It is accordingly addressed in terms of its two major classes recognized by cognitive semanticists adhering to such a view, i.e. genus for species synecdoche and species for genus synecdoche, commonly known as specialization and generalization. Subsequent to the theoretical framework and the delineation of the key concepts, we presented the reader with a list of some of the representative examples of the semantic transfers in question across different Berber varieties and across a variety of semantic domains.

**Keywords:** Berber, metaphor, metonymy, semantic change, synecdoche

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#### Résumé

L'objectif de cet article est d'apporter un nouvel éclairage autour du glissement sémantique en berbère. La portée de l'étude est limitée aux effets de trois mécanismes majeurs : la métaphore, la métonymie et la synecdoque. Cette dernière est étudiée, à la lumière de certains travaux récents en sémantique cognitive, comme une notion indépendante de la métonymie. Elle est, donc, abordée en fonction de ses deux grandes classes reconnues par les sémanticiens cognitifs adhérant à cette vision, à savoir la synecdoque genre-pour-espèce et la synecdoque espèce-pour-genre, communément appelées spécialisation et généralisation. Après avoir établi un cadre théorique et délimité des concepts clés, nous avons présenté au lecteur une liste de quelques-uns des exemples représentatifs des transferts sémantiques - en relation aux différentes variétés berbères et à travers divers domaines sémantiques.

**Mots clés:** Berbère, glissement sémantique, métaphore, métonymie, synecdoque

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## Introduction

It seems that it would not be too much of an overstatement, especially when reflecting on the long history of what we call language(s), to claim that change in meaning is the norm, not the exception. Such a statement would even be more accurate than if it is made about the other components of language. When it comes to meaning, the notion of *change* should in no way be viewed as a sign of language erosion, as one would think of contact-induced lexical change, but, instead, as a dynamic force of language innovation. It is through such semantic change, along with other mechanisms of linguistic modification, that language develops to allow its speakers to cope with the changes in the extralinguistic world. Had it not been for the formidable force of semantic change and extension, we would not be able to use language in an expressive, poetic, and open way as we do today. With semantic change at its disposal, combined with other mechanisms of language change, language evolves and develops into a number of descendant daughter languages, each with its own unique and defining traits but all holding to the original language by way of deeper linguistic features. An understanding of semantic change, both as a process and an outcome, and the mechanisms it functions through is, therefore, deemed necessary for linguists who seek an in-depth understanding of the present and past of any language and, in particular, those interested in the subject of language reconstruction, in general, and semantic reconstruction, in particular.

### 1 Basic Mechanisms of Semantic Change

There is, to some extent today, an agreement on the mechanisms through which semantic change takes place. Nonetheless, some of these mechanisms were deemed more important than others. The focus of scholars, until perhaps recently, was laid on two major mechanisms (not to say one), metaphor and metonymy (Nerlich and Clarke 1999; Traugott and Dasher, 2002). An important reason for such focus, on metaphor in particular, seems to be the influence wielded by the works of scholars in the domain of rhetoric, old and new. Another reason is the fact that these two mechanisms, the second in particular, were understood and conceptualized in a way that made them cover other mechanisms that were, later on, considered independent.

As important as metaphor and metonymy are in of semantic extension, we should admit that they cannot account for all sorts of semantic changes that occur in a language. Linguists have, therefore, used a number of other concepts in order to cover the variety of semantic transfers attested across the different languages (Darmesteter, 1886; Bloomfield, 1933; Ullmann, 1957; Geeraerts 1997; Blank, 1999). These include, among others, *substitution*, *analogy*, *nomination*, *regular transfer*, *permutation*, and *adequation* (Stern, 1931), and *hyperbole*, *meiosis*, *degeneration*, and *elevation* (Bloomfield, 1933). A typology that probably has attracted more attention in the linguistic research community is the one devised by Ullmann (1957). In contrast to the previous classifications of the mechanisms of semantic change, Ullmann's typology draws, along the causes, a distinction between the nature and the consequences of semantic change. Under the

nature of semantic change, he includes metaphor; metonymy, folk-etymology and ellipsis, while under consequences he includes widening, narrowing, amelioration and pejoration (see Ullmann, 1957). On admission of its critics (e.g., Geeraerts 1997; Blank, 1999, etc.), Ullmann's classification remains one of the most recognized accounts for mechanisms of semantic change.

The critique levelled at Ullmann's typology, by Geeraerts (1997) and Blank (1999), has culminated in devising two other classifications. In his account of the types of lexical change, Geeraerts (1997) distinguished between semasiological mechanisms which "involve the creation of new readings with the range of a lexical item" and onomasiological changes which "involve changes thorough which a concept ... comes to be expressed by a new or another lexical item" (Geeraerts, 1997: p. 94). Differently put, semasiological "changes provide existing words with new meanings", whereas onomasiological ones "couple concepts to words in a way that is not yet part of the lexical inventory of the language" (p. 94). Semasiological changes, which is concerned with mechanisms of semantic change per se, is revealed in two subclasses, changes of denotational meaning and changes of non-denotational meaning. Semasiological changes of denotational meaning is further divided into analogical and independent changes. The latter involves what Geeraerts (1997) refers to as the *classical quartet*, namely specialization, generalization, metonymy and metaphor. These were referred to as such "because they constitute the core of most classifications, and because they link up most closely with what may be found in the rhetorical tradition" (Geeraerts, 2010: p. 26). Following Geeraerts, Seto (1999) talked of the classical trio (Seto, 1999) and, later, the modern trio (Seto, 2003), to refer to metaphor, metonymy and synecdoche, under the latter of which specialization and generalization were subordinated. Semasiological changes of non-denotational meaning, to go back to Geeraerts' classification, cover pejorative and ameliorative changes.

Blank (1999), who argued that Ullmann's classification "lacks both a cognitive and empirical background", came up with a typology of eleven mechanisms. Blank (1999), it is worth noting, regarded synecdoche as a type of metonymy, and included specialization and generalization as independent mechanisms. Along these four mechanisms and metaphor, Blank (1999) included six other concepts, namely *cohyponymic transfer*, *antiphrasis*, *auto-antonymy*, *auto-converse*, *ellipsis*, and *folk-etymology*. It is important to note, following Campbell (2013), that there is an overlapping between some of the concepts across the different classifications devised by linguists, and a great deal of disagreement regarding the nature of such concepts.

As it has been pointed earlier, the present study is limited in its scope to the three major mechanisms of metaphor, metonymy, and synecdoche. The three sections that will follow are devoted to such types of semantic transfer, and the other types of mechanisms mentioned above will not be accounted for in this paper.

## 1.1 Metaphor

Of all the mechanisms of semantic change addressed in the literature, the change of meaning through metaphoric extension or shift was held, for a long time to be the most important (Traugott and Dasher, 2002; Haser,

2003). However, as important as metaphor is, both as a literacy style trope and as a mechanism of semantic change, there is no single agreed-upon definition among scholars that one can consider the most satisfying. We will, therefore, focus on the two main features of metaphor that distinguish it from other mechanisms of semantic change.

An important feature or attribute that seems to be taken for granted by scholars, despite the existing differences in their delineation of the concept, is that metaphor involves a relationship of semantic similarity (Bloomfield, 1933; Ullmann, 1957; Blank, 1999, etc.). Campbell (2013), from a linguistic perspective, has offered a definition that displays such a shared property: “Metaphor is semantic change that involves extensions in the meaning of a word that suggest a semantic similarity or connection between the new sense and the original one” (p. 224). This semantic similarity, according to Campbell (2013), bridges the old meaning of a word with its new meaning. The second most important feature of metaphor that is stressed in the literature, though in a less conventional way compared to the first, is that metaphor involves “a figurative leap across semantic domains” (Campbell and Mixco, 2007: p. 121). Some of the definitions that exist in the literature for the concept of metaphor cover both of the features highlighted above. According to Robert (2008):

Metaphor is the transfer of properties from one domain to another to create a new referential value: some of a term’s semantic properties are selected (abstracted) and applied to another domain to designate a new entity in virtue of the properties considered shared by the two referents” (p. 61-2).

Robert (2008) argues further that one can speak of metaphor “when the shift takes place between one particular use (generally a concrete one), considered the primary meaning, and another (generally more abstract), through a process of selecting properties which are transferred from the primary domain to the other” (p. 63).

## 1.2 Metonymy

Metonymy is often discussed in the literature in contrast to metaphor. Indeed, in many of the works that have addressed style tropes or mechanisms of semantic change, a comparison between metaphor and metonymy constituted an essential part. Metonymy differs from metaphor in a number of ways. The most important of such differences is the nature of the relationship between the old and new meaning of the word that is said to have undergone such semantic transfers. While metaphoric change is based on a relationship of semantic similarity, metonymy is said to be essentially based on contiguity between the original and new meaning of a word. This sort of relationship lies at the heart of what metonymy is, and is held to be its major defining attribute by most, if not all, authorities in related fields of endeavor (Ullmann 1957; Blank, 1999; Seto, 1999). Contiguity is explained, according to Bloomfield (1933), in terms of nearness in space and time. It follows from this that contiguity in metonymic transfer takes place in the real, rather than the linguistic, world (Seto, 1999; Campbell 2013). Metonymy is defined from this perspective as “a referential transfer phenomenon based on the spacio-temporal contiguity as conceived by the speaker between an entity and another in the (real) world” (Seto, 1999: p. 91).

The second major difference between metonymy and metaphor is that semantic transfer in metonymy, in contrast to metaphor, takes place within the same semantic domain (Lakoff and Johnson, 1980; Traugott and Dasher, 2002; Kövecses and Radden, 1998). Kövecses and Radden (1998) define metonymy, accordingly, as “a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain” (p. 39).

Seto (1999) has stressed that “metonymy is an E (ntity)-related transfer” (p. 91). In doing so, he maintained that metonymy should not be confused with any other style trope or transfer mechanism that may look similar to it or be considered as one of its classes. An entity is defined, by Seto (1999), as “a bounded thing in the cognitive-linguistic sense of a bounded region” (p. 96). He further goes on to distinguish between three main types of entity, spatial, “understood ... in the sense of physical entities which have spatial extension” (e.g. *a dog, a river*), temporal, which covers events that are bounded by a temporal frame (e.g. *an earthquake, washing*), and abstract, which covers entities that are not spatially or temporally bounded (e.g. *power, beauty, red, height, etc.*) (Seto, 1999: 97).

The nature of metonymic relations is varied and differs depending on the nature of the entities involved. Seto (1999) listed a number of such relations or types of metonymy and arranged them according to the three kinds of entities mentioned above: spatial (*whole-part, container-contents* and *adjacency*), temporal (*whole event-subevent* and *preceding-ensuing*), and abstract (*object-property*). Other kinds of relations that were mentioned in the literature include: *cause-effect, producer-product, material-object, agent-action, author-work, place-event, place-institution, institution-people*, etc.

### 1.3 Synecdoche

Synecdoche is regarded by many, if not most scholars, as a class of metonymy that is, fundamentally, concerned with whole-part relationships (Jakobson, 1963; Le Guern, 1975; Lakoff and Johnson, 1980, just to list a few). For these authors, we speak of synecdoche when “a part (or quality) is used to refer to the whole, or the whole is used to refer to part” or, in other words, when “a term with more comprehensive meaning is used to refer to a less comprehensive meaning or vice versa” (Campbell, 2013: p. 226). Synecdoche is also said to cover genus-species relationships, i.e. when a genus is used to refer to a species or when a species is used to refer to a genus.

There is, currently, a growing tendency, among many scholars, towards a vision that regards synecdoche as independent from metonymy (Seto, 1999; Burkhardt, 2010; Nerlich, 2010). In contrast to metonymy, which is based on contiguity between senses, synecdoche is said to be based on semantic inclusion. Seto (1999) defined synecdoche, accordingly, as “a conceptual transfer phenomenon based on the semantic inclusion between a more comprehensive and a less comprehensive category” (p. 92) (cf. Nerlich, 2010). The second difference between synecdoche and metonymy, based on this definition, is that synecdoche is a *category-related* transfer whereas the latter, as it has been pointed out in the previous heading, is an *entity-related* transfer (see Seto, 1999). Synecdoche, accordingly, is only concerned with taxonomical relations and not with partonomy relations (Seto, 1999; Nerlich,

2010). These differ in the sense that “taxonomy is a ‘kind-of’ relation while partonomy is a ‘part-of’ relation” (Seto, 1999: p. 93). Put differently, “taxonomy is the relation between a more comprehensive category and a less comprehensive one, while partonomy is the relation between an entity and its parts” (Seto, 1999: p. 93). The authors who take this stance have, therefore, argued that whole-part relations should no longer be included under synecdoche, but metonymy. The main, or in fact the sole, relation that is addressed under synecdoche is the genus-species relation (for a further discussion of synecdoche and, in particular, the distinction between synecdoche and metonymy (see Seto, 1999; Nerlich, 2010; Burkhardt, 2010; and other related works).

Scholars usually talk of two main types of synecdoche, genus for species synecdoche, also known as specialization, and species for genus synecdoche, also known as generalization (Geeraerts, 1997; Seto, 1999). These mechanisms involve relationships of, respectively, subordination and superordination between the old and new meanings of a word that has undergone such sorts of semantic change (Geeraerts, 2010). The specialization of the meaning of a word “*implies that the range of the application of the new meaning*” of such a word “*is a subset of the range of the old meaning*” (Geeraerts, 2010: p. 26). For example, the meaning of *girl* in English has resulted from a specialization of *gyrle* which meant ‘child or young person of either sex’ in Middle English; *deer* from Old English *deor* ‘animal’; *meat* from Old and Middle English *mete* ‘food’, etc. Geeraerts (2015) gives a number of examples of specialization in English, the most striking of which is *corn* which changed from ‘grain’ in general to ‘wheat’ in England, ‘oats’ in Scotland, and ‘maize’ in America. The generalization of meaning, in contrast to specialization, implies that “the new range” of the meaning of a word “includes the old one” (Geeraerts, 2010: p. 27). For example, the current meaning of *dog* has resulted from a generalization of the meaning of Old English *dogca* which originally denoted ‘dog of a powerful breed’; *salary* from Latin *salarium* which originally meant ‘salt-money, soldier’s allowance for the purchase of salt’, etc.

Cruise (2000) argues that it is possible to differentiate between specialization and generalization “if we recognize one of the senses” of a word “as more basic than the other” (p. 110). The change from a more basic meaning to a less basic, more specialized, one entails a semantic specialization. The change, on the other hand, from a less basic meaning to a more basic one entails a semantic generalization.

## **2 Examples of Semantic Change across Berber Varieties: A Focus on Metaphor, Metonymy and Synecdoche**

This section is devoted to semantic change in Berber, in particular those brought about by the mechanisms of metaphor, metonymy, and synecdoche. The examples are displayed following the conventional form used in historical linguistics. On the left side of the transfer arrow of each example is/are the original meaning(s) of the word as commonly attested in most or all Berber varieties. On the right side of the arrow is/are the new meaning(s) acquired for such a word after it has undergone the semantic transfer under consideration, along with a specification of Berber variety or varieties where

such transfer is attested. (*N.B. The examples provided below were obtained by consulting the seminal works of Nait-Zerrad (1998, 1999, 2002) and Haddadou (2007).*)

## 2.1 Metaphor

- **eye → spring, flower, orifice, circle**  
*titt* (also *tit*, *tyett*, *tud*, *caṭt*, etc.) « eye » > **1)** Zng. *tud* « spring », To. *tit* « spring », W *ceṭt*, *caṭt* / Y *tyett* « spring », Cha. *titt* « spring », Nef. *tit* « spring », Siw. *teṭ* « spring »; **2)** To. *tit n ecek* « flower », W/Y *tyett* « flower »; **3)** Tmz. *tit* « orifice », Kab. *tit* « orifice »; **4)** Wrg. *titt* « circle ».
- **ear → handle, tentacle, germ**  
*amezzuy* (also *amezzuy*, *tamezzuxt*, *tamezzuk*, *imejji*, *tameğit*, etc.) « ear » > **1)** Rif. *amezzuy* « handle »; **2)** and **3)** Kab. *imejji* « snail's tentacle », « potato/squash germ ».
- **bone → fruit stone/seed, palm**  
*iyes* (also *iyes*, *ixs*, etc.) « bone » > **1)** Tmz. *iyes* « fruit stone, seed », Cha. *iyes* « fruit stone », Mzb. *iyes* or *ixs* « hard fruit stone », Wrg. *iyes* « hard fruit stone », Ghd. *γess* « fruit stone » > **2)** Ghd. *γess* « young wild palm that grows from a fruit stone ».
- **head → peak, end, best of**  
*ixf* (also *ixef*, *iyf*, *iyef*, etc.) « head » > **1)** To. *eyef* « upper end of something », Tmz. *ixf* « peak, end, tip », Rif/Cha. *ixef* « end », Mzb. *iyef*, *ixef* « end », Wrg. « end, peak », Nef. *iyf* « peak », Kab. *ixef* « end », Ghd. *iyef* « end of something, sword-point, peak, upper part »; **2)** To. *eyef* « the best of ».
- **tongue → flame**  
*iles* (also *ils*) « tongue » > Cha. *ils n leafit* « flame ».
- **heart → the heart of a plant/young leaves, center, inferior part, ...**  
*ul* (*uğ* in Zenaga) « heart » > **1)** and **2)** Chl. *ul* « the heart of a plant, young leaves »; **3)** Mzb. *ul* « center », Wrg. *ul* « (vital) center »; **4)** Mzb. *ul* « inferior part ».
- **foot → end of a book, letter, ...**  
*aḍar* (also *ḍar*, *ṭar*) « foot » > To. *idâren* « end of (a book, letter, a piece of writing) ».
- **liver > center**  
*tasa* (also *tsa*, *tesa*, *tusa*, *awsa*, etc.) « liver » > Ghd. *tusa* « center ».
- **horn → summit, dune, cervix, angle**  
*icc* (also *isk*, *accaw*, *acciw*, *ackaw*, *isek*, *qicc*, etc.) « horn » > **1)** Tmz. *isk*, *icc* « summit », Cha. *icc* « mountain peak »; **2)** Zng. *teska* « white sand dune »; **3)** Tmz. *isk* « cervix », Kab. *askiwen* « cervix »; **4)** Cha. *icc* « angle in a game board ».

- **dog → game piece**  
*aydi* (also *iydi*, *idi*, *eydi*, *agdi*, *igdi*, etc.) « dog » > **1** Cha. *aydi* « game piece » (in a game called *mm-sebea*) (*aydi* is also used to refer to game pieces in other games, such as draughts).
- **bird → crown acorn**  
*agdiđ* (also *agadiđ*, *agediđ*, *ajdiđ*, *ajeđiđ*, *acđiđ*, etc.) « bird » > To. *egdiđ* « crown acorn ».
- **fish → muscle**  
*aslem* (also *asulmay*, *asrem*, and *cgmen*) « fish » > Tmz. *taslemt* « arm's muscle ».
- **snake, viper → intestinal worm**  
*fiyer* (also *ifiyer*, *fiyar*, *ifiyar*, *tifiyra*, etc.) « snake », *ifiyar* (also *tifiyra* and *tifiyra*) « viper, adder » > Mzb/Wrg. *fiyer* « intestinal worms ».
- **turtle → hollow of the belly**  
*ifker* (*ikfer*, *icfer*, *afekrun*, etc.) « turtle » > Kab. *ifker* « hollow of the belly ».
- **root → nerve/vein**  
*azur* (also *azur*, *azer*, *azyer*, *ažar*, etc.) « root » > Chl. *azur* « vein », Nef. *azur* « nerve, vein », Kab. *ažar* « vein ».
- **wheat → mole**  
*ired* « grain of wheat », *irden* « wheat » > Tmz. *ired* « mole ».
- **star → spot on the eye**  
*itri* (also *etri*, *atri*, *ađri*, *ederi* and *iri*) « star » > To. *tatrit* « spot on the cornea », Cha. *itri* « white spot on the eye », Kab. *itri* « white spot on the eye ».
- **see (v.) → visit (v.)**  
*zer* (also *ezer*, *zar*, etc.) « to see » > Tmz. *zer* « to visit », Kab. *zer* « to visit ».
- **salt → charm**  
*tisent* (*tissent*, *têsemt*, *ticent*, etc.) > To. *têsemt* « charm », Tmz. *tisent* « charm, prettiness ».
- **bracelet → tap**  
*azbeg* (also *ibzeg*, *izbey*, *azbeğ*, *ahbeğ*, etc.) « bracelet » > Cha. *azbeg* « tap ».
- **surround with a fence → protect**  
*efreğ* « surround with a fence, enclose with hedges, etc. » > Tmz. *freg* « protect, take under one's guardianship ».
- **rider → game piece**  
*amnay* (also, *amennay*, *amnay*, *amney*, *amnar*, etc.) « rider » > Cha. *amnay* « game piece » (in a game called *imnayen* and which resembles draughts).
- **snail/shell → spoon**



*ajuyɫal* «snail», *ǧuyɫal*, (also *ajeyɫul*, *bujeyɫal*, *aywɫal*, etc.) « shell, snail's shell » > Kab. *tijɣult* « spoon ».

## 2.2 Metonymy

- **eye → evil eye, attention, ...**  
*titt* (also *tit*, *tyett*, *tud*, *caŋt*, etc.) « eye » > **1)** Zng. *tud* « evil eye », To. *tehoŋ* « evil eye », Tmz. *titt* « evil eye », Gour. *tit* « evil eye », Cha. *titt* « evil eye », Djer. *tit* « evil eye » > **2)** Kab. *tit* « attention ».
- **blood → kinship, relatives, menses, bloodletting**  
*idammen* (also *idemmen*, *dimmen*, etc.) « blood » > **1)** Tmz. *idammen* « parental bond, blood alliance », Mzb. *idammen* « kinship, relatives », Wrg. *idamen* « kinship, race », Kab. *idammen* « kinship, relatives »; **2)** Tmz. « menses, female indisposition »; **3)** Tmz. *idammen* « bloodletting ».
- **bone → tooth**  
*iyess* (also *iyes*, *ixs*, etc.) « bone » > Chl. *ax<sup>u</sup>s* « tooth ».
- **head → intelligence, memory, reason, sheep, ewe, livestock,**  
*ixf* (also *ixef*, *iyf*, *iyef*, *eyef*, etc.) « head » > **1), 2),** and **3)** To. *eyef* « intelligence, memory, reason »; **4)** To. *eyef* « hair », **5)** To. *eyef* « goat », Tmz. *tixfawin* « sheep, ewe », Cha. *ixef* « livestock ».
- **tongue → language**  
*iles* (also *ils*, *irs*, etc.) « tongue » > To. *iles* « language », Tmz. *ils* « language », Rif. *irs*, *ils* « language, dialect, patois », Izn. *iles* « language, dialect, patois », Kab. *iles* « language ».
- **hand → arm/fist, five, handle, ...**  
*afus* (also *fus*, *efus*, *effus*, *ufes*, etc.) « hand » > **1)** To. *afus* « arm », Tmz. *afus* « arm, fist », Rif. *fus*, *afus*, also « arm, fist », Nef. *ufes* « arm », Kab. *afus* « fist »; **2)** Nef. *ufes* « five », Sok. *fus* « five »; **3)** To/Chl/Tmz/Kab. *afus* « handle », Mzb/Wrg. *fus* « handle », Ghd. *ufess* « handle ».
- **heart → seat of emotions, conscience, courage, ...**  
*ul* « heart » (*uǧ* in Zenaga) « heart » > **1)** and **2)** Tmz. *ul* « the seat of emotions », « conscience »; **3)** Tmz. *ul* « courage », Mzb/Wrg. *ul* « courage », Kab. *ul* « courage ».
- **neck → collar, neck opening, responsibility, ...**  
*iri* « neck » > **1)** Cha. *iri* « collar », Wrg. *iri* « collar »; **2)** To. *êri* « neck opening »; **3)** Cha. *iri* « responsibility », Mzb. *iri* « responsibility », Kab. *iri* « responsibility ».
- **liver > (maternal) love, courage, fear**  
*tasa* (also *tsa*, *tesa*, *tusa*, *awsa*, etc) « liver » > **1)** Tmz. *tasa* « maternal love », also « affection, tenderness, pity », Cha. *tsa*, *tasa*, esp. « maternal love », Mzb/Wrg. *tsa* « (maternal) love », Nef. *tasa* « love », Kab. *tasa* « maternal

- love, parental attachment to children »; 2) Tmz. *tasa* « courage », Cha. *tsa*, *tasa* « courage, intrepidity », Kab. *tasa* « courage »; 3) Nef. *tasa* « fear ».
- **face → self-esteem, ...**  
*udem* (also *idem*, *admi* and *uden*) « face » > 1) Tmz. *udem* « self-esteem, respectability, honor », W/Y *uden* « consideration, respect, esteem, prestige, grace, benevolence »; 2) and 3) Tmz. *udem* « respectable person, influential, notable, personality », *tudmawin* « favoritism, injustice, segregation ».
  - **chest → breast/nipple, heart**  
*admer* (also *admar*, *idmaren*, *tadmert*, etc.) « chest » > 1) and 2) Kab. *idmaren* « breast », Ghd. *admar* « breast, nipple »; 3) Mzb. *idmaren* « heart ».
  - **ant → anthill**  
*takettuft* (also *tawettuft*, *tayettuft*, *tagedfit*, *acttuft*, *tudeft*, etc.) « ant » > To. *teattuft*, *tehattuft* « anthill ».
  - **branch → tree**  
*taseṭta* (also *asetta*, *taciṭa*, *tacodda*, etc.) « branch, twig » > Cha. *taseṭta* « tree ».
  - **fence → enclosure, yard, room, ...**  
*afrag* (also, *afrağ*, *afreğ*, *afarra*, etc.) « fence, hedge » > Tmz. *afrag* « enclosure, sheepfold », Cha. *afrag* « yard », Kab. *afrag* « enclosure, yard bounded by a fence », Ghd. *afara* « room delimited by a low partition ».
  - **fire → fever**  
*timess* (also *timessi*, *timsi*, *temsi* and *temse*) « fire » > Rif. *timssi*, *timessi* « fever », Cha. *times* « fever », Ghd. *temsi* « fever ».
  - **moon → month**  
*ayur* (also *yur*, *ayyor*, *aggur*, *uyer*, *eôr*, etc.) « moon » > Tmz. *ayur*, *agwur* « (lunar) month », Chl. *ayyur* « month », Cha. *ayur* « month », Kab. *aggur* « (lunar) month ».
  - **stone/rock → rock wall**  
*azru* (also *azeru*, *azru*, etc.) « rock, stone, pebble » > To. *azeru* « rock wall ».
  - **sky → cloud, rain**  
*ajenna* (also *ağenna*, *iğenna*, *igenna*, *igenni*, etc.) « sky » > 1) To. *ağenna* « cloud », Rif. *ajenna*, *iğenna* « thick rain cloud »; 2) To. *ağenna* « rain ».
  - **meat → muscle**  
*aksum* « meat, flesh » > Tmz. *taksumt*, *taysumt* « muscle of the front arm ».
  - **foam → milk**  
*akufa* (*tikufa*, *tkufi*, ...) « foam » > Chl. *akf<sup>ta</sup>ay* « milk », Kab. *ayefk*, *ayefki* « milk ».

- **iron → knife, scissors**  
*uzzal* (also *wezzal*, *uzzel*, *ezzel*, *taḏuli*, etc.) « iron » > **1**) and **2**) Tmz. *uzzal*, *tuzzalt* « knife », *tuzlin* « scissors », *uzlan* « large scissors ».
- **yellow → fox, golden animal, donkey**  
*awray* « yellow » > **1**) Nef. *uray* « fox »; **2**) To. *awray* « golden chestnut animal (camel, ox) »; **3**) To. *iwriy* « reddish yellow donkey ».
- **sit (v.) → stay (v.)**  
*qqim* (*qim*, *yim*, *gam*, etc.) « to sit » > **1**) To. *ḡaym* « to stay », W/Y *gam* « to stay », Tmz/Rif/Mzb/Wrg/Kab. *qqim* « to stay », Cha. *qqim*, *yim* « to stay », Nef/Ghd. *qim* « to stay ».
- **reed → flute, reed pen**  
*aḡanim*, *ḡanim* « reed » > **1**) Tmz. *aḡanim* « flute », Rif. *aḡanim*, *ḡanim* « flute»; **2**) Ghd. *tayanimt* « scribe's calamus », cf. Lat. *calamus* « reed, cane ».
- **hungry → poor, shy, miser**  
*amellaḡu* (also *amelluḡ*) « hungry » > **1**) Cha. *amellaḡu* « poor », Kab. *amellaḡu* « poor, wretched »; **2**) Chl. *amelluḡ* « shy person »; **3**) Tmz/Kab. *amellaḡu* « miser, stingy host ».

## 2.3 Synecdoche

Examples of genus for species synecdoche, i.e. specialization, in Berber include:

- **neck → animal's neck**  
*iri* « neck » > To. *êri* « animal's neck ».
- **goat → three-fingered horned goat**  
*zaley* (also *azley*, *zalaq*, *ahûlay*, *ejegi*, ...) « goat » > Chl. *azalay* « three-fingered horn goat ».
- **horse → racehorse, hackney**  
*yis* (also *ays*, *ayyis*, *ic*, ...) « horse » > **1**) and **2**) Tmz. *iyyis*, *ayis* « racehorse, hackney ».
- **horse → workhorse**  
*aḡmar* (also *aḡmar*) « horse » > Tmz. *aḡmar*, *aḡmar* and *ajmar* « workhorse ».
- **worm → fruit/meat worm**  
*tawekka* (also *awekka*, *awekkiw*, *tawekkiwt*, *tiwkkit*, *tawkke* etc.) « worm » > **1**) Ghd. *tukekka* « fruit worm »; **2**) Chl. *tawkkua*, *tawkkuat* « meat worm ».
- **sheep, ram → short-wooled sheep, sucking lamb**

- ikerri* (also *ikerr*, *ayrar*, *ekrer*, *icarri*, etc.) « sheep, ram » > 1) Chl. *ayrar* « short-wooled sheep »; 2) Tmz. *ikrew*, *icrew* « offspring of an animal, esp. a sucking lamb ».
- **flower → artichoke's flower**  
*ajeğğig* (also *alğig*, *agğig*, *ayğig*, *ajjiga*, *tejige*, ...) « flower » > Cha. *ağeğğig* « artichoke's flower ».
  - **fire → hell (fire)**  
*timess* (also *timessi*, *timsi*, *temsi*, and *temse*) « fire » > Zng. *temci* « hell », To. *témsé*, *times* « hell », Cha. *times* « hell », Mzb. *timsi* « hell fire », Wrg. *timsi* « hell », Kab. *times*, *timess*, *timessi*, *timsi* « hell ».
  - **star → Arcturus**  
*itri* (also *etri*, *atri*, *aṭri*, *ederi*, and *iri*) « star » > W/Y *aṭri* « Arcturus (main star of the Boötes constellation) ».
  - **smoke → thick smoke**  
*aggu* (also *awwu*, *ahu*, *ubu*, ...) « smoke » > Kab. *abbu* « thick smoke ».
  - **hunger → famine**  
*laṣ* (also *tlazit*) « hunger » > Tmz. *laṣ* « famine », Rif. *laṣ*, *raṣ* « famine », Cha. *laṣ* « famine », Wrg. *tlazit* « famine », Kab. *laṣ* « famine ».
  - **woman → wife**  
*tameṭṭut* (also *tameṭṭuṭ*, *tameṭ*, *tamṭeṭ*, ...) « woman » > To. *tameṭ* « wife », Tmz. *tameṭṭuṭ* « wife », Cha. *tameṭṭut* « wife ».
  - **bracelet → men's bracelet, open bracelet, ...**  
*azbeg* (also *ibzeg*, *izbey*, *azbeğ*, *ahbeğ*, ...) « bracelet » > 1) W/Y. *azbeğ* « man's bracelet »; 2) Chl. *azbeg* « open bracelet ».
  - **pedestrian → man**  
*aragaj* « pedestrian » > *argaz* « man » (common to most Berber varieties).
  - **orphan → paternal orphan**  
*agujil* (also *gujil*, *awujil*, *awijil*, *igigil*, *ajujil*, *aujil*, *adujil*, *ağuhil*, ...) « orphan » > W/Y *agugel* « paternal orphan ».
  - **close (v.) → close the door**  
*ergel* (also *erğel*, *erjel*, *erjer*, ...) « to close » > Rif. *rgel* « close the door ».
  - **king → queen bee**  
*agellid* (also *ajellid*, *acellid*, *ajeğğad*, ...) « king, sovereign, etc. » > Chl. *agellid n tezzwa* « queen bee », Kab. *agellid n tizwa* « queen bee ».
  - **needle → syringe**  
*tissegnit* (also *tisegnit*, *tesugnit*, *tisegneft*, *tiseğneft*, *tagennayt*, ...) > *tisegnit* « syringe with its needle ».

- **reach → reach maturity**  
*awed* (also *awet*, *awud*, etc.) « to arrive, to reach, to arrive at, to get to » > To. *awed* « to reach maturity (cereals, vegetables), to achieve suitable growth (pasture), to reach puberty », Nef. *awet* « to reach maturity », Kab. « to become/to be mature », Ghd. *awed* « to reach maturity ».

The species for genus synecdoche, or semantic generalization, seems to be less common than the genus for species one (Nerlich, 2010). Its examples are less frequent or probably less easy to find. This also seems to be true for Berber, as one can easily notice from a comparison of the above and below lists of instances of synecdoche traced and attested across a number of Berber varieties.

- **viper → reptile**  
*fiyer* (also *ifiyer*, *fiyar*, *ifiyar*, *tifiyra*, ...) « snake, serpent », *ifiyar* (also *tifiyra*, *tifiyra*, ...) « viper, adder » > Tmz. *ifiyr* « reptile », Wrg. *fiyer* « reptile ».
- **eagle, vulture, kite → bird of prey**  
*igider* (also *gider*, *ijidar*, *ejadar*, *eheder*, ...) « eagle, vulture, kite » > Kab. *gider*, *ijidar* « bird of prey ».
- **fresh milk → milk**  
*akufay*, *akueffay*, *ayefki* « fresh milk » > Chl. *akfuay* « milk », Kab. *ayefk*, *ayefki* « milk ».
- **melted butter → butter**  
*udi* (also *widi*) « melted butter » > Y *widi* « butter », Tmz/Wrg/Kab. *udi* « butter ».

Using genus for species, or vice versa, does not seem to be the only type of transfer based on taxonomical relations. Plenty of instances of such transfer do not fit into this categorization. Some specialists have, therefore, added other classes of taxonomical transfer to cover those hard-to-categorize instances of semantic change. Nysenholc (1981), for example, and, later, Nerlich (2010), added the species-for-species semantic transfer to the two main types of synecdoche. Blank (1999), on the other hand, came up with a new concept, independent of synecdoche, to refer to horizontal shifts in taxonomy, which he called « cohyponymic transfer», e.g. *mouse* for *rat* (Blank, 1999), English *fir* for German *föhre* « pine tree » (Grzega & Schöner, 2007), etc. We consider, for the purposes of this paper, the taxonomical transfer involving species for species relations, following Nysenholc (1981) and Nerlich (2010), to be a subclass of synecdoche. Examples of such transfer in Berber include:

- **dog → civet**  
*aydi* (also *iydi*, *idi*, *eydi*, *agdi*, *igdi*, ...) « dog » > To. *teydit* « civet ».
- **ewe → goat**  
*tixsi* « ewe » > To. *tiyse* « goat », Wrg. *tixsi* « goat », Skn. *tixsi* « goat ».

- **sheep, ram → goat**  
*ikerri* (also *ikerr*, *ayrar*, *ekrer*, *icarri*, ...) « sheep, ram » > Nef. *akrar* « goat ».
- **worm → moths**  
*tawekka* (also *awekka*, *awekkiw*, *tawekkiwt*, *tiwkkit*, *tawkke*, ...) « worm » > Tmz. *tawekka*, coll. « moths ».
- **butterfly → bat, swallow**  
*aferteṭtu* (also *fereteṭtu*, *aferteṭtu*, *feriteṭtu*, *afereṭtu*, *afaṭtu*, etc.) « butterfly » > **1)** To. *aferteṭta* « bat », W/Y *afāriṭta* « bat »; **2)** Chl. *fereteṭtu* « swallow ».
- **yellow → green**  
*awray* « yellow » > Siw. *awray* « green ».
- **father → cousin**  
*baba* (also *abba*, *ibba*, *bba*, ...) « (my) father » > Chl. *baba*, *bba*, *ibba* « (my) older cousin ».
- **to be brown → to be black**  
*iywal* « to be brown » > Cha. *γwel* « to be black » (*ayugg<sup>w</sup>al* « black »), Wrg. *eγwel* « to be/become dark/black, to blacken » (*ayeggal* « black »).
- **goat → ram, horse**  
*zaley* (also *azley*, *zalaq*, *ahūlay*, *ejegi*, ...) « goat » > **1)** Nef. *zalay* « ram »; **2)** To. *ahūlay* « horse which neighs endlessly ».
- **pigeon → ganga**  
*adbir* (also *atbir*, *itbir*, *adabar*, etc.) « pigeon, dove » > **1)** and **2)** To. *édebir*, *tedebirt* « ganga », *édebir*, *tedebirt* « turtle dove ».
- **snake, viper → crab**  
*fiyer* (also *ifiyer*, *fiyar*, *ifiyar*, *tifiyira*, ...) « snake, serpent », *ifiyar* (also *tifiyira*, *tifiyira*, ...) « viper, adder » > Kab. *ifireyqes*, *ifireeqes* « crab ».
- **viper → toad**  
*talefsa* (also *talifsa*, *telifsa*, *tulifsa*, *tanefsa*, *tarefsa*, ...) « viper » > Tmz. *alefsa* « toad ».

## Conclusion

We have attempted through this paper to present a fairly clear picture of the role of semantic change, in particular transfers through metaphor, metonymy, and synecdoche, in contributing to Berber's rich, diverse, and innovative way of designating the different referents in the extralinguistic environment. It has been shown that Berber is akin to other languages in making use of the mechanisms of semantic change under consideration in order to expand the range of its denotational expressivity, that is its ability to name new, or even old, objects, conditions, ideas, phenomena, and the like referentially. This innate feature, which is common to all human languages, is reflected, in one way, in the existence of instances of semantic transfers

that are similar, if not identical, to others that are attested in a number of world languages. In another way, the tendencies of semantic extension that are observed across such languages are also established in Berber (recall, for instance, how species-for-genus synecdoche in Berber is less common and frequent, as in other languages, than genus-for-species synecdoche). It is worth noting that the outcomes of change are more likely to be alike when close language, in particular those of the Afroasiatic phylum, are involved. Notwithstanding, this paper has equally revealed that Berber is also different from other languages in many respects. In spite of using similar mechanisms of semantic extension, the destinations and outcomes are in most cases unique to this language. In order to understand and appreciate the uniqueness of the instances of semantic change in this paper, in particular, and across Berber varieties, in general, one needs to understand the cultural background in which such changes have taken place. Be it about similarity in metaphoric extension, contiguity in metonymic extension, or inclusion in synecdoche, it is necessary to consider the notions involved in semantic transfer from the world view that Berber presents about them and not from an oriental, occidental, or any other cultural perspective.

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