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UTO-AZTECAN **ps* AND SIMILAR CLUSTERS, AGAIN¹

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As part of the case for reconstructing a **ps* cluster in Proto-Uto-Aztecan (PUA), Manaster Ramer and Blight (1993) proposed the following Uto-Aztecan (UA) cognate set:

- | | | |
|--------------------|-----------------------------|---------------------------|
| (1) PUA: | <i>*hapsi</i> | ‘overtake, reach, arrive’ |
| Northern UA (NUA): | | |
| Tubatulabal: | <i>apsV-</i> | |
| Southern UA (SUA): | | |
| Oodham: | <i>aha</i> (< <i>*asa</i>) | |
| Cahita: | <i>yepsa</i> | |
| Guarijio: | <i>asi-</i> | |
| Eudeve: | <i>hase-n</i> | |
| Nahuatl: | <i>ahsi</i> | |

However, in reality, things are more complicated. Specifically, in Oodham we find not only *aha* ‘overtake; reach (a place or condition); continue until (a specified time); infect; (of time) to arrive’ but also *jiwia* ~ *jiia* ~ *jiwa* ‘arrive’, together with a related bound form *jiwhia-* and a reduplicated form *jijiwhia*.

Under the known sound laws for Uto-Aztecan, we would have to derive *aha* from **asa* or **hasa*, and to trace *jiwia* and its congeners to something like **yipsia*. This is because in Oodham **h* disappears, **s* goes to *h*, **p* changes into *w*, and **y* becomes *j*. Given these facts, it must surely follow that it is this pre-Oodham **yipsia* which is related to Cahita *yepsa*, while pre-Oodham **hasa* is presumably cognate with the Eudeve, the Guarijio, and the Nahuatl forms. We are thus dealing with two quite distinct Proto-Southern-Uto-Aztecan (PSUA) etyma, which at a first approximation would have been something like **yipsV* (with a rather trivial conditioned vowel change required to get from **yipsV-* to **yipsV-* in Oodham) vs. something like **hasV* (although, as we shall see, the Nahuatl form argues for a more complex reconstruction of the latter).

¹ I would like to acknowledge some very helpful comments by the editor of this *Journal* and especially those by the late Wick R. Miller, whose unfailing support and encouragement for my work on Uto-Aztecan syllable-final consonants I will treasure always.

There remains a major web of difficulties centering on the relationship of the Southern UA (SUA) forms with Northern Uto-Aztecan (NUA), specifically Tubatulabal, ones. To begin with, it is not immediately apparent which of the two newly proposed PSUA etyma is related to Tubatulabal *apsV*- 'to catch up with'. Specifically, the *ps* cluster might seem to suggest a connection with **yĩpsa*, while the initial *a* points to an affinity with **hasV* instead, since there is no known way to get Tubatulabal *a* from a **yĩ* sequence.

The problem is solved once we consider another cognate set presented in Manaster Ramer and Blight (1993), namely:

- (2) PUA: **kapsi* 'thigh'
 NUA:
 Hopi: *qa^hsi*
 Tubatulabal: *hapsi-l*
 Luiseño: *qaas̥i-l*
 SUA:
 Oodham: *kahi-o* 'leg'
 Guarijio: *kasi*

Here we find that Oodham *h* corresponds to Tubatulabal *ps*. This means that we can now legitimately assume that Tubatulabal *apsV*- is related, not to Oodham *jiwhia* and Cahita *yepsa*, as seemed at first, but rather to Oodham *aha* and its kin.

As a result, we can no longer project the PSUA **yĩpsV* (reflected in Cahita *yepsa* and Oodham *jiw(h)ia*) back to PUA for lack of NUA cognates. However, we do have reason to posit an unrelated PUA form, attested in both NUA and SUA, which reconstructs to **hapsV*. It is from this latter form that we would derive Tubatulabal *apsV*-, Oodham *aha*, Guarijio *asi*-, Eudeve *hase-n*, and Nahuatl *ahsi*.

There is now, however, a difficulty in trying to explain the Oodham reflexes of **hapsV* (as well as of **kapsi*). For, if *jiw(h)ia* et al. are indeed the Oodham reflexes of PSUA **yĩpsV*, then we must conclude that in this language **ps* gives *wh* (alternating with *w* under so-far mysterious conditions). Thus, proto-forms like **hapsV*- and **kapsi*, which would seem to be required by the Tubatulabal facts, would (incorrectly) predict something like **awha* and **kawhio* in Oodham instead of, or as alternates of, the correct *aha* and *kahio*. As a result, there would appear to be a problem fixing the reconstruction of the middle consonant (or cluster) of these two etyma. On the one hand, it would seem (because of the Oodham facts) that this was not **ps*. On the other hand, the Tubatulabal forms *apsV*- and *hapsi-l* point precisely to **ps*. Moreover, the Nahuatl reflex of the former etymon, namely, *ahsi*, and the Hopi reflex of the latter etymon, namely, *qa^hsi*, also argue for clusters ending in *s*.

In the case of Hopi preaspiration, the situation is especially clear because we have ample evidence that the first elements of almost all PUA consonant clusters are realized as preaspiration in this language (Manaster Ramer 1993a). As far as Nahuatl is concerned, as far back as Sapir (1915) it was seen that Nahuatl *h* might be a reflex of some PUA syllable-final consonants. According to my latest findings (Manaster Ramer 1995; 1996), the vast majority of PUA syllable-final consonants are simply lost in Nahuatl, but it does seem that some of them do survive as *h*. It is consistent with everything we know to assume that **ps* would yield Nahuatl *hs*, and we find support for this assumption in the fact that Nahuatl has *ihsa* 'to awaken' from PSUA **pusaC*. The derivation here is likely to have begun with the pervasive but still somewhat opaque processes occurring early in the history of Nahuatl (namely, syncope and prothesis or else metathesis) which resulted in the loss of the first vowel of many stems and the appearance of a vowel before the resulting consonant cluster (see Campbell and Langacker 1978:203–4, 207 and Dakin 1982:33–35, 50, 62). In other words, we would have had something like **pusaC* > **pusa* > **pisa* > **ipsa* > *ihsa*. While the example before us would not have been a case of PUA **ps*, it could have shared the fate of such original clusters.

The situation thus seems to be that, having already proposed a variety of PUA syllable-final consonants, occurring both word-finally and in such clusters as **c*, **tw*, **ps*, etc. (Manaster Ramer 1984; 1986; 1991a; 1991b; 1992a; 1992b; 1992c; 1993a; 1993b; 1995; 1996; forthcoming), I would now almost seem compelled to postulate yet another cluster, distinct from **ps*. This new cluster, which we could denote by **Xs*, is what would be posited in the two etyma which would now be written **haXsV* and **kaXsi*. The assumption would be that this cluster merged with **ps* in Tubatulabal but with **s* in Oodham (as well as in Guarijio and Eudeve).

However, this new proposal would reduce the evidence for **ps* to the single example of **yïpsV*, which, as noted, has no reflexes outside of SUA. The limited distribution of this latter etymon in turn suggests that it may be quite late, datable to after the breakup of PUA. As a result, the **ps* sequence we find in it might not reflect a genuine PUA **ps* cluster. If so, then we may suppose that **Xs* was really **ps* after all, but that such an original PUA **ps* cluster was distinct from secondary **ps* sequences that might have arisen in PSUA (or in some later ancestral language of Cahita and Oodham).

The likeliest way to get a secondary consonant cluster is, of course, through some kind of syncope. If we supposed **yïpsV* to come from an earlier **yïpVsV*, then the different reflexes we find in Oodham *aha* and *kahio* vs. *jiw(h)ia* would reflect an earlier contrast between **hapsV* and **kapsi*, on the one hand, and **yïpVsV*, on the other. This hypothesis is supported by the facts surrounding an apparent **k^ws* cluster found in at least one etymon in

several UA languages, including Oodham and Cahita, a cluster which on closer inspection turns out to have arisen precisely via syncope:

- (3) PUA: **hiik^wisi* ‘breath’
 NUA:
 Hopi: *hik^wsi* ‘breath’
 Luiseño: *hak^wis-* ‘to breathe, be alive; to take a rest’
 hik^wsa-š ‘breath, life; fontanel’
 SUA:
 Oodham: *i:bhei* ‘breath’
 i:bam ‘get out of breath’
 Eudeve: *hibes* ‘heart, soul’
 hibestuu-n ‘to come back to life’
 hipsi, hisi ‘alive’
 Cahita: *hiapsa* ‘to live’
 hiapsi ‘life, soul, spirit’
 hiabi-te ‘to breathe’
 (← **hiabih-te* ← **hiabis-te*)

Since some of these forms are attested with a vowel separating the two consonants, we may reasonably conclude that we are dealing with secondary clusters in this etymon. It may also be added that such further cognates as Tubatulabal *ihki-* ‘to breathe’ and Guarijio *iwi-* ‘to breathe’ are probably best explained as reflecting a proto-form like **hiik^wi*, thus implying that **hiik^wisi* was morphologically complex, i.e., **hiik^wi-si*. The existence of a secondary **k^ws* cluster, due to syncope, in the very languages under discussion makes it reasonable to assume a similar course of development for the (secondary) **ps* cluster.

Not surprisingly, when I went back to the sources for Cahita, I discovered analogous forms (with a vowel separating the two consonants) in the case of **yipVsV*, such as *yebih-* (← **yebis-*) and *yebisu-*. These forms, which were missed by Manaster Ramer and Blight (1993), seem to cinch the case for the proto-form being not **yipsV* but rather **yipisV* (or perhaps, just as in the case of **hiik^wi-si*, a morphologically complex etymon **yipi-sV*).

We might add that it is perhaps no coincidence that the Oodham reflexes of both the secondary clusters show similar alternations: **k^wVs* gives, as the examples indicate, *bh* ~ *b* (*b* being the regular reflex of **k^w*), while **pVs* yields, as noted, *wh* ~ *w*.

We can thus have our cake and eat it, too. Instead of two different proto-clusters (**ps* and **Xs*), we posit two different kinds of **ps* clusters, original (PUA) ones and secondary (PSUA or even later) ones. This latest twist calls to mind the Indo-Europeanist problem of the correspondence between clusters of velar stop + coronal stop (*KT*) in Greek and clusters of velar stop +

sibilant (*KS*) in Indo-Iranian. To account for the stop/sibilant correspondences found only in these clusters, it was accepted practice for decades to postulate a special series of interdental fricatives (or the like) for Proto-Indo-European (Brugmann and Delbrück 1897–1900:1:790). It apparently took more than a generation for it to become more or less clear (Brandenstein 1936)—and another generation or two for it to become rather widely accepted (e.g., Schindler 1977 and Mayrhofer 1986:150–58)—that there were in reality merely two kinds of **KT* clusters involved.² Although the details remain, as it appears, considerably murkier in Indo-European than in Uto-Aztecan, the real difference between the spurious Indo-European interdentals and the spurious Uto-Aztecan **Xs* cluster is perhaps that, once the lesson of Indo-European had been learned, the Uto-Aztecan case naturally took only a few months to be recognized as spurious, and not a quarter of a century or more.

In any event, the Oodham forms *aha* and *kahio* can now be derived from PUA reconstructions with **ps*, i.e., **hpsV* ‘to arrive’ and **kapsi* ‘thigh’. Of course, the evidence for this cluster is less robust than it once seemed. Since Cahita *yepsa* no longer belongs here, all we are left with is the *ps* in Tubatulabal, the preaspiration in Hopi, and the *h* in Nahuatl. Nonetheless, I remain committed to the PUA **ps* cluster, for the very good reason that it would be difficult to derive the Tubatulabal, Hopi, and Nahuatl forms from anything other than such a cluster and because the evidence for consonant-final syllables in PUA generally seems to me to be compelling.

It is striking that the secondary **ps* cluster is much better preserved than is the original PUA cluster. Thus, Hopi, Luiseño, Oodham, and Cahita all have actual clusters in the former case, while in the case of true PUA clusters these languages show at best preaspiration (in the case of Hopi) and at worst nothing at all (in the case of Luiseño and Oodham).³ This is, of course, as it should be, because the older sequences have had that much more time to get eaten away by the effects of accumulated sound changes. But it still is a bit unsettling to realize that it is precisely in those cases where the superficial indications of a cluster are the strongest that we must be the most cautious about granting it PUA status. When (in UA languages, at least) a cluster looks too good to be true, it probably is.

All this leads me, finally, to yet another PUA etymon which, as noted by Manaster Ramer and Blight (1993), shows *ps* in Tubatulabal but whose

² I disagree with Mayrhofer’s (1986:150) interpretation of Brugmann’s interdentals as a mere “*Notbehelf*.” My reading is that Brugmann was tentative only about the specific phonetic features of these sounds, not about their existence as distinct Proto-Indo-European sounds (phonemes as we would now say, though, of course, he did not). I should also observe that I am not as yet convinced one way or the other about whether it is crucial, or a coincidence, that most of the examples where we find *KT* in Greek vs. *KS* in Indo-Iranian come from earlier **TK*.

³ Cahita appears to lack any relevant cognates.

other reflexes are quite different from those we have been considering so far. At the time, we suggested that this word might have contained PUA **sp*, although I shall now argue that this was wrong:

- (4) PUA: **oCCi* ‘teardrop’

NUA:

Tubatulabal: *opsi-*

Serrano: -*ōšp*

Luißeño: -*es*

Cupeño: -*is*

SUA:

Oodham: *oo’og*

Eudeve;⁴ *ope-t*

Cahita:⁵ *op-wa-m, okš-a-m*

Guarijio: *o’ke-wa*

The alternation between the Eudeve (SUA) *p* and the Luißeño/Cupeño (NUA) *s* would, of course, by itself point to a cluster in this etymon, but which one? Tubatulabal and Serrano both preserve a cluster, but one of the two languages must have metathesized it. Because the reflexes are so different from those of **ps*, it seemed obvious that it was Tubatulabal, and that the original PUA form had the (otherwise unattested) **sp* cluster. However, I have since realized that it is Serrano which must have done the innovating, since the Kitanemuk dialect (Anderton 1988), which is otherwise nearly identical to Serrano, has *opši-č*. Thus, the NUA evidence here points simply to **ps*, and we must seek a different explanation of the reflexes in SUA.

Turning now to the SUA data, we see evidence of a form like **oCCi-wa*, with a suffix *-*wa*, before which the final vowel of **oCCi* has syncopated in Oodham and Cahita. This serves to obscure the picture considerably. Cahita *op-wa-m* (~ *okš-a-m*) could be quite regular, assuming that **opsi-wa-mV* went to **ops-wa-m* and then to *op-wa-m* (or *okš-a-m*). But there are, as noted above, no clear examples of PUA **ps* in Cahita, so these forms really only tell us that there was surely a cluster here but they do not allow us to determine whether we are dealing with the same cluster as in **hapsV* and **kapsi* or not.

Oodham is even less helpful. Clearly, it has *h* (via **s*) from **ps* in *aha* ← **hapsi* and *kahi-o* ← **kapsi*, but we can conclude nothing from *oo’og*, which shows no trace of *h*. This Oodham form must be from an intermediate form **oo’o-wV* (presumably with the same *-*wa* suffix which we find in Cahita and Guarijio), but there is no way of recovering the history of the

⁴ This form was inadvertently omitted from Manaster Ramer and Blight (1993).

⁵ The second of the Mayo forms is listed by Miller (1988) as having been recorded by Jeff Burnham in the Jijiri Mayo dialect of Cahita.

badly eroded stem syllable *-ʼo-*. The consonant which must once have followed is lost (probably regularly), and so this form does not tell us anything. However, in other SUA languages, there are contrasts between **ps* and the cluster found in the **oCCi* etymon. Thus, Eudeve has *hase-n* ← **hapsi* but *ope-t* ← **oCCi*, while Guarijio shows *asi-* ← **hapsi* and *kasi* ← **kapsi* but *oʼke-wa* ← *oCCi-wa*.

We thus seem to be forced to assume some cluster which merged with **ps* in NUA but which was nevertheless originally different. Given the velar in one of the Cahita forms (*ks*) as well as in Guarijio (*k*), possibilities include **ks* or **kʷs*. The latter might perhaps be a better bet, given the **ps* realizations in NUA, since it is easy to see how **kʷ* might change to **p* in this environment.

To be sure, the situation is complicated by the fact that, in general, Cahita has *bw* and Guarijio has *w* for PUA **kʷ*. If the PUA cluster was really **kʷs*, then the retention of the velar articulation in this one cluster in these two languages would be quite remarkable. On the other hand, the variant Cahita forms *okʃ-a-m* and *op-wa-m* might now be explained as reflecting intermediate forms such as **okʷs-wa-m* and **oskʷ-wa-m*, respectively (the latter of which would be due to metathesis). We would need to assume that **kʷs* lost the labialization to yield **okswam*, and that the triconsonantal clusters in **okswam* and **oskʷwam* then simplified, producing, respectively, *okʃam* and **okʷwam* (whence *opwam*). As for Eudeve, we should note that this is another language where PUA **kʷ* normally yields a labial, given as *p* or *b* in the Spanish sources. Thus, Eudeve **ope-t* could perfectly well reflect PUA **okʷsi* (if we only knew how to explain the loss of the **s*, which at the moment we do not).

Thus, in conclusion, we find that the case for PUA **ps* can still be made, although not as exuberantly as was done in Manaster Ramer and Blight (1993). In addition, the case for PUA **sp* has vanished into thin air, but instead of it we can be fairly confident of another PUA cluster whose identity, however, is still hard to pinpoint: it may have been **kʷs*, but it may also have been something else entirely.

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