A Survey of the Hatti Language from an Indo-European Perspective

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Abstract: The paper is a phonological introduction to Hatti together with a compilation of Hatti words with well-established meanings and a comparative survey of Hatti morphology. It is shown that Hatti is genetically related to Proto-Indo-European.

Keywords: Hatti, Anatolia, Indo-European.

1. Introduction

The Hatti language is an extinct language once spoken in the central part of present-day Anatolia in Turkey. It is rather scantily attested in documents written in Hittite, an Indo-European language of the Anatolian branch. Fewer than 400 Hatti words are known: Soysal (2004:271) lists “ungefähr 300 hattische Wörter” [about 300 Hatti words]. Only about half of them have securely identified meanings. It is usually considered that Hatti is a substrate of Hittite, which was spoken by newcomers who conquered the area where Hatti was spoken and ultimately replaced it:

The Anatolian languages are so laced with loanwords from their non-Indo-European neighbours that languages such as Hittite are often seen as having been superimposed on a Hattic substrate. (Mallory-Adams 2006:443)

Because of the nature of the remaining documentation it is impossible to determine when Hatti actually became extinct. The phonetic similarity of ‘Hittite’ and ‘Hatti’ is somewhat misleading: Hatti is indeed autoethnonymic but Hittite, which is a modern neologism, was historically called neš[ili] by the speakers of this latter language:

When based on geographic names, -ili often denotes the language (or some other cultural characteristic) of that region: URU nišili, našili, našumili (the latter two without determinative) ‘in the language of the city of Neša’, ‘in Hittite’; URU hattili ‘in the (pre-IE) language of the Hattians’, ‘in Hattic’. (Hoffner-Melchert 2008:292)

There is no direct genetic relationship between Hatti and Hittite but phenomena of geographic contact and replacement. To some extent the cultural relationship of Hittite to Hatti bears much similarity to that of Akkadian vis-à-vis Sumerian. For that matter Hatti is no longer called Proto-Hittite as this wording would suggest some kind of linguistic descent between Hatti and Hittite. The genetic affiliation of Hatti is not established with certainty. It has often been suggested to be “Caucasic” but this hypothesis has not gained much acceptance. In all cases it is not considered Indo-European but as the rest of the paper will show it can be shown to be related to Proto-Indo-European. Although I will use PIE as etymological basis for Hatti, this will be done for practical reasons. This does not mean that I consider Hatti to be Indo-European: the morphology of Hatti shows a number of differences from that of PIE. Hatti is in my opinion a close sister-language of PIE.

2. A sketch of Hatti phonology

Hatti is attested only written in Cuneiform as used in the Anatolian school, represented by Hurrian and Hittite as well. In that branch of Cuneiform script consonants can be graphically geminated and non-
geminated in the intervocalic position (a-ta vs. at-ta). The gemination is correlated with voiceless in Hittite and Hurrian: Hitt. -t< IE *d, *dh; Hitt. -tt< IE *t. In Hatti it seems that this graphical phenomenon is significantly less regular than the same opposition in Hittite or Hurrian. There are actually very few instances of geminates in Hatti corpora and they are often incoherent: compare for example (1) kuzan ‘hearth’ and tetekuzzan ‘large hearth’, (2) -hukur- ‘to observe, to see’ (< PIE *H₃ekw- ‘to see, eye’) with ŁU-haggazel- ‘an occupation in relationship with water’ (< PIE *H₂ekw- ‘water’). Gemination would therefore appear to be irrelevant. Alternations between graphies seem to be more informative than the graphies themselves. Needless to say that the writing system does not seem to be normative in any respect. A number of words show an alternation between š and t, and sometimes d: Šaru, Taru, Daru ‘Weather God’. Examples tend to show that the underlying phoneme was etymologically a voiced dental equivalent to PIE *d: this alternation may therefore stand for a fricative like /ð/. An interesting instance in that respect is Hatti p(a)raš ~ Greek πάρδαλις ‘panther’. Another alternation is between t and z: etymologically this indicates PIE *dh. The main contrast in Hatti appears to be between stop and spirant consonants. There are some indications that the opposition may have been similar to that of Spanish: voiceless stop ~ voiced spirant. The opposition: /bl/ ~ /w/ is elusive as in Hurrian. In general the graphic alternation between p and w is taken to stand for /l/ (Cf. Soysal 2004:184) but a spirant /l/ fits the data just as well. There is no clear indication of a contrast between a voiced -h- and a voiceless -h-: -h- originates in any of PIE non labialized velars without any apparent contrast. The affricate /ts/ is expressed by the signs of Z-series while the sibilant /s/ is written with the Š-series, as is the case for Hittite (Cf. Hoffner-Melchert 2008:37).

On that basis, Hatti had the following (graphic) system of consonants:

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<table>
<thead>
<tr>
<th>Hatti</th>
<th>PIE</th>
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<th>Hatti</th>
<th>PIE</th>
<th>Hatti</th>
<th>PIE</th>
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<tbody>
<tr>
<td>*p</td>
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<td>*s</td>
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</tbody>
</table>
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Table 1: Hatti consonants

On the whole, unless the graphic system thoroughly misrepresents Hatti and was inadequate to the point of concealing more phonemes than can be detected with explicit graphemes and embedded graphic alternations, the language must have had a fairly simplified phonological system. The sound correspondences with PIE are described in the following table:

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<thead>
<tr>
<th>Hatti</th>
<th>PIE</th>
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<th>PIE</th>
<th>Hatti</th>
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</thead>
<tbody>
<tr>
<td>*p</td>
<td>*p</td>
<td>*t</td>
<td>*t</td>
<td>*ts</td>
<td>*s</td>
<td>*k(u)</td>
<td>*kw, *gw, *ghw</td>
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<tr>
<td>*β</td>
<td>*bh</td>
<td>*ts</td>
<td>*dh</td>
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<tr>
<td>*m</td>
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<td>*n</td>
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<tr>
<td>(*w)</td>
<td></td>
<td>*l</td>
<td></td>
<td>*y</td>
<td></td>
<td>*y, Ø</td>
<td>*H₁</td>
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<tr>
<td>*r</td>
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</tbody>
</table>
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Table 2: Hatti-PIE Sound correspondences

The picture is an impressive collapse of oppositions for the velar consonants: PIE *k, *g, *gh, *H₂, *H₃ are all graphically represented by the single indiscriminate <-h->. What remains of the original situation reconstructed for PIE is a residual opposition between two units: (1) labiovelars *kw,
*gw, *ghw and (2) the other velar stops or spirants. The phonological oppositions are better preserved for coronals than for dorsals. There is no compelling indication that Hatti had a phonemic glottal stop as vocalic hiatuses are hardly ever attested: one may nevertheless cite the case of *šail-, *tail- ‘lord, man’ ~ PIE *deH₁r > Greek δήμος. It can be noted that Hatti preserves a distinction between *s and *ts which is not evidenced in Indo-European languages. The frequency of affricates in Hatti has increased because of the change *dh > /ts/.

The correspondences for vowels are presented in the following table:

<table>
<thead>
<tr>
<th>PIE</th>
<th>Hatti</th>
<th>PIE</th>
<th>Hatti</th>
</tr>
</thead>
<tbody>
<tr>
<td>*e /a/</td>
<td>a, e</td>
<td>*ei ~ i</td>
<td>a ~ i</td>
</tr>
<tr>
<td>*ə</td>
<td>a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*i</td>
<td>i</td>
<td>*oi ~ i</td>
<td>u ~ i</td>
</tr>
<tr>
<td>*o</td>
<td>u</td>
<td></td>
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<tr>
<td>*u</td>
<td>u</td>
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</tbody>
</table>

Table3: Correspondences for vowels

It is unclear whether Hatti actually had a distinction between /u/ and /o/. Cuneiform is notoriously opaque as regards the potential representation of /o/. There is no indication in graphies that this distinction may have existed.

3. Hatti vocabulary

Only the (176 or so) lexemata with well-established meanings are listed in the present paper. It is possible that the realization that Hatti is closely related to PIE will help decipher the language but at the present stage this would be of no avail to add words with no clear parsing nor meaning.

- *ah-, -waah- ‘to put, to organize, to order’ [Soysal (2004:274) “setzen, (ein)ordnen, befehlen”]. Translates Hittite dai-, watarnahh-. Et. PIE *aḡ- ‘to lead, drive’ and *wek(w) ‘to speak’. It is not clear whether this should be dealt with as one or two items.


- *an- ‘to come (inside ?)’ [Soysal (2004:274) “(herein?) kommen”]. Et. PIE *H₁en- ‘in(side)’.


- habalgi- ‘iron’ [Soysal (2004:278) “Eisen”]. Translates AN.BAR. Cf. Hurrian habalgi. It would appear that this word is a place-name: a town called Balki or Barki, with locative ha-.


-her-, hir- ‘to attribute, to decide, to arrange, to order, to rule’ [Soysal (2004:280) “zuteilen, bestimmen, einordnen, befehlen, verwaltet”]. Translates Hittite maniyahh-, tapariya-. Et. PIE *H₂er-yo- ‘lord’, *H₂er-gh ‘to command’, *H₂er- ‘to distribute’. There is quite possibly more than one root mixed up in Hatti data.


-hukur- ‘to observe, to see’ [Soysal (2004:281) “beobachten, schauen”]. Translates Hittite auš-. Et. PIE *H₂êkw- ‘to see, eye’.


-imallen ‘this, thus’ [Soysal (2004:282) “dies, auf diese Weise”]. Translates Hittite ka-. Et. PIE *i-mo-H₁il- ‘deictic particles’.

-inta, ida ‘thus, so’ [Soysal (2004:282) “(eben)so, in dieser Weise”]. Translates Hittite kiniššan-. Et. PIE *H₁endh- ‘deictic particle: here, there, then’.

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Et. PIE *ters- ‘dry’. Cf. Latin terra, Hurrian eše, Kassite yaš ‘earth, ground’. Possibly a compound meaning ‘land (that is) dry’.


-karkar- ‘to bury’ [Soysal (2004:285) “verscharren”]. Translates Hittite hahhariya-.


-kasbaruwyah- ‘bright’ [Soysal (2004:286) “strah lend, schimmernd”]. Translates Hittite laukkima-. Et. PIE *bhrH₂k- ‘bright’ with a first element kaš- < *PIE *kweit ‘white’ (?). The shape of kasbaruwyah suggests the following development: *kwoit-bhraH₂k > *kad-b(a)ruH₁aH > kadbaruyah.

-kaštip- [uncertain shape, ka- may be a prefix] ‘door’ [Soysal (2004:286) “Tor”]. Translates KÁ.

-kattah- ‘queen’ [Soysal (2004:286) “Königin”]. Translates MUNUS.LUGAL. Note that the feminine ending -ah can be compared with PIE *-eh₂. Cf. -katte-.

-katakumi- ‘wizard’ [Soysal (2004:287) “zauberkräftig ; Zauberer”]. Translates Hittite alwanzena-. Et. (?) The first part may be related to PIE *ghiu ‘to invoke (superior forces)’ > *ghu-to- ‘god’ and the second part could be PIE *(dh)ghum- ‘man, person’.

-katte- ‘king, lord’ [Soysal (2004:287) “König”]. Translates LUGAL. Et. (?) unclear relationship with PIE *ghiu ‘to invoke (superior forces)’ > *ghu-to- ‘god’. The word katte < *Kwate is highly reminiscent of Greek βασιλεύς < Mycenian qa-si-re-u < *ghwoti- (?).


-kip- ‘to protect’ [Soysal (2004:288) “Becher”]. Translates Hittite pahš-


-kun- ‘to see’ [Soysal (2004:290) “sehen”]. Et. PIE *H₂ekw- ‘eye, to see’. Cf. hukur-.

-kunku-, kukku- ‘to live, to be alive’ [Soysal (2004:290) “(intrans.) leben, am Leben sein; (trans.) am Leben halten”]. Translates Hittite hušuwant- eš-. Et. PIE *gweyH- ‘alive’.

-kur- ‘to stay, to be standing’ [Soysal (2004:291) “stehen (bleiben), sich aufrechthalten”]. Translates Hittite ar-.

-kurupal- ‘peg, nail’ [Soysal (2004:291) “Pflock, Nagel”]. Translates GĩGAG. Et. -kupal may have a relationship with *gembh- ‘tooth, nail’.


-kut- ‘soul’ [Soysal (2004:292) “Seele”]. Translates ZI. Et. in case PIE *kwēp ‘smoke, vapor’ would include a suffix -p-, then a variant *kwē-t- is thinkable.


-le-, -ale- ‘to be jealous’ [Soysal (2004:292) “neidisch sein; beneiden”]. Translates Hittite aršaniya-.


-lin-, -liyan- ‘to drink (?)’ [Soysal (2004:293) “trinken”]. Et. PIE *lei(H)- ‘to flow, to pour (water)’.


-lu- ‘to be able, to know (?)’ [Soysal (2004:293) “imstande sein, können”]. Translates Hittite za tarh-.

-LU-luizzil- ‘runner’ [Soysal (2004:293) “Läufer”]. Translates Hittite LUKAŠ₄,E. It is unclear if this word contains the root *√Hei-t- as in Hurrian izuri ‘runner’.


-mane ‘then, so that (?)’ [Soysal (2004:294) “dann, so daß”]. Et. PIE *me and Hurrian man. Cf. ma-.

-mar- ‘to split, slit’ [Soysal (2004:294) “schlitzen”]. Translates Hittite iškalli-. Et. PIE *me and Hurrian man. Cf. ma-.


-miš- ‘to take (for oneself)’ [Soysal (2004:295) “(für sich) nehmen”]. Translates Hittite za da-. Et. PIE *mei- ‘to exchange (goods)’ or *H₁em- ‘to take (away).’


-nimah-, -limah- ‘eye(s)’ [Soysal (2004:296) “Auge(n)”]. Translates Hittite šakuwa-.

-nimhut-, -nimhuš- ‘woman (?)’ [Soysal (2004:296) “Frau”]. Et. (?) PIE *meH₂ter ‘mother’. Hatti seems to display an initial extra segment -ni-.

-niw- ‘to stand, to exist’ [Soysal (2004:297) “sitzen; sich setzen”]. Translates Hittite eš-.

-ntel- ‘image, shape’ [Soysal (2004:297) “Bild, Gestalt, Körper(bau)”]. Translates Hittite ešri-. Et. (?) PIE *steH₂- ‘to stand’ with a different prefixation (?). Cf. -nti-.

-nti- ‘to stand, to exist’ [Soysal (2004:297) “stehen, bestehen, existieren”]. Translates Hittite ar-. Et. (?) PIE *steH₂- ‘to stand’ with a different prefixation (?).

-nu- ‘to come; to bring’ [Soysal (2004:297) “(intrans.) kommen, gehen; (trans.) bringen”]. Translates Hittite pai-, uwa-. Et. PIE *wen-dh- ‘to go’ and Hurrian un-.


-paštæ- ‘(battle) club’ [Soysal (2004:300) “ein Hiebgerät, etwa (Schlacht-)Keule”]. Et. PIE *peis- ‘to pound, crush’.


-pezil-, -wazil- ‘wind’ [Soysal (2004:300) “Wind”]. Translates Hittite huwa(n)tr-.


-pnu- ‘to observe, to look at’ [Soysal (2004:302) “beobachten, schauen”]. Translates Hittite ušk-. 


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- *pulup(ta)-* ‘a kind of bread’ [Soysal (2004:303) “eine Brotsorte”’]. Translates *NINDA* *harši*.


- *puš(e)-* ‘to eat’ [Soysal (2004:304) “fressen”’]. Translates Hittite *at*.

- *pušan-* ‘to blow, to fan’ [Soysal (2004:307) “hauchen, (an)fachen”’]. Translates Hittite *parai*-.


- *šail*- / *tail-* ‘lord’ [Soysal (2004:306) “Herr”’]. Et. (?) PIE *deH* 4 > Greek δῆµος. This word suggests that Hatti may have had glottal stop as a phoneme. Cf. *set*- / *sit*-. 

- *šam-* ‘to listen’ [Soysal (2004:307) “(an)hören”’].

*Šaru*, *Taru*, *Daru* ‘Weather God’. [Soysal (2004:307) “Wettergott”’]. Translates *d*M, *d*U. Because of the alternation *š* ~ *d* ~ *t* < *d*, Hatti *Daru* cannot have any relationship with the Hittite storm-god *TARHU(nt)-* (< PIE *terH*2-) who is in addition written *TIŠKUR*.


-teh- ‘to build’ [Soysal (2004:313) “bauen”]. Translates Hittite wete-.


-ti-, -te-, -zi- ‘to put, to be lying’ [Soysal (2004:315) “(intrans.) liegen; (trans.) (nieder)legen”]. Translates Hittite ki-. Et. the best comparandum is PIE *dheH₁- ‘to put, lay’.


-tuk-, -duh- ‘to draw near, to stand by’ [Soysal (2004:316) “hinterreten, beistehen”]. Translates Hittite tiya-. Et. It seems that the morpheme can be further parsed into PIE *ad- ‘to(ward)’ and *gwe-H₂-/m- ‘to come’.


dundu- ‘to conjure; to swear to’ [Soysal (2004:317) “beschwören”]. Translates Hittite uddaniya-. Et. PIE *oito ‘oath’.


-tuwahši- ‘wall’ [Soysal (2004:318) “Mauer(werk)’]. Translates Hittite kutt-. Et. PIE *dheigh- ‘to knead clay, make walls’. The change *i > w of *dhoy(e)gh- > tuwah- can be compared with *u > y in *leuk- > leliyah(u)- ‘light, shine’. It seems that *y and *w adjust to the preceding vowel in Hatti.


-urana- ‘edgy, angular’ [Soysal (2004:319) “kantig”]. Translates Hittite iatrant-.


-wur-, -pur- ‘country, population’ [Soysal (2004:324) “Land, Landesbevölkerung”]. Translates Hittite utne-, KUR, utniyant-, uddani-. *Et. PIE* *bhweH* ‘to grow, to be, to live’.


-wutiliš- ‘the long year’ [Soysal (2004:325) “das lange (Lebens)Jahr”]. *Et. PIE* *wet-* ‘year’.


-zar(aš)- ‘to call’ [Soysal (2004:326) “rufen”]. Translates Hittite halzai-, kalleš-. *Et. PIE* *dheH₁* ‘to speak’. Cf. -zel-.

-zari(l)- ‘human, mortal’ [Soysal (2004:326) “der Sterbliche; Mensch”]. Translates Hittite dandukeššar-.


-zel-, -zil- ‘to cry’ [Soysal (2004:327) “schreien, weinen”]. Translates Hittite waï-. *Et. PIE* *dheH₁* ‘to speak’. Cf. -zar(aš)-.

-zi-pinu- ‘young child’ [Soysal (2004:327) “kleines Kind”]. *Et. PIE* *dheH₁* ‘to suck, breastfeed’.


-zuwatu-, -ziwatu-, -ziwašiu ‘wife’ [Soysal (2004:330) “Gattin, Gemahlin”]. Translates DAM. *Et.* PIE *dheH₁* ‘to suck, breastfeed’. Because of the alternation t ~ d ~ š ~ *d, this word cannot have a relationship with *wadh-* > *wedding*.

4. A survey of compounds

Attested compounds include:

-ištarrazil- ‘earth, ground’ = ili- (Noun) + tarraz- (Adj.) ‘dry’
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-kašbaruyah- ‘bright’ = kaš- (Adj.) ‘white’ + baruyah- (Adj.) ‘bright’

d-Šulin-katte ‘Sun-god’ = Šulin- (Noun) ‘sun’ + katte (Noun) ‘king’

d-Telipinu- ‘the Sublime Son’ = teli- (Adj.) + binu (Noun) ‘son’

d-tetekuzzan- ‘large hearth, foundry oven (?)’ = tete- (Adj.) + kuzzan (Noun) ‘hearth’

d-tetešhawi- ‘the Great Goddess’ = tete- (Adj.) + ešhawi (Noun) ‘god’

d-tetemu- ‘the Great Mother (?)’ = tete- (Adj.) + mu (Noun) ‘mother’

t-tittahzilat- ‘great throne’ = tittah- (Adj.) + zilat (Noun) ‘chair’

d-windukkaram- ‘butler, cupbearer’ = windu- ‘wine’ (Noun) + karam- ‘wine (ration)’ (Noun)

d-Wurunkatte- ‘the Earth King’ = wuru(n) (Noun) + katte (Noun)

d-Wurunšemu- ‘the Earth Mother’ = wuru(nše) (Noun) + mu (Noun)

-zi-pinu- ‘young child’ = dheiHf- (Verb) ‘to suck, breastfeed’ + binu (Noun) ‘son’

5. A survey of noun morphology and case-markers

The cases are indicated with suffixes, added to both nouns and adjectives, and what appears to be prepositions. The different case-markers are:

Absolutive: -Ø. This case is used for the subject, the object and after prepositions. There is no trace of an “Ergative”-like case-marker -š in Hatti.

Accusative: indicates the definite direct object of a transitive verb: -š ~ -t (< *-d): ure-š (Adj.) huzzašai-šu (Noun) ‘the strong smith’. Nouns take an extra vowel -u- when compared to adjectives.

Genitive: -(u)n (< PIE *(o)n): zari-un ‘of the man’ ~ wa-zari-un ‘of the men’.

Locative: -i, -e (< PIE *(e)i): ha-wur-i ‘in the ground’ ~ ha-wur-Ø ‘into the ground’.


Plural is indicated by -p / -w- with vowel -a- for adjectives and -i- for nouns: wa-šah ‘the angry ones’ ~ wi-pizil ‘the winds’. This Plural marker may be related to PIE dual *-Hu.

Examples of prepositions:

ha-, ka- ‘under, at (with Loc.), for, to (with Abs.)’ (< PIE *gho): ha-wa-šhap-i ‘under the gods’, ha-wur-i ‘in the ground’ but ha-Daru-Ø ‘to the god Daru’ (with movement).

pi-, wi- ‘in(to)’ (< PIE *bhi): pe-wil-Ø ‘into the house’, translates Hittite É-ri anda.

zi- ‘down from’ (with Abl.) (< PIE *de): zi-yah-šu / -tu / -du ‘from the sky down’.

Prepositions are also used as preverbal formatives as will appear below.
6. Hatti verb template

Hatti had a fairly rigid verbal slot pattern as described in Soysal (2004:187-201). The first and second slots are the subject and direct object of the verb. The next slots are prepositions used as preverbal formatives. Tense markers are suffixed to the verb stem. Enclitic conjunctions come last.

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<tr>
<th>1</th>
<th>2</th>
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<th>5</th>
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</tr>
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<td>Object</td>
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<td>Stem</td>
<td>Tense</td>
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</tr>
<tr>
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<td>-ma</td>
</tr>
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<td>-b-</td>
<td>-ha-, -ka-</td>
<td>-e- Future</td>
<td>-</td>
</tr>
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<td>-n-</td>
<td>-haš-</td>
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</tr>
<tr>
<td>P1Pl</td>
<td>ai-, e-</td>
<td>?</td>
<td>-zi-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>P2Pl</td>
<td>uwa- ?</td>
<td>?</td>
<td>-wa-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>P3Pl</td>
<td>Ø-, a-</td>
<td>-š-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table4: Hatti verb template (simplified)

A peculiarity of Hatti when compared to PIE is that the pronominal morphemes are prefixed to the verb stem instead of being suffixed. Some of the Subject prefixes are also used to express possession with nouns: wa- (?) ‘my’, u- ‘thy’, le- ‘his’, d/še- ‘her’, ai- (?) ‘our’, uwa- ‘your(s)’, iwa- ‘theirs’. Some of these pronouns include the Plural marker -wa-. Some of these elements have obvious PIE counterparts with the positional difference that PIE suffixes these morphemes:

<table>
<thead>
<tr>
<th>Hatti</th>
<th>PIE</th>
<th>Hatti</th>
<th>PIE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>Object</td>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>P1Sg</td>
<td>wa-</td>
<td>-ō</td>
<td>-h-</td>
</tr>
<tr>
<td>P2Sg</td>
<td>u(n)-</td>
<td>t-ū</td>
<td>-b-</td>
</tr>
<tr>
<td>P3Sg</td>
<td>Ø-, a-</td>
<td>-e</td>
<td>-n-</td>
</tr>
<tr>
<td>P1Pl</td>
<td>ai-, e-</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>P2Pl</td>
<td>uwa- ?</td>
<td>vō-s</td>
<td>?</td>
</tr>
<tr>
<td>P3Pl</td>
<td>Ø-, a-</td>
<td>-š-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table5: Comparative table of Hatti-PIE pronouns


7. Conclusions or perspectives

This survey of the clearest lexemes and morphemes of the Hatti language reveals that this language bears very strong genetic affinities with Proto-Indo-European, even though it appears that a number of Hatti morphemes are not affixed in the same positions as in the Indo-European languages. In my opinion the discovery that Hatti is related to PIE must have very positive consequences when it comes to understanding the language and disentangling its vocabulary and morphology. I hope to have contributed with this paper to an improved decipherment of Hatti.
A Survey of the Hatti Language

References

Hoffner, Harry A. Jr.; Melchert, H. Craig

Mallory, James P.; Adams, Douglas Q.

Soysal, Oğuz