

The semantics of Hadza gender assignment: a few notes from the field *

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1. Introduction

This working paper presents some preliminary data from ongoing work on agreement and person/gender/number in the Hadza language, and aims specifically to assess the semantic basis for the assignment of gender in this language, based on the analysis and semantic classification of some 1,400 nouns. While it is commonly accepted that all languages have a basic or underlying semantic system for gender assignment, there are also often (more or less) formal criteria involved (cfr Corbett 1991). The extent to which such formal criteria are relevant in the case of Hadza will not be investigated here; instead we will try to see how well the semantics can account for the allocation of nouns into genders. That said, allowances will be given for exceptions to perceived “rules” or tendencies, without necessitating reformulation or restatement of these. Indeed, we would expect to find exceptions which cannot, for the time being at least, be accounted for. What we are interested in here is the investigation of general tendencies or features, and attempts to go into very fine details will be largely avoided except in such cases where a rule can be convincingly shown for such a very narrow semantic field.¹

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¹ There would, for instance, often be little purpose in creating a class of nouns encompassing ‘sun’. This word could be considered not only a possible candidate for a class of its own, but also a very likely one. That is, the ‘sun’ is such a fundamental entity in life that we need not search for semantically similar words to account for its gender.

We are looking for natural ‘semantic classes’, that is, classes that share some core features, which may account for similar treatment in the mental lexicon. For example, a natural class might be ‘large catlike mammals’, but most likely not ‘large mammals’ as this would be too general a class that could incorporate distinctly dissimilar animals with few relevant features in common. Naturally, there are often a number quite unrelated traits working together to form a semantic class. However, such “semantic complexes” are rather difficult to establish and provide evidence for. The “semantic rules” suggested here will therefore be as simple and categorical as possible.

Hadza is a language isolate spoken by a group of hunter-gatherers in north-central Tanzania, principally to the east and south of Lake Eyasi. Amounting to less than one thousand, the population nevertheless seems to have been fairly stable. Even today most Hadza children learn little Swahili in early years, and it is only among grown up men that knowledge of Swahili may be taken for granted. Through the years, numerous lexemes have been borrowed into Hadza from languages of such diversity as the Bantu languages Nyihanzu (Isanzu) and Sukuma, the Cushitic language Iraqw, and also Datooga, a Nilotic language (Edenmyr 2003). As these borrowed nouns conform to the major patterns discussed below, these will not be treated separately from other nouns.

The rest of the paper will be structured as follows. In section 2, a short description of the system of gender/number marking on nouns will be given. Section 3 will present suggestions of valid ‘semantic classes’ for the assignment of gender, that is, classes of nouns where membership is determined by the existence of a shared set of features. Features which occur across several semantic classes and may be taken as prototypical, or at least general, features of assignment will be discussed in section 4, and, especially, features of what will here be called ‘noun pairings’, that is, noun stems found in both masculine and feminine with special and systematic semantic differences occurring between genders. Lastly, a summary will be provided in section 5.

2. Noun marking

Hadza has overt gender/number marking on nouns. Thus, it is possible to determine gender affiliation from the form of the noun itself (as well as, of course, from any agreement marking on dependents). There are no instances found where a noun has, say, feminine marking but agrees like a masculine noun. (There are special circumstances where the marking on the nouns may be deleted, eg. if used together with certain demonstratives, which display the relevant gender/number markings, but this will not be investigated here.)

| | “SINGULAR” | “PLURAL” |
|-----------|------------|--------------|
| MASCULINE | -∅ | -biʔi, -piʔi |
| FEMININE | -ko | -beʔe, -peʔe |

Table 1. Gender and number markers. ²

There are two genders, masculine and feminine, and a two-way distinction in number; thus, there are four gender/number markers of nouns (see table 1).

Although an example of a very basic gender/number system, it yields some interesting peculiarities. Many nouns, mainly animates, while having what might be called an ‘original’ or ‘underlying’ gender, may receive any marking depending on the meaning conveyed; eg. the word *k//aʔano-∅* ‘dog’ is masculine and may be marked with the masculine -∅ (zero) marking to mean either ‘a male dog’, or ‘a dog of unspecified sex’, or even ‘dog/dogs of unspecified sex and number’, and thus ‘dogs in general’. But, it may be marked with the feminine singular -*ko* as well, and thus get the ‘specified’ meaning of ‘one female dog/bitch’. For a noun with underlying feminine gender the system of marking would be the opposite, that is, in the unmarked case it would receive the -*ko* marker. Thus *doŋgo-ko* ‘zebra’ would mean ‘a feminine zebra’, or ‘a zebra of unspecified sex’, etc. If given the masculine marker, *doŋgo-∅* would mean ‘one male zebra’.

The meaning of the “plural” (-*biʔi/-piʔi*, -*beʔe/-peʔe*) is somewhat less clear. Sands (forthcoming) labels these “plural & paucal”. However, it seems to me to have more to do with the meaning of ‘specified as being more than one’ or ‘specified as non-singular’. (Phrases like *seseme-biʔi bone-biʔi* ‘four lions’, *seseme-biʔi ʔifirini-biʔi* ‘twenty lions’, or *seseme-biʔi ʔasu-piʔi* ‘many lions’ would all receive the plural marking, and I have been unable to record the proposed paucal use/meaning.) Thus, it seems to be more of a distinction between ‘one or unspecified number’ and ‘specified as more than one’, much like gender seems to specify ‘male or unspecified sex’ versus ‘female or unspecified sex’. A male zebra might be referred to as *doŋgo-ko* ‘zebra-FEM’ unless it is desirable to express and/or stress its maleness. The system may still

² The gender/number markers are often phonetically reduced, the last vowel becoming devoiced or deleted, thus -*ko* [k^ho̥], -*biʔi* [biʔi̥ ~ biʔ], -*peʔe* [p^heʔe̥ ~ p^heʔ], etc. Note that IPA symbols are used throughout in this paper. Thus ‘/j/’ is used here to denote a glide where others might have preferred ‘/y/’.

ORIGINAL / UNDERLYING GENDER

| APPR. MEANING | MASCULINE, eg. 'dog' | FEMININE, eg. 'zebra' |
|---|--|--|
| One of "original sex", or one of unspecified sex, or unspecified sex and number | <i>k//aʔano-Ø</i> 'a dog/dogs' | <i>doŋgo-ko</i> 'a zebra/zebras' |
| More than one of original, mixed or unspecified sex | <i>k//aʔano-biʔi</i> , <i>k//aʔano-piʔi</i> '(several) dogs' | <i>doŋgo-beʔe</i> , <i>doŋgo-peʔe</i> '(several) zebras' |

GENDER-SWITCH

| APPR. MEANING | MASC. AS FEMININE | FEM. AS MASCULINE |
|---------------------------------|---|---|
| One of "opposite sex" | <i>k//aʔano-ko</i> 'a female dog/bitch' | <i>doŋgo-Ø</i> 'a male zebra' |
| More than one of "opposite sex" | <i>k//aʔano-beʔe</i> , <i>k//aʔano-peʔe</i> '(several) female dogs/bitches' | <i>doŋgo-biʔi</i> , <i>doŋgo-piʔi</i> '(several) male zebras' |

masculine, unspecified number
eg. *k//aʔano-Ø* 'dog, dogs'

specified PL

eg. *k//aʔano-piʔi* 'dogs'

gender-switch, specified SG

eg. *k//aʔano-ko* 'one female dog'

gender-switch, specified PL

eg. *k//aʔano-peʔe* 'female dogs'

feminine, unspecified number
eg. *doŋgo-ko* 'zebra, zebras'

specified PL

eg. *doŋgo-peʔe* 'zebras'

gender-switch, specified SG

eg. *doŋgo-Ø* 'one male zebra'

gender-switch, specified PL

eg. *doŋgo-piʔi* 'male zebras'

Table 2. The semantics of gender/number markers.

prove more complex, but for the time being, table 2 can be taken as a reasonable overview of the Hadza gender system.

The two final remarks on noun marking concern the plural, more specifically the alternation of /b/ and /p/, and the significance of the vowels /i/ and /e/ in Hadza. The /b/-/p/ variation of the plural markers has been ascribed to a copula/non-copula distinction (Sands, forthcoming), similar to that found in the singular, with the unvoiced markers being the copula form while the voiced represent a ‘base’ form. Sands gives these as found in table 3 (slightly adapted).

| | BASE FORM | COPULA FORM |
|------------------|-----------|-------------|
| <u>MASCULINE</u> | | |
| SG | -∅ | -a |
| PL | -biʔi | -piʔi |
| <u>FEMININE</u> | | |
| SG | -ko | -ako |
| PL | -beʔe | -peʔe |

Table 3. Base and copula markers (after Sands, forthcoming).

The copula of the singular, given as a suffix *-a* (though rather found as /ʔa/, /wa/, or /ja/), is not found in the plural. The use of voiced/unvoiced as a corresponding marker in the plural seems rather unusual, but again, I have not found this distinction among my informants. Rather, I have found a free variation here, and although one form may be preferred for a specific word, they often accept the other form as well, and the forms seem to be, at least semantically, equivalent. It would appear that the copula forms exist only in the singular, and in this paper the plural forms will be given as my informants have given them, voiced or unvoiced.

The significance of the vowels /i/ and /e/, found as markers distinguishing masculine plural and feminine plural in, respectively, *-biʔi/-piʔi* and *-beʔe/-peʔe*, is one that extends to large parts of Hadza agreement morphology. Time and again, these vowels show up as markers of gender/number.

A subclass of nouns is the “dead animals” class. This small word class consists of words for commonly hunted animals. As shown in table 4 below, masculine and feminine gender of the singular is marked differently than for nouns. There is a plural, not mentioned by Sands (forthcoming), which is also marked differently from some nouns.

| | <u>SINGULAR</u> | | <u>PLURAL</u> | |
|-------------------|------------------|------------------|-----------------------|----------------------|
| | MASC. | FEM. | MASC. | FEM./MIXED |
| ‘dead zebra’ | <i>hantaʔe</i> | <i>hantaʔi</i> | <i>hantaʔitʃiʔi</i> | <i>hantaʔiteʔe</i> |
| ‘dead lion/eland’ | <i>hubuʔe</i> | <i>hubuʔi</i> | <i>hubuʔitʃiʔi</i> | <i>hubuʔeteʔe</i> |
| ‘dead ostrich’ | <i>hufuwe</i> | <i>hufuwi</i> | <i>hufuwetʃiʔi</i> | <i>hufuweteʔe</i> |
| ‘dead baboon’ | <i>ʔ!okowe</i> | <i>ʔ!okowi</i> | <i>ʔ!okowitʃiʔi</i> | <i>ʔ!okoweteʔe</i> |
| ‘dead impala’ | <i>tɔʔoŋkoʔe</i> | <i>tɔʔuŋkuʔi</i> | <i>tɔʔuŋkoʔetʃiʔi</i> | <i>tɔʔuŋkoʔeteʔe</i> |

Table 4. Examples of ‘dead animals class’.

These nouns do not normally take modifiers, but if they do they agree like other nouns, and thus, despite the differences in gender/number marking, they should be included in the class of nouns, eg. *hantaʔiteʔe piʒebeʔe* ‘two (female or mixed sex) dead zebras’. As can be seen here, the vowels of the singular markers of the dead animals class are the opposite of the plural for each gender.

| <u>POSSESSED</u> | <u>POSSESSOR</u> | | | |
|------------------|------------------|---------------|---------------|---------------|
| | MASC., SG | FEM., SG | MASC., PL | FEM., PL |
| MASC., SG | <i>-ne</i> | <i>-ni</i> | <i>-ni</i> | <i>-ne</i> |
| FEM., SG | <i>-te</i> | <i>-ti</i> | <i>-ti</i> | <i>-te</i> |
| MASC., PL | <i>-bitʃe</i> | <i>-bitʃi</i> | <i>-bitʃi</i> | <i>-bitʃe</i> |
| FEM., PL | <i>-bite</i> | <i>-biti</i> | <i>-biti</i> | <i>-bite</i> |

Table 5. Possessive markers.

Looking at the possessive markers in table 5, we get further evidence of the /i/ - /e/ distinction. The masculine singular possessor and the feminine plural possessor are marked identically, and so are the masculine plural and the feminine singular possessors. Thus, this combines the vowels of plural marking of nouns and the singular marking of the dead animals class, and we are left with the following correspondence (table 6):

| | MASCULINE | FEMININE |
|----------|-----------|----------|
| SINGULAR | <i>e</i> | <i>i</i> |
| PLURAL | <i>i</i> | <i>e</i> |

Table 6. Vowels of gender/number marking.

There are several examples (such as in the case of ‘dead impala’ above) when, through leftward vowel harmony, these vowels are responsible for (sometimes quite substantial) differences between singular and plural forms.

| | | | |
|-----|-------------------|---------------------|---------------------------|
| (1) | <i>kini-ko</i> | <i>kene-pe?e</i> | ‘old thing’ |
| | <i>mupene</i> | <i>mupini-pi?i</i> | ‘handle’ |
| | <i>tʰʉsuwa</i> | <i>tʰʉsuwi-bi?i</i> | ‘man who eats greedily’ |
| | <i>tʰʉsuwa-ko</i> | <i>tʰʉsuwe-be?e</i> | ‘woman who eats greedily’ |

3. Semantic classes of nouns

This section will summarize the findings of the semantic analysis and classification of nouns mentioned above. Approximately 1,400 nouns were analysed, and, excluding words for human beings, the nouns were evenly distributed between genders (roughly 53% masculine and 47% feminine). Again, it must be stressed that the semantic classes presented below almost invariably contain exceptions. However, all semantic classes below still contain the vast majority of the specified nouns. For instance, CARNIVOROUS MAMMALS³ includes over ninety percent of all such nouns found, and TREES AND PLANTS hold eighty percent of associated words. For the purpose of this paper such classes are deemed valid.

3.1 Human beings

The details pertaining to this important category is not entirely clear, but we will attempt to present a general outline. There are basically two kinds of nouns of human beings; those that denote persons of either sex and may take either masculine or feminine markers, and those that denote ‘gender specific’ persons, eg. many kin terms, and take only either masculine or feminine marking.

Nouns that take either gender marking resemble other nouns. A male is marked in masculine singular and a female in feminine singular, etc. It seems that there is a preference when speaking of groups of men and women to refer to them as separate groups and thus use two (conjoined) nouns, one marked in masculine plural and the other in feminine plural. However, if only one noun is used to refer to a mixed sex group, eg. when speaking of an ethnic/linguistic group, then the feminine plural seems to be commonly, but not exclusively, used, eg. *hadza-be?e* ‘hadza people’ or ‘people/human beings’.

The gender specific personal nouns can only take either masculine or feminine markers. All such nouns referring to male persons take masculine

³ Labels of semantic classes are given in small caps.

marking, and vice versa. (There may be examples where feminine nouns occur, at least in the singular, with what looks like the masculine singular marker, eg. -Ø. Since the root is only used in the feminine, it may very well be that it can sometimes be deleted, eg. *?aija* and *?aija-ko* ‘woman’.)

3.2 Animals

With regards to names of animals, there are some rather clear classes, while other parts of this semantic field are much less clear, eg. ‘birds’. One class has already been mentioned, the class encompassing CARNIVOROUS MAMMALS, such as cats, dogs and genets. All the words in the class are masculine.

| | | |
|-----|---------------------------------------|---------------|
| (2) | <i>seseme, mondo</i> | ‘lion’ |
| | <i>ɲ!e, dzandzai</i> | ‘leopard’ |
| | <i>mbugida</i> | ‘hunting dog’ |
| | <i>molola, k^wetɕ’e</i> | ‘jackal’ |
| | <i>gojegoda, k^wi?uguda</i> | ‘genet’ |

A doglike animal that seems to be excluded from this group is the *?embege-ko* ‘bat-eared fox’, which, apart from the other animals in the class, do not feed on large prey, but mainly termites. It might be possible to include MONGOOSES in the class above. Like the larger carnivores, the mongooses are all masculine, as in the following examples:

| | | |
|-----|-----------------|-----------------------|
| (3) | <i>dumpunia</i> | ‘marsh (?) mongoose’ |
| | <i>kaŋga</i> | ‘dwarf (?) mongoose’ |
| | <i>ts’anŋka</i> | ‘banded (?) mongoose’ |

Turning to grazers, many LARGE AND DOMESTIC GRASS-EATERS are feminine. This class is not very solid, however, but a few examples are given below. Further, all of the small DUIKERS AND DIK-DIKS are feminine, whereas BUSH-AND REEDBUCKS are all masculine.

| | | |
|------|-------------------|-------------------|
| (4a) | <i>biso-ko</i> | ‘wildebeest, gnu’ |
| | <i>k!’ele-ko</i> | ‘hartebeest’ |
| | <i>?atseka-ko</i> | ‘cow’ |
| | <i>?ala-ko</i> | ‘goat’ |
| (b) | <i>geweda-ko</i> | ‘dik-dik’ |
| | <i>fefe-ko</i> | ‘sp. duiker’ |

| | | |
|-------|--|--------------|
| | <i>ts'ets'e?e-ko</i> | 'sp. duiker' |
| (c) | <i>?utumbeda, tsimaŋgana, k'uŋgulu</i> | 'bushbuck' |
| | <i>ŋgunilalo, ndza, mindza</i> | 'reedbuck' |

As mentioned, the names of birds are not easily classified according to obvious semantic criteria. There appears, at least superficially, to be a semantic basis for the assignment of gender even in this group. For instance, DOVES AND PIGEONS, and maybe HERONS AND STORKS, are chiefly masculine, but not much more can be said here. Among the “lower” animals, there is a clear tendency for shape to be one of the qualities involved in gender assignment. Two clear classes are SNAKES and LONG, THIN INSECTS, both being masculine.

| | | |
|-------|----------------------------|-------------------|
| (5a) | <i>?ijato</i> | 'snake' |
| | <i>łano</i> | 'python' |
| | <i>milo</i> | 'spitting cobra' |
| | <i>k//iteleka, k/umase</i> | 'puff adder' |
| (b) | <i>tfahi</i> | 'sp. maggot' |
| | <i>dudujeka</i> | 'sp. larva' |
| | <i>kata?une</i> | 'sp. caterpillar' |
| | <i>ku?itf'i</i> | 'sp. millipede' |
| | <i>k^wemba</i> | 'sp. centipede' |

Among other insects, SPIDERS and TERMITES are all feminine, whereas most members of BEES AND WASPS appear in the masculine.

3.3 Plants

TREES AND PLANT species are generally feminine,⁴ and this is also true for most TUBERS AND EDIBLE ROOTS. The general term for ‘tree’, however, is masculine. Most PARTS OF PLANTS, eg. ‘twigs’, and the majority of BERRIES AND FRUITS are masculine.

| | | |
|------|---------------------|-------------------|
| (6a) | <i>ŋ//oba-ko</i> | 'baobab tree' |
| | <i>muhi-be?e</i> | 'tamarind tree' |
| | <i>k'ada-pe?e</i> | 'desert rose' |
| | <i>munan?ale-ko</i> | 'candelabra tree' |
| | <i>mukuju-ko</i> | 'fig tree' |

⁴ While not in itself constituting evidence, this is also the intuition of the speakers. Other than TREES, they also mentioned STONES as being typically feminine.

| | | |
|------|------------------------|--------------------------|
| (b) | <i>muʔa, ts'iti</i> | 'twig, stick' |
| | <i>ʔawata</i> | 'branch' |
| | <i>wili-piʔi</i> | 'root' |
| | <i>ɲaɲa</i> | 'kind of fruit' |
| | <i>ʔandaranda-biʔi</i> | 'kind of unripe berries' |

There is also a connection between this last class and the class of FOOD (see 3.5 below), which is also for the most part masculine.

3.4 Body and body parts

This is not an easy category to address; there are many nouns of similar meaning appearing in both masculine and feminine. Clearly feminine, though, is HAIR AND BODY COVER ('bald head' is masculine), and GENITALIA are masculine.

| | | |
|------|-------------------------------------|-------------------|
| (7a) | <i>haʔ'e-ko</i> | 'hair' |
| | <i>wagala-ko</i> | 'pubic hair' |
| | <i>goloʔo-ko</i> | 'mane (of lion)' |
| | <i>ɲgala-ko</i> | 'mane (of zebra)' |
| | <i>haija-ko</i> | 'feather' |
| | <i>k'olok'olo-beʔe</i> | 'pangolin scales' |
| (b) | <i>wanɲga, balanɲgo, ɲ/alaʔatʃa</i> | 'bald head' |
| (c) | <i>tʔ'ufu</i> | 'penis' |
| | <i>dʒili, k'itʃ'irintoʔo, ntʃa</i> | 'clitoris' |
| | <i>k'uda</i> | 'genitals' |

Internally, BLOOD VESSELS, INTESTINES AND BONES are masculine, whereas MUSCLES are feminine.

| | | |
|------|------------------------------------|-------------------------|
| (8a) | <i>ʔatama-piʔi, gomoda, lahipi</i> | 'blood vessels' |
| | <i>k//amba-piʔi, ts'ikisi-biʔi</i> | 'intestine' |
| | <i>kimpisa</i> | 'part of intestine' |
| | <i>pafapafa</i> | 'collarbone' |
| | <i>hats'ats'e</i> | 'bone of leg' |
| | <i>k'ats'a</i> | 'breastbone' |
| (b) | <i>tʃetatʃeta-ko</i> | 'muscle of the chest' |
| | <i>matanɲ^wa-ko</i> | 'arm muscle' |
| | <i>k'ats'a-ko</i> | 'muscle of the abdomen' |

Generally in body parts, as we have above, there is a tendency for long, thin objects to be masculine, but there are several exceptions here. However, we might give some additional examples of such nouns:

| | | |
|-----|------------------------------|----------------------|
| (9) | <i>k/uti</i> | ‘neck’ |
| | <i>?asena</i> | ‘leg’ |
| | <i>wits’iwits’i</i> | ‘long tail of birds’ |
| | <i>?uk^wa</i> | ‘finger’ |
| | <i>k/ikirij/a, k/ikiij/a</i> | ‘pinkie finger’ |

As for DISEASES AND AILMENTS, these are with few exceptions masculine. Two such exceptions might be genital diseases and headaches, but the data here is rather thin.

| | | |
|------|--------------------|------------------|
| (10) | <i>bulule</i> | ‘fever, disease’ |
| | <i>mbili</i> | ‘leprosy’ |
| | <i>kisepela</i> | ‘tuberculosis’ |
| | <i>k/etene?e</i> | ‘pain’ |
| | <i>hats’e</i> | ‘hunger’ |
| | <i>?a?umpi</i> | ‘boil’ |
| | <i>tʃ’ihi-bi?i</i> | ‘pus’ |

3.5 Substances

This is basically a masculine domain. Most LIQUIDS, FOOD, and other substances belong to this gender. Some notable exceptions exist of course, eg. *?atama-ko* ‘menstrual blood’, which is feminine in contrast to ‘blood’, which is masculine. Various terms for kinds of honey are rather evenly distributed between genders.

| | | |
|-------|---|----------|
| (11a) | <i>?ati-bi?i</i> | ‘water’ |
| | <i>?atama</i> | ‘blood’ |
| | <i>?ahumi-pi?i</i> | ‘urine’ |
| | <i>hats’apik^wa-pi?i</i> | ‘tears’ |
| | <i>ntuli-bi?i, gasa-bi?i, mak’ani?ijami</i> | ‘beer’ |
| | <i>hatf’e?e, k’ada</i> | ‘poison’ |
| | <i>mak^wi-bi?i</i> | ‘soup’ |
| | <i>k//itʃ’i?a-pi?i</i> | ‘semen’ |

| | | |
|------|----------------------------|----------------------------|
| (b) | <i>manaketa, didadida</i> | ‘maize porridge’ |
| | <i>kaʔafa-piʔi</i> | ‘porridge of baobab flour’ |
| | <i>daranga</i> | ‘flour’ |
| | <i>monoda</i> | ‘salt’ |
| | <i>kipolo</i> | ‘leftovers’ |
| | <i>tumbate</i> | ‘tobacco’ |
| (c) | <i>tfuma, galijanda</i> | ‘metal’ |
| | <i>k//ok’^wa</i> | ‘charcoal’ |
| | <i>tf’umuwa</i> | ‘dirt’ |
| | <i>hitf’i</i> | ‘excrement’ |
| | <i>hohoʔa-piʔi</i> | ‘air’ |

3.6 Natural phenomenon

Under this header most phenomena occurring in nature, not directly associated with humans or human activities, will be included. First, ‘sun’ and ‘moon’, being feminine and masculine, respectively.

| | | |
|------|----------------|--------|
| (12) | <i>ʔifo-ko</i> | ‘sun’ |
| | <i>seta</i> | ‘moon’ |

Related to these, we find a dichotomy between ‘day’ and ‘night’.

| | | |
|------|--------------------|---------|
| (13) | <i>ts’ifija-ko</i> | ‘day’ |
| | <i>ts’ifi</i> | ‘night’ |

The semantic class of WEATHER seems very clear-cut.

| | | |
|------|---------------------------------|-------------------|
| (14) | <i>boboygongo</i> | ‘thunder, storm’ |
| | <i>malundi-piʔi</i> | ‘clouds’ |
| | <i>poiʔa-piʔi, ts’utʃi-biʔi</i> | ‘wind’ |
| | <i>ʔati</i> | ‘rain’ |
| | <i>wilikuʔa ʔati</i> | ‘lightning’ |
| | <i>kitʃikitʃija</i> | ‘earthquake’ |
| | <i>ŋ//atʃ’ani-piʔi</i> | ‘cold wind, etc.’ |

As can be seen these are all masculine. Geographical landmarks except those connected with WATER (below), and possibly holes and caves, seem to be split between the two genders.

| | | |
|------|--|-----------------------------|
| (15) | <i>woʔo-ko</i> | ‘swamp’ |
| | <i>kela-ko, η^wapo-ko</i> | ‘river’ |
| | <i>lukumbu-ko</i> | ‘small puddle’ |
| | <i>k^wilik^wili-ko</i> | ‘well’ |
| | <i>kesati-ko</i> | ‘water-filled hole in tree’ |

3.7 Time and direction

Almost without exceptions, nouns denoting TIME and seasons are masculine (but cfr ‘day’ and ‘night’ above) and there is a tendency for nouns of DIRECTION to be feminine.

| | | |
|-------|----------------------------|----------------------------|
| (16a) | <i>hamaʔifo</i> | ‘today’ |
| | <i>ʔigolona-piʔi</i> | ‘yesterday’ |
| | <i>ʔifowa</i> | ‘daytime’ |
| | <i>welapija</i> | ‘morning’ |
| | <i>talafa, η//akafe</i> | ‘afternoon’ |
| | <i>η^waka</i> | ‘year’ |
| | <i>hongola-piʔi</i> | ‘rain season Oct. to Dec.’ |
| | <i>motfonoda</i> | ‘dawn’ |
| (b) | <i>basa-ko</i> | ‘left’ |
| | <i>diroda-beʔe</i> | ‘west’ |
| | <i>nok^wa-ko</i> | ‘right’ |

4. Noun pairings and prototypical features

Here we will look at pairs of noun stems where masculine and feminine carry its own meaning, but are closely related. This is done to try to establish systematic differences depending on the gender assigned. The results will be supplemented with some of the findings of the semantic classes, in section 3, to attempt to arrive at a set of prototypical features that can be said to underlie the assignment of gender, or parts of it, in Hadza.

In the data used, some 40 pairs of nouns were found where masculine and feminine share the same noun stem. Some of these do not conform to any obvious pattern of semantic differences, but the vast majority does. However, they do not always point in the same direction, and it might be that several seemingly conflicting systems converge.

There are quite many cases where there is a difference in size, and where the feminine marks the larger of the two.

| | | |
|------|--|--|
| (17) | MASCULINE | FEMININE |
| | <i>ʔato</i> ‘small axe’ | <i>ʔato-ko</i> ‘large axe’ |
| | <i>ʔitɕ’a</i> ‘knife’ | <i>ʔitɕ’a-ko</i> ‘large knife’ |
| | <i>koʔo</i> ‘bow’ | <i>koʔo-ko</i> ‘rifle’ |
| | <i>lambuwa</i> ‘stump’ | <i>lambu-ko</i> ‘log’ |
| | <i>manze</i> ‘trunk of elephant (shrew)’ | <i>manze-ko</i> ‘trunk of elephant’ |
| | <i>mitɕ’a</i> ‘bone’ | <i>mitɕ’a-ko</i> ‘large bone’ |
| | <i>muʔa</i> ‘twig, thin stick’ | <i>muʔa-ko</i> ‘stick’ |
| | <i>muk!’u</i> ‘thicket’ | <i>muk!’u-ko</i> ‘bush’ |
| | <i>ts’ok’o</i> ‘fire’ | <i>ts’ok’o-ko</i> ‘large fire’ |
| | <i>ʔuk^wa</i> ‘finger’ | <i>ʔuk^wa-ko</i> ‘arm, hand’ |
| | <i>wati</i> ‘testicle’ | <i>wati-ko</i> ‘swollen testicle’ |
| | <i>ʔaha-piʔi</i> ‘teeth’ | <i>ʔaha-peʔe</i> ‘row of teeth’ |

There are very few noun pairings where the opposite occurs, that is, where the masculine represents the larger and the feminine represents the smaller of the two, but one such example is *kamuʔa* ‘lake’ and *kamuʔa-ko* ‘pond’.

The other pattern is, as has been touched upon above (cfr 3.2), that masculine nouns tend, to a larger extent than feminine nouns, to be long and thin, whereas feminine tend to be short and stout. Below are some additional examples of this.

| | | |
|------|--|---|
| (18) | <i>luʔu-piʔi</i> ‘long horns (of gazelle)’ | <i>loʔo-beʔe</i> ‘short horns (of buffalo)’ |
| | <i>ts’ahu</i> ‘long, thin tail’ | <i>ts’aho-ko</i> ‘short, stout tail’ |
| | <i>meleka</i> ‘deep baobab cave’ | <i>meleka-ko</i> ‘shallow baobab cave’ |
| | <i>peja</i> ‘long pipe’ | <i>peja-ko</i> ‘pipe’ |
| | <i>tɕ’omasa</i> ‘long pipe’ | <i>tɕ’omasa-ko</i> ‘short pipe’ |
| | <i>lotʃe</i> ‘awl’ | <i>lotʃe-ko</i> ‘small, short awl’ |
| | <i>ʔupuk^wa</i> ‘leg, thigh’ | <i>ʔupuk^wa-ko</i> ‘foot’ |
| | <i>ʔutume</i> ‘long spear’ | <i>ʔutume-ko</i> ‘short spear’ |

To some extent, the long/thin versus short/stout dichotomy seems contrary to the small versus large dichotomy suggested previously. For example, it is not obvious, perhaps, that ‘finger’ relates to ‘hand, arm’ in a different way than, say, ‘foot’ relates to ‘leg’, as is proposed here. However, it could be conceived that the two are related; thin things may be thought of as small, and, of course, stout or fat objects may very well be envisaged as being big.

From this, it is tempting to return to the semantic classes surveyed in 3 to see if the same, or indeed other, patterns are found there. At the same time, there is an obvious risk of exaggerating these patterns, as it may in fact be other reasons for their assignment to a certain gender. Looking at MAMMAL CARNIVORES there does not seem to be any connection to ‘small vs. large’ or ‘long vs. short’, as these mammals cannot be said to be either small or long/thin as masculine nouns would tend to be. Rather, it might be their common behaviour that forms the class, all being “hunters”, which is an exclusively male occupation.⁵ Similarly, that the class of TREES AND PLANTS should be of predominantly feminine gender is also not obvious from the prototypical features discussed here. On the other hand, PARTS OF PLANTS may very well be. Further, the classes of SNAKES and LONG, THIN INSECTS fit very nicely into the overall pattern. Moreover, these last classes have very few exceptions, which is something that strengthens the general pattern. Less apparent perhaps, it might be observed also among masculine body parts (cfr 3.4).

As touched upon above, ‘birds’ is a category which is not easily classified semantically. If we apply the prototypical features discussed here, we might, however, discern a possible pattern. In 3.2 it was noted that HERONS AND STORKS are generally masculine. Also the following examples of birds might be construed as basically long/thin:

- | | | |
|------|---------------------------|---|
| (19) | <i>ʔajumaje</i> | ‘long-tailed bird (paradise whydah/flycatcher, etc.)’ |
| | <i>gogogogo</i> | ‘flamingo’ |
| | <i>horogofaje</i> | ‘shrike’ |
| | <i>talifi, k!umumbuli</i> | ‘secretary bird’ |
| | <i>ʔohowani</i> | ‘crowned crane’ |

To this there are but a few counter-examples. The examples above, however, do not explain the vast number of nouns denoting kinds of birds.

We have only briefly touched upon classes of nouns where gender seems to be linked with what is perceived as typically male or female. But CARNIVOROUS MAMMALS may very well be such a class, as hunting is an exclusively male occupation (and possibly a female-herbivore connection could be discerned). Of course, the exception of ‘menstrual blood’ from the obviously masculine category of LIQUIDS is also a case point. No doubt gender assignment of other categories and specific words could be attributed to socio-cultural phenomena, but without a deep study of these very complex phenomena, it would be very speculative indeed to take this much further in the present study.

⁵ Naturally, there may be other reasons than this for their gender assignment.

The sun/day vs. moon/night is of course an interesting distinction, which could very well have such an origin.⁶

In conclusion, it seems that there is at least one complex of general prototypical features involved in the assignment of gender in Hadza (as well as several probable but less prototypical features, see 3). The main evidence comes from the noun pairings analysed in this section, and it points toward a basic division between masculine and feminine where masculine is primarily associated with long and thin objects and feminine with short and stout objects. In extension, the long/thin of the masculine might expand to include the more abstract and relative concept of ‘smallness’, and the short/stout of the feminine is taken to include the concept of ‘largeness’. While these features do not account for, or explain, the assignment of all nouns, they are evidently widespread enough to warrant special status as prototypical features.

Looking at gender assignment from an animate/non-animate perspective, we can conclude that there are lexemes in both categories that occur only in either masculine or feminine, and those that may surface in both (though one may be the ‘underlying’ gender). Regarding animates the determining factor is one sex, while among non-animates, size/shape seems to be the over-all decisive feature.

5. Summary

This paper has tried to investigate the semantic of gender assignment in Hadza, based on some 1,400 nouns. While preliminary, the investigation has yielded some basic structures and semantic classes of nouns. Most of these are of a ‘natural scientific’ and not socio-cultural nature. As an example of the latter, we might mention again the class of CARNIVOROUS MAMMALS, where it seems that the determining factor is the ‘hunting’ behaviour, which in the Hadza culture is an occupation solely for men.

Other, apparently clear-cut semantic classes, as discussed above in 3, include the feminine classes of TREES AND PLANTS, HAIR, and WATER and the masculine SNAKES, GENITALIA, DISEASES, and LIQUIDS.

Cutting through many of the semantic classes is what seems to be underlying, prototypical features, as discussed in section 4. Here long, thin and, possibly by extension, small objects tend to be masculine, whereas short, stout and, again possibly by extension, large objects tend to be found in the feminine.

⁶ Powers and Watts (1997:544) quote Bleek’s field notes, saying that Hadza women “become ‘ill’ when they see the moon” according to Hadza belief. I hope to return to this issue in a later paper.

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