<table>
<thead>
<tr>
<th>Authors</th>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. D. KING</td>
<td>3</td>
<td>Push Chains and Drag Chains</td>
</tr>
<tr>
<td>H. WITTMANN</td>
<td>22</td>
<td>The Development of K in Hittite</td>
</tr>
<tr>
<td>D. ABDO</td>
<td>27</td>
<td>A Note on the Doubled Nominals and the Relative Clause in Lebanese</td>
</tr>
<tr>
<td>P. A. LUELSDORFF</td>
<td>39</td>
<td>On the Phonology of English Inflection</td>
</tr>
<tr>
<td>G. H. FAIRBANKS</td>
<td>49</td>
<td>Language Split</td>
</tr>
<tr>
<td>C. R. LONGYEAR</td>
<td>67</td>
<td>Computer Simulation of Natural Language Information Process</td>
</tr>
<tr>
<td>D. L. F. NILSEN</td>
<td>101</td>
<td>The Expletive &quot;There&quot; from a Transformational Point of View</td>
</tr>
<tr>
<td>R. SAUNDERS</td>
<td>108</td>
<td>Review: Phonotactic Grammaticality (Scholes)</td>
</tr>
<tr>
<td></td>
<td>123</td>
<td>Notice</td>
</tr>
</tbody>
</table>
THE DEVELOPMENT OF K IN HITTITE.

Interests in hieroglyphic Hittite have worked for a long time around the interpretation of the rare but important sign since it is contained in the words for 'horse', 'dog', and 'horn'. The reading of this sign in a-x-wa-, x-wan-, and x-ma- as phonologically reminiscent of IE *kw was first posed by Gelb (1942.19ff.). A few years later (1950.135 fn. 30), Gelb was fortunate to discover the name of a country written A-HORN-ru, which by the nature of things could only be Assur. Since Gelb's reading is today largely accepted, the etymological connections of the three Hitt. items are as obvious as they are widely discussed;

1. asuwa-: Skt. aśva- 'horse', IE *ekwo-.
2. suwan-: Skt. śvan- 'dog', IE *kwon.
3. surna-: Skt. śṛṇga- 'horn', IE *kṛ-.

In all instances, an Anatolian sibilant seems to correspond to Skt. s < IE *k.

The discovery of these correspondences has yielded diverse reactions among the scholars. Bonfante & Gelb (1944) asserted hieroglyphic Hittite to be a satem language. More recently, Siegel (1961) went considerably further: he wished to see in Hittite a 'decayed satem speech', whatever that meant. Others, especially

1-Laroche, 1960.231, still transcribes tentatively sū? on the ground that no proper noun containing sū? has as yet been identified.

2-Cf. here cHitt. aṣṣu-ṣṣannī- 'horseman, equerry', (Wittmann, 1964. 147f.), Lyc. obl.-inst. esbe-di 'cavalry'?

3-beside Lyd. *kan- in Kandaules 'dog slayer'. For the second element, cf. Skt. sār-dūla- 'tiger' and Gk. kor-dūlos 'lizard'.

4-beside cHitt. karawar 'horn', Lith. kārvē 'horned animal, cow', IE *kēr-.

5-He bases his assumption largely on Garbry's (1944) hypothesis of a close relationship between Lithuanian and Hittite. Siegel, besides having the customary distinction of satem and kentum, claims the priority of the 'satem speech' and posits 'kentum speech' as a later development.

glossa 3:1 (1969)
Kronasser (1957), categorically declared such words to be borrowings from an Indic language. Most scholars, however, particularly Friedrich (1953:134), observed an attitude of reserve.

A more convincing argument to solve the problem was put forward by A. Goetze (1954). He demonstrated that the shift from the \(^k\) of the proto-language to an Anatolian sibilant only takes place if the \(^k\) is followed by the back-vowel \(u\). Thus, the shift, he concluded (1954:405), has to be ascribed to the combinatory effect of this back vowel. Goetze’s additional evidence is as follows:

(4) chitt. šu-ppala- ‘livestock’: Skt. pasa- ‘livestock’, šu- in compounds, IE *(pe)ku-.\(^7\)

(5) chitt. šuppi- ‘pure, (ritually) clean, holy’ : Skt. sūba-‘beautiful, pleasant, bright; propitious’, sūdh- ‘to clean’, sūddha- ‘pure’, Arm. surb ‘pure, clean, holy’, IE *k(e)u ‘bright’, *ku-bh-, *ku-dh-.

(6) chitt. šuwu- ‘full’, šuwa- (medio-passive) ‘to swell up’, šuwai- ‘to fill’, šunnas- ‘to fill’ : Skt. śv-āyati ‘swells up’, śūna- ‘swollen’, IE *k(e)u- ‘to swell’.\(^8\)

In addition, he naturally reinterpreted Gelb’s data.

Goetze’s hypothesis aroused a minor discussion among Hitologists.\(^9\) It remained, however, largely without consequences for IE comparative research. Furthermore, scholars found it very difficult to extend the existing proof beyond its original dimension. Indeed, words with IE *kw are far and few in between. Such obvious candidates as Skt. parśu- ‘rib’ do not yield a comparable equivalent in Anatolian. Nevertheless, three more instances can be offered where Goetze’s combinatory effect seems to come into its own.

6-i.e. ku > kiú > šu.


8-Cf. possibly chitt. šumrai- ‘to become pregnant’, Gk. kúeō ‘to be pregnant’.

E.H. Sturtevant (1933.88, 1951.65) connected išha- 'lord, master', fem. heru on the assumption that the h in herus results from contamination with hērēs, because of older esa 'domina'. However, as Ernout & Meillet (1951.359) point out, this earlier esa is of doubtful existence, and herus itself is of extremely rare occurrence. Even if a esa existed such as, one would expect here a Hitt. eššus or aššus as cognate (following Sturtevant's own rules). In fact, a aššus exists meaning 'good, kind; property', and an acceptable etymology has been posited for it by Sturtevant himself (1951.51). In this way, another etymology has to be found for išba-, as follows: Skt. iśa- 'lord, master', išvara-, 'owner, ruler', iś- 'to own', Av. išvan- 'rich, powerful', OHG eigan 'to possess, own', etc., IE *(e)ik(w)-. In this way, another etymology has to be found for išba-, as follows: Skt. iśa- 'lord, master', išvara-, 'owner, ruler', iś- 'to own', Av. išvan- 'rich, powerful', OHG eigan 'to possess, own', etc., IE *(e)ik(w)-.

Skt. aśman- 'stone, cliff, sky', aśmara- 'stony, Av. asman- 'stone, sky', Lith. ašmū 'edge, sharpness', Gk. škmēn 'anvil', Norw. humul 'stone', MHG hamel 'cliff', Gmc. originally 'stone hammer', as in ON hammer 'hammer, cliff', OHG hamar, NE hammer, etc., IE *(a)k(w)m- 'sharp edged'. Palatal *(a)k(w)m- obviously fluctuated with a velar *(a)k(w)m-. Lith. akmū 'stone', OCS kamy 'stone'.

11-Also to be compared: Lat. aequus 'equal', aequus 'edge, sharpness', Gk. aexó 'point, edge', akōs 'pointed instrument', Bret. ek 'point, edge', ON egg 'edge', etc. Laroche (1957.25f.) links this group with Hitt. ahu- 'stone, cliff'. Yet, Hitt. single k cannot reflect IE k; it would be preferable to connect ahu- with IE *agw(e)ṣ 'axe, hatchet', as in OS acus, OE acus, OHG ahus, Goth. agon, Gk. axón, Lat. oscia (cf. Ernout & Meillet, 1951.90). Indo-European must have had considerable fluctuations between ak-, ah-, and og-, all meaning 'sharp edged'. Cf. also the fluctuations in: Lith. ašmū 'edge; akmū 'stone'. Lätt. suns 'dog': kūn 'female dog', OPruš. sūnis 'roe, deer': konwix 'bull, ox', Hitt. suwan-: Lyd. *kōn- 'dog', Hitt. surna-: Hitt. karawar 'horn.'
stops. Still, the large number of words with initial ti- in Hittite reflecting an IE dental stop plus front vowel is surprising. A different etymology for šiu-, šiwaτt- would therefore be more appealing: Skt. ṣu- ‘to call (the gods)’, part. ṣuτa-, Goth. gup, gen.sg. gudis ‘god’, etc., Olr. guth ‘voice’, Gall. gutuater, a class of priests, IE *ǵh(a)u-, *ǵhu-to-. Derivatives are Skt. ahaν-, Av. azan- ‘day’. This equation extends Goetze’s shift to the voiced series and thus proves the generality of his hypothesis. There may also be a possibility of linking Goetze’s findings with another phenomenon in Hittite. Frequently, Hitt. w/u after k reflecting IE (velar) k, g seems to be the product of anaptyxis. A w/u apparently is interpolated between (velar) k, g and a following front vowel i/e. Instances are cHitt. kar-š-: kwer- ‘to cut’, ka-this’; kw- ‘who’, še/ak- ‘to know’: šakwi- ‘eye’ (with derivative sakuwai- ‘to see, look’), all with established IE cognates. Significantly, there are no Hitt. kw- followed by back or center vowels corresponding unambiguously to an IE ‘labio-velar’ stop followed by a back or center vowel. If we now let K stand for any guttural in the proto-language, regardless of voice, then we may combine the patterns into the following table:

<table>
<thead>
<tr>
<th>WITHOUT ANAPTYXIS</th>
<th>WITH ANAPTYXIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>IΝ K̄i/e Antl. ki/e-</td>
<td>Hitt. ki-</td>
</tr>
<tr>
<td>Ku/o</td>
<td>ku/a-</td>
</tr>
<tr>
<td>K̄a-</td>
<td>ka-</td>
</tr>
</tbody>
</table>

The obvious conclusion must be that the proto-language did not have any labio-velar stops but distinguished palatal stops phonemically from velar ones, contrary to what has been stated in the past. Indeed, the presence or absence of anaptyctic vowels with K when followed by a vowel of maximum differentiation cannot be a phenomenon of chance.

12-Cf. here perhaps IE *gheu- ‘to pour a libation’.
13-By proto-language, the ancestor of both the Anatolian and Indo-European languages, Indo-Hittite, is meant here.
14-Sturtevant assumed here that Indo-Hittite lacked the phonological oppositions palatal : velar, velar : labio-velar, and only possessed aspirated : non-aspirated, voiced : voiceless, of which only the latter left traces in Hittite. Kranasser supposed for his proto-language all the feature-oppositions, of which none leaves a trace in Hittite. Thus, 15 (or 20?) proto-stops collapsed neatly into 3 Hitt. stops, p, t, and k.

WITT MANN: K in Hittite – 25
REFERENCES
---. forthcoming. Some Hittite etymologies II. Die Sprache.