On the Regularity of Nasal Dissimilation in Anatolian*

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Dissimilation, Raimo Anttila writes in his outstanding textbook on historical and comparative linguistics, is when

a sequence of the same or similar sounds becomes further differentiated. In many areas of human muscular activity, repetition of the same movement is difficult. This is the operative principle of tongue twisters (e.g., *Theodore Oswaldtwistle, the thistle sifter, in sifting a sack of thistles thrust three thorns through the thick of his thumb*), which apparently exist in all languages. It may well be true that dissimilation is due to neural ease, in the same way that assimilation is connected with articulatory simplification. The former often sporadically affects sequences of liquids and nasals so that a liquid is replaced by a nasal and vice versa (e.g., Finnish *rälssi* > *ränssi* 'tax exemption', *kumppani* 'companion', Italian *venēnu* > *veleno* 'poison', and Hittite **naman* > *laman* 'name'). A sequence of the same liquid can be differentiated by replacing one with the other, a lateral with a trill or vice versa (e.g., *peregrīnus* > *pilgrim*, and Cheremis *lölpö* > *lörpö* 'alder'). Or just a sequence of dentals is differentiated (e.g., Lithuanian **nìzdas* > *lìzdas* 'nest' and Finnish *nysi/nyde*- > *lysi/lyde*- 'handle'). Dissimilation need not be sporadic; it can be quite regular throughout the whole phonology. ... (Anttila 1972a: 74 and 1989: 74)

In this paper, which can unfortunately neither begin nor end with examples from Anttila's beloved Finnish, I consider Anatolian words that, like Hitt. $l\bar{a}man$ "name", have initial l- rather than expected *n- and suggest that the regressive dissimilation they manifest, which is invariably said to be sporadic, may in fact be rule-governed.

It is easy to see why Hitt. $l\bar{a}man$ (weak stem lamn-) is regularly trotted out in the general linguistic literature as a prime instance of dissimilation: evidently related to Eng. name (OE nama) and a host of well-known forms throughout the Indo-European family (Lat. $n\bar{o}men$, Toch. A $\tilde{n}om$, B $\tilde{n}em$, etc.), it goes back to the same nasal-filled paradigm in the proto-language, which is probably to be reconstructed as the proterokinetic $*h_1n\acute{e}h_3-mn_2-*h_1n\rlap/h_3-m\acute{e}n$ -. But on two counts there is rather more to the story. For one thing, other words in Hittite aside from $l\bar{a}man$ seem to have been subject to the identical dissimilatory process, or at least a very similar one;

and for another, there is some evidence for this dissimilation in an Anatolian language other than Hititte as well, namely Hieroglyphic Luvian.

Since I have recently discussed the full dossier of evidence (Katz 2004: 207-11, with detailed references), I shall do no more here than briefly rehearse the examples, whose number two, three, or four—depends on one's tolerance for 'fancy' etymologies. Two cases are pretty well assured: Hitt. lāman ~ lamn- "name", of course, but also Hitt. lammar ~ lamn- "a small unit of time (moment, instant; hour); instantly, immediately", which is generally agreed to be cognate with Lat. numerus "number" (cf. the archaic adverb numerō "immediately") and go back to the PIE r/n-stem * $n \acute{o} m$ - $r \sim *n \acute{e} m$ -n- (a derivative of the root * $n \acute{e} m$ -"allot", perhaps also to be seen as such in a Hittite verb lam- "become mixed (vel sim.)").4 Note that it is these two words that seem to have relevant cognates in Hieroglyphic Luvian: the hapax la-mi-ni-' (KARAHÖYÜK §1) probably means "at the moment" (cf. Hitt. lamnī, dat.-loc. sg. of lammar),⁵ and this suggests to Melchert (1994: 82) that there is "no reason to take HLuv. la-m(a)-ni-ya- 'call upon' as a borrowing from Hittite lam(ma)niye- 'name, call'" rather than seeing the two denominative verbs as derived from a common *l-initial source in Proto-Anatolian.⁶ A third example of nasal dissimilation in Hittite may be the controversial prohibitive negative particle $l\bar{e}$: I find very attractive the idea of Norbert Oettinger that this goes back to a negative of the form *n\(\vec{e} \) (cf., e.g., Lat. $n\bar{e}$) generalized from its appearance "in den häufigen [nasal-containing] Verbindungen $l\bar{e}$ man (modal/irreal) und lē-mu 'mich nicht, mir nicht'" (Oettinger 1994: 310). Fourth and finally, I have proposed (see Katz 2004, which expands on and modifies Katz 2001a: 210, with n. 16) that the Hittite word for "duck", lah(h)anza(n)- (MUSEN), for which there are, to be sure, quite a number of etymologies in the secondary literature, is based on an old participle *(s)néh2-ont"swimming" and is cognate at the level of the root with the Greek word for the same water bird, νῆττα/νῆσσα.

The immediate preform of each of the words invoked in the previous paragraph begins with an *n- (the initial laryngeal in the word for "name" is lost prior to the development of a separate Anatolian branch; on the non-appearance of the sibilant in the root for "swim", see Katz 2004: 210), and Melchert (1994: 82f.) has suggested that the dissimilation takes place by Proto-Anatolian times "in the presence of two following nasals" (82). Such a specification would indeed account for $l\bar{a}man \sim lamn$ -, $lammar \sim lamn$ -, and also $l\bar{e}$ if this is abstracted from * $n\bar{e}=man$ (rather than * $n\bar{e}=mu$), in all of which the sequence also happens to be precisely *-m (...) n-. Any way one looks at it, lah(h)anza(n)- (< *nahhant-, in my view) is phonologically the odd duck here: there is sometimes only a single nasal after the initial *n-7; furthermore, this second nasal is an [n] in the next syllable's coda rather than an [m] at its onset. But even if my etymology of the word should not be accepted, it makes sense to examine the phenomenon of initial nasal dissimilation from a bottom-up perspective, which means beginning with the wide assumption that it might affect any string with more than one nasal.⁸

Now, there are some examples of nasal dissimilation in Anatolian that can in no wise be lumped under the same rubric as the forms under discussion. Take, for instance, Hitt. *māl*-"inner strength" and CLuv. **\textit{mali(ya)}-"think", which—if these are indeed from PIE *\textit{men}-, the root of mental activity par excellence*} —show progressive (and by definition therefore non-initial) dissimilation; or take Hitt. a/irmala-"sick" and irmaliya-/irmaniya-"be sick", which—as they are patently derivatives of \(\bar{e}rman-"sickness"—Melchert (1994: 171), following N. Oettinger, counts among a small but motley set of "apparent substitutions of /l/ for /n/ in Hittite", cases that do not necessarily involve dissimilation (e.g., Hitt. \(\betaalmas\) switt-"throne", borrowed

from *hanwašuitt*- in Hattic) and that Melchert pointedly separates from *lāman* and *lammar*, whose initial *l*- he of course does "attribute ... to a P[roto-]A[natolian] dissimilation". Such examples are interesting, of course, for the simple reason that they provide further data that attest to the extraordinary frequency with which nasals and liquids, both high on the Sonority Hierarchy, are associated cross-linguistically with sporadic phonological effects, most notably assimilation and dissimilation that involve non-adjacent sounds. 11 There is no doubt a great deal more to be said about unexpected sound-substitution in Anatolian, but my aim in this paper is to consider just one single matter: the status as a regular rule of the regressive nasal dissimilation that affects the initial *n- of some Anatolian words and converts it into an l-, that is, the putative rule that accounts for any or all of Hitt. *lāman*, *lammar*, *lē*, and *lah(h)anza(n)*-. I do not believe that in so restricting my scope I am ignoring any critical evidence. One way in which I am not taking a narrow view is in considering, for the purposes of argument, all forms that might have had the shape $*\#n \dots N$ in (pre-)Proto-Anatolian, regardless of which sounds intervene and regardless of the syllable in which the second nasal actually appears: it is, however, almost certain that relative proximity does matter, specifically that dissimilation takes place only when the nasals are in adjacent syllables (i.e., the first and second) within a word's domain; it will not be at all surprising to discover that there are other specifications as well. 12

Lest there be any doubt about this, one more thing needs to be said before we dive into Anatolian: although generally considered sporadic, non-adjacent dissimilation certainly can be regular (see the references in fn. 2). Perhaps the most famous example, and an especially attractive one to keep in mind, is the dissimilation of aspirates known as Grassmann's Law (the subject of the sentence in Anttila 1972a: 74f. and 1989: 74f. that immediately follows the quotation that opens this paper), whose attractiveness lies in part in the fact that its regular effect

has taken place, independently, in more than one language. ¹³ One other case—an instance of assimilation—is worth mentioning here: it is well known that in both Italic and Celtic, PIE *p ... k^u develops (independently in the two branches) into * k^u ... k^u . What is less widely acknowledged is that there is a real chance that this is a regular rule: as Henry M. Hoenigswald, the last of the Grand Old Men of 20th-century historical linguistics (d. 16 June 2003), wrote in a classic paper, the "Latin numeral 'five' ... [is] paraded so prominently whenever talk turns to the minor sound changes. In fact [it is] harmless and should be discarded from any special context. ... p—qu [PIE * $p\acute{e}nk^ue$] is distant-assimilated to qu—qu (quinque) in Latin (perhaps in Italic in general) and in Celtic in all cases in which the sequence is known to exist. There are only three such: the word for 'five', the word for 'cook', and the name of the tree called 'quercus'—but there are no counterinstances, and regularity is beyond the slightest doubt" (Hoenigswald 1964: 212f. = 1978: 169). ¹⁴ I propose that we take our lead from Hoenigswald's re-evaluation of familiar facts and consider seriously the idea that the handful of examples of regressive nasal dissimilation in Hittite and Anatolian might likewise show regularity.

If the dissimilation is rule-governed, then there should in principle be no Anatolian words of the (synchronic) shape #n ... N. This is anything but true, as just a glance at any dictionary of Hittite will suffice to show, but I shall endeavor to demonstrate in what follows that there are a number of reasons why most of these words, perhaps all, should be discarded as evidence one way or the other. Many of the forms in question, both in Hittite and in the other Anatolian languages, fall into three broad categories: borrowings; more or less obvious derivatives and compounds that involve multiple nasals; and lexicalized particle-chains. I shall discuss each of these in turn before taking on the remaining cases. Note that all words that follow are from Hittite unless otherwise noted.

First, a reasonably large component of the 'Hittite' lexicon is actually Hurrian (or otherwise foreign). The following nouns—many dripping with nasals—are of unclear meaning but certain Hurrian origin: *naḥnazu*, *namni* (cf. ḤUR.SAG *Nanni*?; see fn. 15), *nangi*, *nenuwanna*, *nenuwar*, *ninunna*, *nenuni*, *nirampi* (also *nirammi*, etc.), and *nirni*. To these generally ritual or sacral terms one may add ^{KUS} *na-aḥ-m[e- ...* in *KUB* 7.56 Vo. iii 3, ¹⁷ (D)nam(m)ulli- "(deified) couch", ¹⁸ *nenganani*, ¹⁹ and perhaps the Cuneiform Luvian hapax *inikrani-*²⁰; note also the much-discussed Indic (Mitanni) hippological loan *nāwartanna/i* "(for) nine laps" (cf. *panzawartanna* "five laps", etc.) and also its obscure Hurrian gloss (?), *nišuwan[n]iwa tidu[ppa]* (*vel sim.*) in *KBo*. 3.2 Vo. ¹ 45. ²¹ Even if it could be shown that some of these words were borrowed before the operation of nasal dissimilation, it can hardly be doubted that almost all of them remain synchronically somehow marked as outside the native phonological system.

A second category comprises nasal derivatives of words that begin with an *n*-. Since there are many kinds of derivation and different levels of opacity, such forms need to be examined on a case-by-case basis. Examples of synchronically wholly understandable derivatives are *natant*- "provided with a drinking tube" and (2) *naduwant*- "having reeds, reedy" to *nata/i*- "reed; arrow; drinking tube". Less clear, but still straightforward enough, are a number of words that seem to be based on the verb *nai*- "turn": *nanna*- (and *nanni(ya)*-) "drive" (cf. also CLuv. *nana*- "lead" and perhaps the obscure hapax *nanna*-) and its reduplicated counterpart *nenniya*- "id.", Hitt. and CLuv. GIS *niniyal(l(a²))*- "cradle", and CLuv.

NINDA *niniyama/i*- "a kind of spiral-shaped bread". A sure, if morphologically unexpected, example of reduplication is Hitt. *nana(n)kušš(iya)*- "become dark": Watkins 1985b: 249-55, comparing the formation of Hitt. *laluk(k)eš*- "become light", argues persuasively that this goes

back to a "quasi-intensive (?)" (253) *no-nok*-s- (cf. nekuz 'evening' and nekuz(z)i "it becomes evening"). As for Hitto-Luv. ne/iwal(l)ant(a/i)-, this is probably connected to Hitt. niwalla-and CLuv. (1)niwalla/i- "innocent" and mean something like "good-for-nothing", but there is as yet no agreement. Needless to say, many examples of secondary derivation postdate the Proto-Anatolian period and therefore quite plausibly also nasal dissimilation: of the clearly derivative words in this paragraph, only nana(n)kušš(iya)- looks as though it might be old, and it is not hard to imagine that the effect of an early sound change here would have been undone (or 'blocked') by paradigmatic pressure (the desire to maintain the integrity of reduplication as well as the force of n-initial nekuz).

The Cuneiform Luvian word (\$\frac{1}{2}\) niwalla/i- "innocent", just mentioned, is a negative compound in ni- (cf. the factual negatives CLuv. nāwa and HLuv. na(wa/i) and the prohibitives CLuv. nīš and HLuv. ni(s)), and there are two such Hieroglyphic compounds, both probably meaning "child", that deserve particular notice here: (INFANS)nimuwiza- and (INFANS)niwarani- (the meaning of the latter is not assured). While "warani- remains unclear (Hawkins 1980a: 143, comparing wariya- "help", suggests that it "could have the basic meaning "the helpless"), it is generally agreed that "muwiza- is connected to Hitto-Luv. mūwa-, a word for some sort of awesome quality that Weiss (1996: 206f. and passim) has now neatly explained as meaning specifically "reproductive power" (cf., e.g., Lat. mūtō "penis"), which a child of course conspicuously lacks. In any case—and especially for ni-muwiza-, whose morphemes would certainly have been synchronically understandable—it is easy to see why the compounding negative ni- did not become *li-.

A singular case that can be disposed of quickly is the Lycian preposition *ñtewẽ* (the final vowel is nasalized) "facing, opposite; toward". This is almost surely a fossilized compound

meaning literally "in(to) the eye": "pre-Lycian *en tewē with expected syncope of *en to \tilde{n} in proclisis" (thus Melchert 1994: 318). Since this combination, even if of (pre-)Proto-Anatolian date, did not begin with a nasal when dissimilation took place and, furthermore, owes its second nasal to an accusative ending (- \tilde{e} implies *- e^n < PIE *-o-m), nothing more needs to be said about it in the present context.²⁶

Other words that may fall into the category of derivatives and compounds are a striking set of kinship terms throughout Anatolian whose morphology has been the subject of intense debate (the most recent and fullest contribution is Neumann 1996). Whatever the ultimate conclusions about their exact relationships may turn out to be, it is hard to believe that Hitt. negna- "brother" and associated forms (e.g., negnatar "brotherhood") pose insuperable difficulties to the idea of a general rule of nasal dissimilation. To explain the non-appearance of a form *legna- one might think it would be sufficient to note the existence of the word with which it is clearly paired semantically, nega-"sister", with only a single nasal. Perhaps it is, but until we are certain of the PIE source(s) of *negna*- (spelled out as such only once, <ne-ek-na> in KBo. 20.31 Ro. 6; otherwise ŠEŠ) and nēga- (spelled with scriptio plena e-vocalism, <né-e-ku-...>, in KBo. 22.2 Ro. 19 [Old Script]), the matter remains vexed. Watkins (1995: 359; see already Watkins apud Hoffner 1988: 197) cautiously suggests that the word for "brother" might be a derivative of "sister" (i.e., *neg-na-, with the same suffix as Gk. τέκ-νον "child"), writing that "[n]o known truncation rule could enable us to get from negna- to nega-, the other way around". But there is no cross-linguistic support for the view that "brother" can be based on "sister", and I am more taken than Watkins is with Günter Neumann's derivation of negna- from *ni-ĝnh₁-ó-, literally "der (in eine Familie) Hinein-Gezeugte" (Neumann 1996: 8), a formation for which he adduces many nice parallels throughout Indo-European (see already Neumann 1991 = 1994). Even so, though, it is hard to believe that Neumann (1996) is correct to now view $n\bar{e}ga$ - as the derived form after all, "durch Haplologie aus *negnaga- (mit Suffix -ga-) 'zum Bruder gehörend, Pendant zum Bruder'" (9, footnote omitted): the case for haplology is far from straightforward since [g.na] is quite a bit different from [ga]; furthermore, and more important, *negnaga- can be right, as far as I can tell, only if Neumann's attractive PIE preform with *ni- is wrong, for this this would not have resulted in the writing < $n\acute{e}$ -e-> in Old Script. While the relationship between negna- and $n\bar{e}ga$ - must remain a puzzle, there is in any case (to return to the matter of nasal dissimilation) a possible way to account for the two n's in negna- on phonological grounds: I suggest that dissimilation may be blocked specifically in the sequence *m ... m (where m and m and m perhaps even specifically velar—stop), a restriction that we shall have occasion to consider again below.

As for other relevant kinship terms in Anatolian, Neumann (1996) discusses these in detail as well. His explanation of the Hieroglyphic Luvian hapax (INFANS) nawanawa/i- "great-grandson's grandson" is ingenious and compelling: a compound just like Gk. $veo-\gamma vo'\varsigma$ "newborn", namely nawa- "new" (< PIE *néuo-) plus a completely different "nawa/i- derived from the combining form we have just been examining, *" gnh_1 -o'- (cf. also the second element of Lyc. esedē-ñnewe- "collateral descendant"). More problematic, however, is his account of the Luvian and Lycian words that pertain to siblings: CLuv. $n\bar{a}ni(ya)$ - "brotherly" (cf. also * $n\bar{a}nahit$ - "brotherhood") and Lyc. $n\bar{e}ne/i$ - "brother" and, with feminine recharacterization, CLuv. $n\bar{a}na\check{s}ri(ya)$ - "sisterly" and HLuv. (FEMINA) nanas(a)ri- "sister". The suggestion that these must go back to a proximate preform that look rather more like Hitt. negna-, with Luvo-Lycian simplification of the consonant cluster *-gn- and compensatory lengthening, is due to Jay Jasanoff and seems to have won universal acceptance. The problem with this, as Craig

Melchert has stressed to me, is that there is absolutely no reason to believe that PIE *-i-, as in Neumann's preform of *negna*-, would have given rise to -ā- in Luvian or -e-/-ē- in Lycian (*pace* Neumann 1996: 9). Therefore, if Neumann's *ni-ĝnh₁-ó- is correct, then either Luvo-Lycian speakers changed the vocalism of the words for "brother" and "sister" by assocation with 'Nana/Dada/Mama/Papa'-type hypocoristics or, indeed, they are in origin *Lallwörter* (which notoriously fail to participate in normal sound changes) and are not cognate with *negna*- after all.³⁰

A third source of the sequence #n ... N is the particle chain—synchronic, of course, but also diachronic, as in Oettinger's derivation of $l\bar{e}$. The following 'words' (listed as such in Tischler 1991) are synchronically analyzable as hiding an enclitic with a nasal element: nan "and him" (<*nu=e=an), nen "and them" (<*nu=e=an), and nezan "id." (<*nu=e=za=šan), as well as $na\check{s}ma$ "or" (actually attested as $na\check{s}\check{s}u$ "or" + =ma "but" in KUB 4.72 Vo. 4). Rather more problematic are the adverbs *namma* "then, next" and *nūman* (troublesomely spelled *nūwăn* in two versions of a single passage), which expresses negative volition ("not want to; never (?)"). The former Melchert 1992: 37 n. 11 derives from $*n\acute{a}m + = m\check{o}$ (cf. Lat. $n\~am$ "for" and Hitt. =ma), which should have led to Hitt. *lamma if dissimilation is regular. But perhaps the effect of nasal dissimilation was undone because of pressure from the many n-initial function words throughout Anatolian, notably the Hittite and Palaic 'satzeinleitende Partikel' nu=; note that no function words aside from Hitt. $l\bar{e}$ begin with an l-. As for * $n\bar{a}m$ itself, this seems to show up as such in Lydian, where $n\tilde{a}v$, likewise a conjunction with the meaning "for", could well be the exact cognate of Lat. nām (thus Melchert 1992: 37). I suggest that *nām does not become *lām because of a restriction of the rule of dissimilation to polysyllables. Since monosyllables are

cross-linguistically known for their unusual phonological behavior (see, e.g., Katz 1997, 1998a, and 1998c), this is not indefensibly ad hoc.

Consider now nūman. The meaning and morphology of this word pose a number of problems to Hittitologists (see Hoffner 1982), and it is tricky as well for the historical linguist who wishes to defend the idea that nasal dissimilation is regular since it probably conceals almost exactly the same particle chain—though a synchronically partly understandable one—as Oettinger's putative * $n\dot{e}=man$ ($\rightarrow l\bar{e}$): Eichner (1973: 92 n. 34) has made the attractive suggestion (very similar to one of E. A. Hahn from three decades before) that it goes back to "*ne 'nicht' + $u \dots + m\bar{a}n$ 'wie", that is, to the irrealis particle preceded by a form of an old ninitial negative (as in every other negative particle in Anatolian, e.g., Hitt. natta³¹) that has been extended by a particle u "and (vel sim.)". If something like this is correct, one might be able to argue that dissimilation is indeed restricted to proximate syllables (see above) and took place before the first two particles fused into monophthongal '*neu'. But in any case (and this could help explain both *namma* and *nūman*, as well as CLuv. *nānun* "now", discussed at the end of the paper), there is nothing implausible about assuming that particle chains—whose status is somewhat awkwardly between being merely linked morphemes and being morphemes that combine to form a self-standing word—receive different analyses from different speakers and that what may appear to be exceptions to sound laws arise as the result of the speakers' particular choices: the earlier the process of dissimilation, the clearer the component parts of any particle chain would still have been and the greater also, I would think, the likelihood that dissimilation would have been undone. Note that if Hitt. $l\bar{e}$ does come from something like * $n\dot{e}$ =man, it is a good bet that this same chain was found in the speech of all Anatolians, not just Hittites: my assumption would be that the lack of *l*-initial negatives in the other languages is the result of a

different linguistic decision—not to regard *né=man as a single word—rather than a different preform.³²

Another Hittite word of the shape #n ... N, though owing its second nasal to a derivational suffix, belongs nevertheless in a class of its own: ne/ikumant- "naked" (cf. also, e.g., ne/ikumandariya- "undress"). Its would-be PIE preform is *neg*-mo-, and as it is probably still disyllabic even in Hittite ([neg*.mant-]; see, e.g., Melchert 1994: 120 and 157), it would not be viable to claim that dissimilation failed to take place on account of an intervening nasal-less syllable (as though it were pronounced *[ne.gu.mant-]); it is, however, possible that dissimilation is blocked when the second nasal is immediately preceded by a velar stop (see above on negna-). Whatever the case may be, words for "naked" throughout Indo-European present such a staggering range of taboo-effects that firm reconstructions are nearly impossible, witness Skt. nagná-, YAv. maγna-, Gk. γυμνός, Lat. nūdus, OIr. nocht, and Arm. merk, all of which have subtly different proximate preforms. It does not seem wise, therefore, to take ne/ikumant- as evidence against the putative rule.

A further lexeme that might be expected to cause trouble is the number "nine", usually reconstructed as PIE $*h_I n \acute{e} u \eta$ (> Eng. nine [OE nigon, nigen], etc.), though there is some support for $*h_I n \acute{e} u \eta$ (> Lat. nouem [but cf. $n \~{o} nus$ "ninth"], etc.), including among Anatolianists. Either preform (the former with assimilation or the latter showing influence from $*d \acute{e} \^k \eta$ "ten") would have led to Skt. $n \acute{a} v a$, which was then borrowed into Hittite as the first syllable of the Mitanni word discussed above, $n \~{a} wartanna/i$ "(for) nine laps" (hapologized from expected *nawa-wartanna/i). As for native Anatolian forms, the word is indeed attested with the sequence $\#n \dots n$ in more than one language (the loss of the initial $*h_I$ -, suggested by Gk. $\`{e} v v \acute{e} \alpha$ and Arm. inn, finds a perfect parallel in the word for "name"): while it is never written out in

Hittite (we find only 9-an and the like), Lycian has the hapax $nu\tilde{n}t\tilde{a}ta$ (even if it should mean "90", as some have suggested, it would have to be based on the word for "nine") and it is clear from the fact that the Luvian hieroglyph for "9" (*395) has the value <nú> that CLuv. 9-un-za and HLuv. 9-za and 9-wa/i-i-za are pronounced something like [nuwintsa] (or, with contraction, [nūntsa]). But whether one chooses to reconstruct * $h_1n\acute{e}u\eta$ or * $h_1n\acute{e}u\eta$ for Anatolian—I do not see that there is any way to decide—it is perfectly reasonable to suppose that nasal dissimilation did not take effect because the syllabic nasal had not yet developed into -VN.

Other words—especially in languages other than Hittite—are entirely obscure, or nearly so, and until more is known about them, they cannot either provide support for or knock down any hypothesis. In Hittite we have nana(n)kalta/i- (only in the genitive in set phrases modifying the word for "wagon"), Lúna-an-ša-al-l[i(-) (a hapax in KBo. 20.1 Ro. ii? 3), nūwaneške-, nuhalimi- (seemingly a Luvian particle in -mi-), and nuriman(za). Cuneiform Luvian gives us naimma/i- (a noun), nani- (a verb?), and nimiyanni (???), all hapaxes. In Lycian we have ne()une (a hapax, possibly two words), namalimita-, and namalimita-, and namalimita-, Milyan gives us nebure-in, neitala, nenijeti, nuniti, and namalimita- (all are unclear in sense, the first four are hapaxes, and the first three are perhaps not even to be read as such). There are a few unclear forms in Lydian, of which nans and nas seem the most worthy of mention. Finally, Palaic has nadipanta and nus siyampi (both are unclear and the latter may not even be a single word).

After all this we are still left with five semantically reasonably straightforward Hittite words of the form #n ... N: nini(n)k- "mobilize, move" (and $nininke\check{s}\check{s}ar$ "mobilization (?)"), ni(n)k- "quench one's thirst; get drunk", 40 (D) ninga- "rain(god); drenching, cloudburst (?)", ninganu- "drench", and $nuntara\check{s}$ "soon, quickly". Aside from $nuntara\check{s}$, these words look as though they might all be linked, but in fact their interrelationships are far from obvious. Still, it

is likely that ni(n)k- and ninganu- are historically linked to each other but unconnected to nini(n)k- (though Oettinger 1979: 181 notes that they "können sich wechselseitig beeinflußt haben"); the status of $^{(D)}ninga$ - is wholly unclear. 41

Let us take first nini(n)k-, which is now generally accepted as having congeners in Baltic and Slavic (e.g., Lith. *j-ninkù* [-nikti] "throw myself into (e.g., work)") and deriving from the PIE root *neik- "rise" (see in the first place Benveniste 1954: 40f.; the latest word is M. Kümmel's lemma in Rix 2001: 451) plus an old infix of the shape -ni(n)- found in a handful of Hittite verbs (the best account is Eichner 1982: 16-21, with references; on the optional echoic -n-, see fn. 24). Now, a notable fact about three of these verbs is that they exist in Hittite alongside semantically similar verbs without the infix: ištarni(n)k- "sicken" is a derivative of ištark- "become sick" (< PIE *(s)ter $\hat{g}h$ -), harni(n)k- "destroy" is related to hark- "perish" ($< *h_3 erg$ - [vel sim.]; Kümmel in Rix 2001: 301 opts for $*h_3$ -, but $*h_2$ - is possible), and $h\bar{u}ni(n)k$ - "wound" is connected with huek-"slaughter" ($<*h_2ueg$ -, with Strunk 1979; see also Meiser 1993: 289f. and 310f.). As for the remaining verbs, *šarni(n)k-* "make restitution" finds its counterpart in Lat. *sarcīre* "id." (PIE *serK-), the rare impersonal verb hi-ni-ik-ta (probably [hini(n)kta]) "it pours down (vel sim.)", discovered by Hart (1976), unfortunately has no clear cognates, ⁴² and finally *nini(n)k*- itself may perhaps have an old infixless cognate in the OCS root agrist v_bz-niko "(they) rose up" as well as in the Greek noun veikos "dispute". It is at least possible, then, that nini(n)k- does not become *lini(n)k- because of pressure from an old *nik- (vel sim.).

It would certainly be nice if ni(n)k- "be drunk" could in fact be this apparently missing link *nik-, as scholars of the 'Yale—UCLA School of Indo-European' from E. H. Sturtevant to our honorand have wanted. But this view has not caught on—and neither has any other. Recently, Melchert (1994: 165) made the novel suggestion that ni(n)k- goes back to an extended

root *nem-K- (for *nem-"allot", see above on lammar): "*'take one's share of drink' > nink'drink one's fill'. Cf. for the semantics Span. tomar 'take' > 'drink' and for the formation *HasK- 'be satiated' > haššikk-". Whether or not this is right depends, among other things, on the
status of the nasal before the -k-: is it in fact old rather than merely intrusive, as in the verbs
discussed in the previous paragraph? Whatever the case may be, I suggest that a duly old form
nink-, with two nasals, might have failed to surface as *li(n)k- for either or both of two quite
different reasons. On the one hand, the dissimilation may be restricted to polysyllables (see
above on Lyd. $n\bar{a}v$) or, put a bit differently, it may not apply when the nasals belong to the same
syllable (e.g., in case of [nVN.CV], as in 3pl. pres. act. ninkanzi). And on the other, it appears
not to be unknown for an otherwise regular sound change to be exceptionally blocked because of
homonymie fâcheuse—and Hittite already has a verb li(n)k- that means "swear an oath". 44

This leaves $nuntara\check{s}$ "soon, presently" and a number of related forms (e.g., nu(n)tarnu"hasten"). As Melchert 1979: 262-65 has shown, this adverbial form implies an old adjective *nuntara- "present", built by adding the 'oppositional suffix' *-t(e)ro- (as, e.g., in Gk. $\pi\acute{o}\tau$ Epos and Lat. uter "which of two?") to the familiar temporal adverb *nun, as in Gk. $v\~uv$, vv(v) "now"; compare also CLuv. $n\bar{a}nuntarriyal(i)$ - "present", a derivative of $n\bar{a}$ -nun "now", which goes back to an old particle chain * $n\acute{o}$ =nun (see in the first place Neumann 1964: 47-49) and for which, then, the explanation for the lack of initial nasal dissimilation is mutatis mutandis the same as for Hitt. nam-ma and $n\bar{u}(-?)man$. It is not hard to see why the Hittite word does not come out as * $luntara\check{s}$. For one thing, it may be that dissimilation fails to take place when the nasals fall in the same (mono- or poly)syllable: this would in itself block the development of *lun from *nun. Furthermore, the combined evidence of Hitt. ki-nun "now" (probably the same particle chain, but reversed, in Lat. nun-c) and CLuv. $n\bar{a}$ -nun suggests that the crucial morpheme is anyway, like

Gk. enclitic vv(v) but unlike the semantically bleached particle nu= of Hittite and Palaic, not normally found first in whatever sequence(s) the early Anatolians used to speak about the very moment.⁴⁵

Some will no doubt say that I, like Theodore Oswaldtwistle the thistle sifter, have pushed things too far: if initial nasal dissimilation is regular, there still remain a number of Anatolian words with the sequence #n ... N that simply are not so easy to explain away. This may be because there is in fact no such rule or it may be because, as I have suggested, refinements are needed now that the forms have finally been gathered. For example, dissimilation might fail to occur in monosyllables (cf., e.g., Lyd. nãv), when the nasals are not in proximate syllables (i.e., not at the onset of the first syllable and somewhere in the second: cf., e.g., HLuv. niwarani-), and when there is an oral stop, and perhaps specifically a velar, directly before the second nasal (cf. Hitt. negna- and ne/ikumant-). One workable formulation (to put these all together) would be that dissimilation takes place only when an initial nasal in pre-Proto-Anatolian is followed in the next syllable by another consonantal nasal that is not itself immediately preceded by a (velar?) oral stop. An additional caveat is necessary: our limited knowledge of the Anatolian languages aside from Hittite does make it risky to push the rule back to Proto-Anatolian (or some stage between then and the emergence of Hittite). The only positive evidence for dissimilation comes, after all, from two words in Hieroglyphic Luvian, the nominal hapax lam(i)ni "at the moment" and the verb (LOQUI) lam(a)ni(ya)- "call upon; proclaim", the second of which could perhaps even be a loan from Hittite.⁴⁶

To close on a positive note, though, I believe it is worth pointing out a striking fact about the Hittite words for "name", "time", and "duck" (though not the negative $l\bar{e}$), namely that they are both paradigmatically isolated and derivationally opaque: there is no verbal root * $h_l neh_3$ - in

any Indo-European language and neither *nem- nor *(s)neh₂- seems to survive elsewhere in Anatolian. When the putative nasal dissimilation took place, then, there would have been no reason within the linguistic system why these words should have had the change undone. I judge it as significant that the best evidence for dissimilation comes from precisely those words for which it is difficult to conceive of external factors that might have had an influence.

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References

- Adiego Lajara, Ignacio-Javier. 1993. *Studia Carica: Investigaciones sobre la escritura y lengua carias*. Barcelona: Promociones y Publicaciones Universitarias.
- Anttila, Raimo. 1972a. *An Introduction to Historical and Comparative Linguistics*. New York: Macmillan.
- Anttila, Raimo. 1972b. "The Pitfalls of ananke". Die Sprache 18.34-43.
- Anttila, Raimo. 1989. *Historical and Comparative Linguistics*. 2nd ed. Amsterdam: Benjamins.
- Benveniste, E. 1954. "Études hittites et indo-européennes". *Bulletin de la Société de Linguistique de Paris* 50 (Gs. Jules Bloch).29-43.
- Blažek, Václav. 1999a [publ. 2000]. "Indo-European 'Nine". *Historische Sprachforschung* 112.188-203.

- Blažek, Václav. 1999b. Numerals: Comparative-Etymological Analyses of Numeral Systems and their Implications (Saharan, Nubian, Egyptian, Berber, Kartvelian, Uralic, Altaic and Indo-European Languages). Brno: Masarykova Univerzita v Brně.
- Boas, Franz. 1911. "Introduction". *Handbook of American Indian Languages* ed. by Franz Boas. Part 1, 1-83. Washington, D.C.: Government Printing Office.
- Bonfante, Giuliano. 1978. "Faits phonétiques romans éclairant des faits indo-européens".

 **Bulletin de la Société de Linguistique de Paris 73.221-24.
- Campbell, Lyle. 1996. "On Sound Change and Challenges to Regularity". *The Comparative Method Reviewed: Regularity and Irregularity in Language Change* ed. by Mark Durie & Malcolm Ross, 72-89. New York: Oxford University Press.
- Campbell, Lyle. 1999. Historical Linguistics: An Introduction. Cambridge, MA: MIT Press.
- Carruba, Onofrio. 1970. Das Palaische: Texte, Grammatik, Lexikon. Wiesbaden: Harrassowitz.
- CHD = Güterbock, Hans G. & Harry A. Hoffner, eds. 1980- . The Hittite Dictionary of the Oriental Institute of the University of Chicago. [Citations in this paper come only from vol. 3, fascs. 3 (1986) and 4 (1989).]
- Collinge, N. E. 1985. *The Laws of Indo-European*. Amsterdam: Benjamins.
- del Monte, Giuseppe F. 1992. Die Orts- und Gewässernamen der hethitischen Texte:

 Supplement. Wiesbaden: Reichert.
- del Monte, Giuseppe F. & Johann Tischler. 1978. *Die Orts- und Gewässernamen der hethitischen Texte*. Wiesbaden: Reichert.
- Dunkel, George. 1980. "Ennian atque atque; prope". Glotta 58.97-103.
- Eichner, Heiner. 1973. "Die Etymologie von heth. mehur". *Münchener Studien zur Sprachwissenschaft* 31.53-107.

- Eichner, Heiner. 1982. "Zur hethitischen Etymologie (1. *ištark* und *ištarnik*-; 2. *ark*-; 3. *šešd-*)". *Investigationes philologicae et comparativae: Gedenkschrift für Heinz Kronasser* ed. by Erich Neu, 16-28. Wiesbaden: Harrassowitz.
- Eichner, Heiner. 1985. "Malwa, eine hieroglyphenluvisch-sidetische Wortgleichung". Münchener Studien zur Sprachwissenschaft 45 (Fs. Karl Hoffmann, vol. 2).5-21.
- Grammont, Maurice. 1895. La Dissimilation consonantique dans les langues indo-européennes et dans les langues romanes. Dijon: Darantiere.
- Gusmani, Roberto. 1964-80. *Lydisches Wörterbuch mit grammatischer Skizze und Inschriftensammlung*. 1 vol. + 3 supplementary fascs. Heidelberg: Winter.
- Hajnal, Ivo. 1995. Der lykische Vokalismus: Methode und Erkenntnisse der vergleichenden anatolischen Sprachwissenschaft, angewandt auf das Vokalsystem einer Kleincorpussprache. Graz: Leykam.
- Hart, Gillian R. 1976. "Hittite hi-ni-ik-ta". Studies in Greek, Italic, and Indo-European

 Linguistics offered to Leonard R. Palmer on the Occasion of his Seventieth Birthday,

 June 5, 1976 ed. by Anna Morpurgo Davies & Wolfgang Meid, 93-96. Innsbruck:

 Institut für Sprachwissenschaft der Universität Innsbruck.
- Hart, Gillian R. 1977. "On the Origin of Hittite Nasal Infix Verbs of the Type šarnikzi/šarninkanzi". *Archivum Linguisticum* N.S. 8.133-41.
- Hawkins, J. D. 1980a. "The 'Autobiography of Ariyahinas's Son': An Edition of the Hieroglyphic Luwian Stelae *Tell Ahmar* 1 and *Aleppo* 2". *Anatolian Studies* 30 (Fs. O. R. Gurney).139-56.
- Hawkins, J. D. 1980b. "The Logogram 'LITUUS' and the Verbs 'To See' in Hieroglyphic Luwian". *Kadmos* 19.123-42 (+ Appendix by Frank Starke on pp. 142-48).

- Hawkins, John David. 2000. Corpus of Hieroglyphic Luwian Inscriptions. Volume I:

 Inscriptions of the Iron Age. 3 parts. Berlin: de Gruyter.
- Hock, Hans Henrich. 1987. "Regular Contact Dissimilation". Festschrift for Henry

 Hoenigswald on the Occasion of his Seventieth Birthday ed. by George Cardona &

 Norman H. Zide, 143-53. Tübingen: Narr.
- Hock, Hans Henrich. 1991. Principles of Historical Linguistics. 2nd ed. Berlin: de Gruyter.
- Hoenigswald, Henry M. 1964. "Graduality, Sporadicity, and the Minor Sound Change Processes". *Phonetica* 11.202-15. [Reprinted in *Readings in Historical Phonology:*Chapters in the Theory of Sound Change ed. by Philip Baldi & Ronald N. Werth, 160-71.

 University Park: Pennsylvania State University Press, 1978.]
- Hoffner, Harry A. 1982. "Hittite man and nūman". Reference as for Eichner (1982), 38-45.
- Hoffner Jr., Harry A. 1988. "A Scene in the Realm of the Dead". *A Scientific Humanist:*Studies in Memory of Abraham Sachs ed. by Erle Leichty, Maria deJ. Ellis, & Pamela
 Gerardi, 191-99. Philadelphia: University Museum.
- Hoffner, Harry & Craig Melchert. 2002. "A Practical Approach to Verbal Aspect in Hittite".

 **Anatolia antica: Studi in memoria di Fiorella Imparati* ed. by Stefano de Martino & Franca Pecchioli Daddi, (1.)377-90. Florence: LoGisma.
- Hyllested, Adam. 2004a. "L'Esprit des eaux: grec νύμφη, sanskrit *Rámbhā*, lituanien *Laumē* et quelques autres formes semblant apparentées". *Per aspera ad asteriscos: Studia Indogermanica in honorem Jens Elmegård Rasmussen sexagenarii Idibus Martiis anno MMIV* ed. by Adam Hyllested *et al.*, 219-33. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.

- Hyllested, Adam. 2004b. "Greek λωτός 'Lotus' and the Indo-European Words for 'Blue'". *Indo-European Word Formation: Proceedings of the Conference held at the University of Copenhagen, October 20th-22nd 2000 ed. by James Clackson & Birgit Anette Olsen, 59-64. Copenhagen: Museum Tusculanum.*
- Janda, Michael. 1996 [publ. 1998]. "Altgriechisch νεβρός 'Hirschkalb' und νέβραξ 'Küchlein'". *Die Sprache* 38.87-92.
- Jasanoff, Jay H. 2003. Hittite and the Indo-European Verb. Oxford: Oxford University Press.
- Katz, Joshua T. 1997. "Ein tocharisches Lautgesetz für Monosyllaba". *Tocharian and Indo-European Studies* 7.61-87.
- Katz, Joshua T. 1998a. "Archaische keltische Personalpronomina aus indogermanischer Sicht".

 Sprache und Kultur der Indogermanen: Akten der X. Fachtagung der Indogermanischen

 Gesellschaft, Innsbruck, 22.-28. September 1996 ed. by Wolfgang Meid, 265-91.

 Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Katz, Joshua T. 1998b. "Testimonia Ritus Italici: Male Genitalia, Solemn Declarations, and a New Latin Sound Law". Harvard Studies in Classical Philology 98.183-217.
- Katz, Joshua T. 1998c. *Topics in Indo-European Personal Pronouns*. Ph.D. dissertation, Harvard University.
- Katz, Joshua T. 2001a. "Hittite ta-pa-ka-li-ya-<aš>". Anatolisch und Indogermanisch— Anatolico e indoeuropeo: Akten des Kolloquiums der Indogermanischen Gesellschaft,
- Pavia, 22.-25. September 1998 ed. by Onofrio Carruba & Wolfgang Meid, 205-37.Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.

- Katz, Joshua T. 2001b. Review Article of *Studies in the History of Celtic Pronouns and Particles* by Peter Schrijver (Maynooth: Department of Old Irish, National University of Ireland, 1997). *Kratylos* 46.1-23.
- Katz, Joshua T. 2004. "The 'Swimming Duck' in Greek and Hittite". *Perspectives on Indo-European: Essays in Honour of A. E. Morpurgo Davies* ed. by John H. W. Penney, 196-217. Oxford: Oxford University Press.
- Kent, Roland G. 1936. "Assimilation and Dissimilation". Language 12.245-58.
- Kimball, Sara E. 1999. *Hittite Historical Phonology*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Knobloch, Johann. 1993. "Gr. γυμνός—ein Relikt der mediterranen Frauensprache".

 Historische Sprachforschung 106.303-4.
- Kronasser, Heinz. 1966. Etymologie der hethitischen Sprache. Vol. 1: I. Zur Schreibung und Lautung des Hethitischen; II. Wortbildung des Hethitischen. Wiesbaden: Harrassowitz.
- Lanszweert, René. 1994. "GRASSMANN im Griechischen: Zur umstrittenen Chronologie eines unbestrittenen Lautgesetzes". *Früh-, Mittel-, Spätindogermanisch: Akten der IX.*Fachtagung der Indogermanischen Gesellschaft vom 5. bis 9. Oktober 1992 in Zürich ed. by George E. Dunkel et al., 185-200. Wiesbaden: Reichert.
- Laroche, Emmanuel. 1966. Les Noms des hittites. Paris: Klincksieck.
- Lühr, Rosemarie. 1980. "Althochdeutsch antlingen 'antworten". Zeitschrift für Deutsches Altertum und Deutsche Literatur 109.48-72.
- Meiser, Gerhard. 1993. "Zur Funktion des Nasalpräsens im Urindogermanischen".

 **Indogermanica et Italica: Festschrift für Helmut Rix zum 65. Geburtstag ed. by Gerhard Meiser, 280-313. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.

- Melchert, H. Craig. 1979. "Three Hittite Etymologies". Zeitschrift für Vergleichende Sprachforschung 93.262-71.
- Melchert, H. Craig. 1988. "Luvian Lexical Notes". Historische Sprachforschung 101.211-43.
- Melchert, H. Craig. 1992. "The Third Person Present in Lydian". *Indogermanische Forschungen* 97.31-54.
- Melchert, H. Craig. 1993a. Cuneiform Luvian Lexicon. Chapel Hill, NC: self-published.
- Melchert, H. Craig. 1993b. Lycian Lexicon. 2nd ed. Chapel Hill, NC: self-published.
- Melchert, H. Craig. 1994. Anatolian Historical Phonology. Amsterdam: Rodopi.
- Melchert, H. Craig. 1998. "Aspects of Verbal Aspect in Hittite". *Acts of the IIIrd International Congress of Hittitology, Çorum, September 16-22, 1996* ed. by Sedat Alp & Aygül Süel, 413-18. Ankara: Uyum Ajans.
- Melchert, H. Craig. 2003a. "The Dialectal Position of Lydian and Lycian within Anatolian".

 Licia e Lidia prima dell'Ellenizzazione: Atti del convegno internazionale, Roma, 11-12

 ottobre 1999 ed. by M. Giorgieri et al., 265-72. Rome: Consiglio Nazionale delle

 Ricerche.
- Melchert, H. Craig. 2003b. "Hittite Nominal Stems in -anzan-". Indogermanisches Nomen:

 Derivation, Flexion und Ablaut. Akten der Arbeitstagung der Indogermanischen

 Gesellschaft/Society for Indo-European Studies/Société des Études Indo-Européennes,

 Freiburg, 19. bis 22. September 2001 ed. by Eva Tichy, Dagmar S. Wodtko, & Britta

 Irslinger, 129-39. Bremen: Hempen.
- Meyer, Denise P. 1993. "A Reexamination of Indo-European *pnKu- 'All, Whole'". *Indogermanische Forschungen* 98.40-47.

- Morpurgo Davies, Anna. 1975. "Negation and Disjunction in Anatolian—and Elsewhere". *Anatolian Studies* 25.157-68.
- Neumann, Günter. 1964. "Drei luwische Wörter". *Münchener Studien zur Sprachwissenschaft* 16 (Fs. Wilhelm Wissmann, vol. 1).47-53.
- Neumann, Günter. 1991. "Hethitisch negna- 'Bruder". Historische Sprachforschung 104.63-66. [Reprinted in Ausgewählte kleine Schriften ed. by Enrico Badalì, Helmut Nowicki, & Susanne Zeilfelder, 105-8. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 1994.]
- Neumann, Günter. 1996 [publ. 1998]. "Hethitisch-luwische Verwandtschaftswörter". *Die Sprache* 38.1-13.
- Nussbaum, Alan J. 1997. "The 'Saussure Effect' in Latin and Italic". Sound Law and Analogy:

 Papers in Honor of Robert S. P. Beekes on the Occasion of his 60th Birthday ed. by

 Alexander Lubotsky, 181-203. Amsterdam: Rodopi.
- Odden, David. 1994. "Adjacency Parameters in Phonology". Language 70.289-330.
- Oettinger, Norbert. 1979. *Die Stammbildung des hethitischen Verbums*. Nürnberg: Carl. [Note also the new edition (Dresden: Verlag der TU Dresden, 2002), which includes 13 extra pages of revised introductory material.]
- Oettinger, Norbert. 1994. "Etymologisch unerwarteter Nasal im Hethitischen". *In honorem Holger Pedersen: Kolloquium der Indogermanischen Gesellschaft vom 25. bis 28. März 1993 in Kopenhagen* ed. by Jens Elmegård Rasmussen, 307-30. Wiesbaden: Reichert.
- Ohala, John J. 2003. "Phonetics and Historical Phonology". *The Handbook of Historical Linguistics* ed. by Brian D. Joseph & Richard D. Janda, 669-86. Malden, MA: Blackwell.

- Orël, Vladimir. 1994. "Armenian Etymologies". Annual of Armenian Linguistics 15.37-42.
- Pierrehumbert, Janet. 1993. "Dissimilarity in the Arabic Verbal Roots". *Proceedings of the North East Linguistic Society* 23.(2.)367-81.
- Puhvel, Jaan. 1991. *Hittite Etymological Dictionary*. Vol. 3: *Words beginning with H*. Berlin: de Gruyter.
- Rieken, Elisabeth. 1999. *Untersuchungen zur nominalen Stammbildung des Hethitischen*. Wiesbaden: Harrassowitz.
- Rix, Helmut. 2001. *LIV: Lexikon der indogermanischen Verben. Die Wurzeln und ihre Primärstammbildungen.* 2nd ed. Wiesbaden: Reichert.
- Sihler, Andrew L. 1995. *New Comparative Grammar of Greek and Latin*. New York: Oxford University Press.
- Starke, Frank. 1990. *Untersuchung zur Stammbildung des keilschrift-luwischen Nomens*. Wiesbaden: Harrassowitz.
- Starke, Frank. 1995. Ausbildung und Training von Streitwagenpferden: Eine hippologisch orientierte Interpretation des Kikkuli-Textes. Wiesbaden: Harrassowitz.
- Strunk, Klaus. 1979. "Heth. huekzi, heth. hūnikzi und die indogermanischen Nasalinfixpräsentien". Hethitisch und Indogermanisch: Vergleichende Studien zur historischen Grammatik und zur dialektgeographischen Stellung der indogermanischen Sprachgruppe Altkleinasiens ed. by Erich Neu & Wolfgang Meid, 237-56. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Stüber, Karin. 1997. "Urindogermanisch * h_1 nóm-n 'Name', * h_2 óng"-n 'Salbe' und der Ablaut der neutralen n-Stämme". *Die Sprache* 39.74-88.

- Sturtevant, Edgar H. & E. Adelaide Hahn. 1951. *A Comparative Grammar of the Hittite Language*. Vol. 1, rev. ed. New Haven: Yale University Press.
- Suzuki, Keiichiro. 1998. *A Typological Investigation of Dissimilation*. Ph.D. dissertation, University of Arizona. [Downloadable at the Rutgers Optimality Archive: http://roa.rutgers.edu/view.php3?id=293.]
- Tischler, Johann. 1991. *Hethitisches etymologisches Glossar*. Vol. 2, fasc. 7: *N*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Watkins, Calvert. 1985a. "Greek menoináai: A Dead Metaphor". International Journal of American Linguistics 51:4 (Fs. Eric Pratt Hamp).614-18. [Reprinted in Selected Writings ed. by Lisi Oliver, (2.)695-99. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck, 1994.]
- Watkins, Calvert. 1985b. "Hittite and Indo-European Studies II". *Münchener Studien zur Sprachwissenschaft* 45 (Fs. Karl Hoffmann, vol. 2).245-55.
- Watkins, Calvert. 1995. "Some Anatolian Words and Forms: Hitt. nega-, negna-, Luv. *niya-, nāni-". Verba et Structurae: Festschrift für Klaus Strunk zum 65. Geburtstag ed. by Heinrich Hettrich et al., 357-61. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Watkins, Calvert. 2001. "An Indo-European Linguistic Area and its Characteristics: Ancient Anatolia. Areal Diffusion as a Challenge to the Comparative Method?". *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics* ed. by Alexandra Y. Aikhenvald & R. M. W. Dixon, 44-63. Oxford: Oxford University Press.
- Weiss, Michael. 1996. "Greek μυρίος 'Countless', Hittite mūri- 'Bunch (of Fruit)".

 Historische Sprachforschung 109.199-214.

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^{*} This paper is loosely based on some observations I made in a lecture at the Ohio State
University (Historical Linguistics Study Group) in October 2003, "Ducks and Dissimilation in
Hittite". The lively and helpful audience did much to stimulate my thoughts—thanks especially
to Catherine Callaghan, Richard Janda, and my host, Brian Joseph—and I owe a particular debt,
as so often, to Craig Melchert, who has had many wise things to say, particularly about kinship
terms, but is in no way responsible for my errors. I am pleased to be able to express my gratitude
as well to the American Council of Learned Societies and the Institute for Advanced Study for
generous support during the 2002-2003 academic year.

¹ Following standard Hittitological practice, I indicate so-called '*plene*-writing' with a macron over the vowel in question: by '*lāman*', for example, I mean that the word is sometimes spelled out as <*la-a-ma-an*>, though other times we find just <*la-ma-an*> or <*lam-an*>.

The classic, data-rich survey of dissimilation remains Grammont (1895), written before the discovery of Hittite and dedicated to the author's teachers, one of whom was Saussure. Suzuki (1998) offers a good modern account that balances concern for data with interest in theoretical results (unfortunately, he does not cite Grammont and works in the framework of Optimality Theory, whose premises I find difficult to accept); he has surprisingly little to say about nasal dissimilation as such (though see pp. 68 and 155, with particular reference to work by D. Odden [esp. Odden 1994: 301-3]). On dissimilation as a regular process, see notably Hoenigwald (1964 = 1978) and, more recently, Hock (1987 and 1991: 111-14 and 666); Kent (1936) claims that it is more naturally regressive than progressive. Ohala (2003) argues forcefully and against received wisdom that "sound change—assimilative as well as dissimilative—is not related to

physiological cost but is primarily a parsing error on the part of the listener" (680; see pp. 677-80 specifically on dissimilation).

- ⁵ Rieken (1999: 123-25, with references) considers the possibility that the Cuneiform Luvian cognate lurks in the first half of the putative Hittito-Luvian compound *lamarhandatt(ašši)*-, which may perhaps mean "(pertaining to) the setting or fixing of a small unit of time".
- ⁶ The base noun in Hieroglyphic Luvian and a number of other Anatolian languages looks nothing like Hitt. $l\bar{a}man$, beginning for one thing with a vowel: HLuv. \acute{a} - $ta_{4/5}$ -ma- $^{(n)}za$ [adamantsa] "name", Lyc. $ad\tilde{a}man$ "id.", and Lyd. $\tilde{e}tamv$ "designation". Like (O)Ir. ainm and (O)Russ. imja, these go back to a generalized double-zero-grade preform $*h_1\eta h_3$ - $m\eta(-)$, and subsequent changes to the syllabic nasal in the first syllable (it vocalizes to *an- and then becomes *ad-) make dissimilation a non-issue.

³ I note with interest but without judgment the unexpectedly different view of this paradigm in Stüber (1997).

⁴ Compare (with Bonfante 1978: 221) the Sardinian forms *lúmene* "name" (< Lat. *nōminem*) and *lúmeru* "number" (< *numerum*).

⁷ On the third nasal and the importance of acknowledging and accounting for the n-stem forms of Hittite words in -anza(n)-, see now Melchert (2003b).

⁸ In Katz (2004) I made two claims that might merit review by phonologists. Suppose that the Anatolian dissimilation under discussion—the process that accounts for the initial l- of at least some of the forms cited in the last two paragraphs—really is rule-governed rather than sporadic. Then, I stated, "it is surely an unreasonable rule that generates $l \dots N_i N_j$ from * $n \dots N_i N_j$ while blocking this same dissimilation in * $n \dots N$ " (Katz 2004: 209). I should have written "just * $n \dots N$ " at the end, and the whole thing would have been clearer had I used X, Y, and Z, for my point

was that an intervening sound Y can have an effect on the mutual relationship between X before it and Z after it, but Z cannot influence a preceding sequence X ... Y. Note, for example, my suggestion in Katz (1998b: 206 and 214-17, esp. 215f. n. 92) that the assimilation of PItal. *f... rb to b ... rb in Latin (cf. barba "beard" and the form BERBER in the Carmen Arvale, which I define as "firm") could be regular even though there is clearly no rule whereby just $*f \dots b$ becomes *b ... b (cf. fiber "beaver", not *biber); also, I propose below in the text that Anatolian nasal dissimilation may be blocked by the oral stop K in the (pre-)Proto-Anatolian sequence *#n... KN. My second claim—pace, e.g., Oettinger (1994: 310f.) and Kimball (1999: 336f.)—was that the restriction of the rule to specifically $*n \dots m$ (rather than supposing the more general *n... N) is unlikely: not just on account of of lah(h)anza(n)-, but also because "it is hard to believe that a language would have [regular] dissimilation of $*n \dots m$ but not of $*n \dots n$ " (Katz 2004: 209 n. 48). This still seems reasonable to me, is in accord with a tendency explored by Pierrehumbert (1993) and Suzuki (1998: 17-19 and passim), and does not seem to be contradicted by any of the cross-linguistic evidence Grammont (1895) has assembled that "n dissimilé par n devient l" and "n dissimilé par m devient l" (98f.). ⁹ See Watkins (1985a: 617 n. 2 = 1994: (2.)698 n. 2): "Indo-European *men- is evidently dissimilated to mal- in Anatolian, to judge from Luvian (Glossenkeil in Hittite) *mali- 'think' (*mn-ie-, cf. Skt. manyate, OIr. -muinethar 'thinks') and Hittite māl- 'mental force, strength' (neuter root noun *mon-, cf. [Gk.] ménos, Ved. mánas- for the semantics, and note that one can 'know' (sakk-) one's māl, just as in Greek one can 'forget' (lathésthai) one's ménos)"; Melchert

Watkins continues with the tentative suggestion that the "obscure Hittite *malali* ..., if dat.-loc. *malal-i*, might somehow represent a dissimilated **menon*- [cf. Gk. $\mu \epsilon \nu o i \nu \bar{\alpha}$ - 'desire eagerly'],

(1994: 169) considers this plausible, but Rieken (1999: 51, with n. 233) thinks differently.

perhaps via Luvian". Note that Luvian also has a variety of words that go back to slightly different stem- and root-forms and do not show dissmilation: see Hawkins + Starke (1980b) and Melchert (1988: 218-20) for an overview of CLuv. m(a)nā- and HLuv. LITUUS+na- "see" (< PIE *mneh₂-), CLuv. mimma- "regard" (< *mi-mn-), and CLuv. māmmanna- "regard with favor" and HLuv. LITUUS.LITUUS-na- "see" (< *me-mn- [vel sim.]). ¹⁰ Melchert (1994: 171) notes as well a number of words that show low-level "alternation of l/n[specifically] before a dental stop" (e.g., Hitt. maltalla/i- / mantalla/i- "slanderous (vel sim.)"). ¹¹ For further examples of Anatolian phenomena, including dissimilation, that involve [n] and/or [1], see most notably Kronasser (1966: 58-65 and 103—overly skeptical, and note the remark of Anttila 1972b: 40 on the Finnish and Uralic forms Kronasser cites on pp. 59f.!), Melchert (1994: 169 and 317), Oettinger (1994), Kimball (1999: 336f.), and Katz (2001a: 216-20). Sporadic assimilation and dissimilation involving [n] and [l] are considered so ordinary that scholars routinely invoke them without much comment in etymological speculations: the most recent, if not necessarily the most plausible, Indo-European examples come from the work of Adam Hyllested (see Hyllested 2004a and 2004b); an especially interesting case is the derivation in Nussbaum (1997: 187f. n. 47) of Lat. sollemnis "ceremonial (vel sim.)" from *soll-epli-. John Ohala (who notes in print that one would not expect laterals to be involved in dissimilation, though indeed they frequently are [thus Ohala 2003: 686 n. 7; compare, e.g., Odden 1994: 327 and passim]) has suggested orally that the apparent dissimilation in words like *lāman* might provide evidence that [1] could be thought of as a 'denasalized [n]' (Brian Joseph, p.c.; confirmed

by Ohala per litt. electron.); Catherine Callaghan points out to me that Boas (1911: 16f.) noted

the existence of a sound in Pawnee that "may be heard more or less distinctly sometimes as an l.

sometimes an r, sometimes as n, and again as d".

¹² On the relevance of proximity, see in particular the detailed analysis of Arabic verbal roots in Pierrehumbert (1993), as well as, e.g., Odden (1994) and Suzuki (1998: 19-22, 120, and *passim*); Ohala (2003: 680) claims explicitly that the "domain of dissimilation is the word".

¹³ This is not to say that the workings of Grassmann's Law in either Greek or Indic are uncontroversial—far from it, to judge from the steady stream of papers on the subject (see, e.g., the idiosyncratic approach of Lanszweert 1994). Collinge (1985: 47-61) provides a somewhat ornery introduction, noting in passing also W. J. de Reuse's observation of the same phonological process in the extinct Siouan language Ofo.

Compare the salutary remarks of Dunkel (1980: 101f.). Meyer (1993), reviving an idea of D. Silvestri and E. P. Hamp, presents a reasonably strong argument for a possible fourth example: Lat. $c\bar{u}nctus$ "all, the whole" (and presumably also Umbr. **puntes**, on the assumption that its initial labial comes from a remade * k^u - even before a -u- rather than from the old PIE *p-); see also Sihler (1995: 145f.).

¹⁵ By 'word' I mean, for Hittite, any 'common' noun that receives a separate entry in Tischler (1991) or the *CHD*. (I exclude for obvious reasons *n*-initial forms that have a second nasal only because of synchronically transparent inflectional morphology, e.g., such parts of the paradigm of the verb nah(h)- "fear" as 1sg. pres. act. nahmi and 1sg. pret. act. nah(h)un. I also exclude 'proper' nouns, though any follow-up investigation should examine these with an eye to determining which ones are based on regular items of vocabulary, which ones are non-native, etc.: for personal names [e.g., Hitt. ^fNanna and ^mNun(n)u], see in the first place Laroche 1966; for toponyms [e.g., HUR.SAG Nanni and ^{URU}Ninuwa "Nineveh"], see del Monte & Tischler 1978 and del Monte 1992; and note also such theonyms as ^DNinatta, as well as words based on these, e.g., Hitt. ^{D/NINDA}ni/enattanni- "Ninatta-doll".) For Cuneiform Luvian, see Melchert

(1993a); for Hieroglyphic Luvian, see the index to Hawkins (2000)—not a full dictionary, but Craig Melchert tells me that he is unaware of forms not listed on p. (2.)628 that might prove troublesome for me; for Lycian and Milyan, see Melchert (1993b); for Lydian, see Gusmani (1964-80); and for Palaic, see Carruba (1970). (I have nothing to say about evidence for nasal dissimilation in the Anatolian *Trümmersprachen*, though it might be worth looking more closely at Carian, on which there has been so much work in the past decade: Adiego Lajara 1993: 338f. would be a good place to start.) These dictionaries should be consulted for further details of the attestation, meaning, and etymology of the words under discussion; I shall be selective in my own citations of the secondary literature.

¹⁶ The form *nušūni* listed in the *CHD* (p. 476) is a ghost word according to Tischler (1991: 352).

¹⁷ The *CHD* writes that "[i]t is not certain if this word is Hittite" (343), a judgment with which Tischler (1991: 249) concurs.

¹⁸ Although this seems to be synchronically good Hittite, it is a borrowing from Hurrian (which has various words for "bed" shaped like *namal(l)i-*) and may have been felt as such.

¹⁹ Tischler (1991: 310) writes of this obscure form, "Die Wortstruktur wirkt hurritisch."

²⁰ Tischler (1991: 325) notes that E. Laroche suggested tying this in with Hurrian.

²¹ On the relationship between *nāwartanna/i* and the Hurrian phrase, see now Starke 1995: 83-85.

²² Similar are *naḥḥān* "fear; respect", *naḥḥant*- and *naḥšariyawant*- "afraid", *naḥšarant*- "fear, fright" (but this is usually *naḥšaratt*-), and *naḥšarnu*- "make afraid", all built to *naḥ(ḥ)*- (see fn. 15). Note also *nešumnili* "in Hittite ('Nesian/Nesite')", a derivative of the name of the old capital Nesa, whence also the word for a man from said place. ^{LÚ}nešumena-.

- ²⁵ On Luvian negative compounds, see esp. Starke (1990: 452f., with references). On the abbreviated spellings *nuwiza* and *niza* instead of *nimuwiza*-, see Hawkins (2000: (1.)148).
- ²⁶ See for further details of its derivation Eichner (1985: 19 n. 26), Melchert (1993b: 50), and Hajnal (1995: 14, with 31 n. 8, and 92, with 113 n. 113).
- Watkins (1995: 357 n. 1) writes of Neumann's derivation that it "founders on the primacy of the vocalism *ne* in both *negna* and *nega* when word initial". (On the compounds *pappa-n(n)e/igneš* "brothers by the same father" and ^(SAL) *anna-ne/igēš* "sisters by the same mother", see esp. Hoffner 1988: 194-97 and Watkins 1995. It is difficult to be sure of the vocalism of compounded *ne/ig-* since the same sign serves for both <ni> and <né>.) I agree with Watkins that *e*-vocalism in *nēga* is primary (see immediately below in the text); but as for *negna*-, whose sole uncompounded spelled-out attestation is not in Old Script, Craig Melchert informs me that E. Rieken has argued that the lowering of [i] to [e] in Hittite began earlier than is usually supposed, in which case Neumann's *ni-\$nh_1-\$o-* is phonologically possible.

Whereas *nenniya*- is surely an example of old reduplication, *nanna*- almost certainly only looks that way (*pace*, e.g., Watkins 1985b: 253) and actually contain a suffix *-anni/a*- (see Kronasser 1966: 122, as well as Melchert 1994: 19 and 1998: 416 and Hoffner & Melchert 2002: 386; see also now Jasanoff 2003: 117f., with n. 68). For the possibility that HLuv. CRUS.CRUS is to be read as reduplicated *niniya*- rather than simply *niya*-, see F. Starke *apud* Hawkins (1980b: 128).

²⁴ The optional third -*n*- in *nana*(*n*)*kušš*(*iya*)- is an intrusive (perseverative, echoic) nasal, as noted by, e.g., Hart (1977: 138 and *passim*), Watkins (1985b: 252), and Oettinger (1994: 319f.); compare also Melchert (1994: 343, with reference to H. Eichner).

- Neumann (1991: 65 = 1994: 107) writes that CLuv. $n\bar{a}ni(ya)$ "wäre dann also von Haus aus kein 'Lallwort'", but he ends his most recent paper on the subject with the following sentence about the apparent use of kinship terms as personal names in Anatolia: "Bei manchen von ihnen bleibt freilich offen, ob sie nicht zur großen Gruppe der Lallnamen gehören" (Neumann 1996: 11). See Tischler (1991: 269-71) for a survey of the "Personennamenelement" he calls "nana-(nani-, nanu-)".
- ³¹ For an overview of Anatolian negatives, see Morpurgo Davies (1975); on Hitt. *natta* and possible evidence in Anatolian and Celtic for a negative of the shape $*n\acute{o}$, see Katz (2001b: 8-11).
- Note also Lyd. $nikum\bar{e}k$ "never" ($<\tilde{e}>$ is a nasalized vowel), which is almost certainly in origin a particle chain headed by a negative in n- (cf. Lyd. nid "not" and other probable extensions of this with a second nasal: nimit, nin(-), and $ni\tau in$).

²⁸ On Lyc. *nēne/i-* and its relationship to *nere/i-* "sister", see Hajnal 1995: 140, 222, and esp. 233 n. 297; note also, though, the somewhat different view of Neumann (1996: 11, with reference to O. Carruba and others). Hawkins (2000: (1).278) discusses the Hieroglyphic Luvian hapax (FEMINA)*nanas(a)ri-*, which is coupled in MARA,S 6, l. 1 with what would appear to be a quite different word for "brother", namely FRATER-*la-* (perhaps the same as what is written as ("INFANS.*NI*")*á-ta₅-la-* in KARKAMIŠ A15*b* §16).

²⁹ See Jasanoff *apud* Watkins *apud* Hoffner (1988: 197, with n. 41) and Jasanoff *apud* Watkins (1995: 359), as well as Neumann (1991: 65 = 1994: 107 and 1996); see also Melchert (1994: 256 and 271).

³³ The derivative *nekmuntatar* "destitution (lit. 'nakedness')" displays late metathesis; see Melchert (1994: 170).

³⁴ Recent articles that attempt to make sense of the forms are Knobloch (1993), according to whom γυμνός comes from *νεγυμνός and shows "décapitation" characteristic of women's speech (304), and Orël (1994: 37f.), who denies that *merk* goes back to anything like **neg^u-ro*-and compares instead Lith. *márgas* "motley", from a supposed root **merHg*- "shine, shimmer". I do not believe that either is correct (for a lovely defense of **neg^u-ro*-, see Janda 1996 on Gk. νεβρός "fawn") and cite them simply in order to emphasize the lengths to which scholars will go to explain away the phonological difficulties that this group of words presents.

³⁵ For overviews of the words for "nine" in Anatolian and all the other Indo-European languages, see most recently Blažek (1999a and 1999b: 277-89). Prominent Anatolianists who support the reconstruction with *-*m* include Melchert (1994: 278) and Hajnal (1995: 75 and 129).

³⁶ On HLuv. 9-wa/i-i-za, which may perhaps mean "ninth" rather than "nine", see now Hawkins (2000: (1.)116).

Sound changes in Anatolian final syllables are notoriously difficult to pin down (see Melchert 1994), but to judge from the (apparently) divers outcomes of *-m(C)# throughout Anatolian, this particular syllabic nasal definitely remained as such until after the breakup of the subfamily. (The evidence Melchert 1994: 278f. very tentatively marshals for the development of PIE *-m(-) in final syllables to -uN(-) in Luvian is shaky, however: he himself admits that "CLuvian 9-un-(u) 'nine' clearly reflects *u0, but the result with u1-vocalism may be due to the preceding *u1, as for HLuv. u2-(u1) and u2 [antsunts] "us", which Melchert analyzes as *u3-u4 plus athematic acc. pl. *-u5, I suggest in Katz 1998a: 282f. and 1998c: 141-46 and u5 and u6 and u7.

³⁸ Tischler (1991: 351, with references) suggests that *nuriman(za)* may be Luvian.

- ⁴¹ The *CHD* (p. 445) connects ^(D)*ninga* to *ni(n)k* and *ninganu*-, but Tischler (1991: 333) doubts this (and the *CHD*'s translation "drenching, cloudburst"). If ^(D)*ninga* is historically separate, the absence of dissimilation might best be explained on the grounds of folk-etymological association.
- ⁴² Hart (1976 : 95), positing a root *(s)Heik-, suggests that the Hittite verb is connected to Skt. siñcáti "pours out", which, however, is generally taken to reflect PIE *seik*- (see, e.g., Th. Zehnder in Rix 2001: 523). Her idea has received a fair amount of support in the secondary literature (in recent years from, e.g., Puhvel 1991: 315f.) but it is, in my view, ultimately difficult to accept.
- ⁴³ Sturtevant was evidently very fond of 'getting high' (see, e.g., Sturtevant & Hahn 1951: 127, where ni(n)k- is defined as "rise, be intoxicated"); see also Anttila (1972b: 43) and the further references in Tischler (1991: 332).
- ⁴⁴ Putative examples of this strategy to avoid homophony can be found in Anttila (1972: 182 and 1989: 182: Finn. *kuti* "spawned" does not undergo assibilation and merge with *kusi* "pissed") and Campbell (1996: 78 and, a bit more cautiously, 1999: 293f.: some German dialects that would have merged *liegen* "lie (down)" and *lügen* "(tell a) lie" keep them apart). The etymology of *li(n)k* (cf. also CLuv. *lik*-) is much disputed, but the word is probably, with Oettinger (1979: 96, 138, and 181) and Lühr (1980: 69f.), to be derived from an old 'Rechtsterminus' **h₁lenGh*-, as in

³⁹ Lycian also has the enclitic pronoun = $\tilde{n}ne$ "to/for them", but the first nasal is not really initial and the form goes back in any case to the same preform *=s-mos as, e.g., Hitt. = $\tilde{s}ma\tilde{s}$ "id." (see for details Katz 1998c: 242-47, esp. 245-47, with references).

⁴⁰ The meaning of the noun *ninkunatar* is unknown, but it surely belongs with ni(n)k-.

Gk. ἐλέγχω "refute; prove by testing" (see now Melchert 1994: 67 and Kümmel in Rix 2001: 247).

- ⁴⁵ Hawkins (2000: (2.)542) compares also HLuv. *u-nu-* [unu(n)] "now", which is "probably to be associated with **nun*, 'now', Hitt. *kinun*, Cun. Luw. *nanun* ... [and t]hus ... would show yet another prefix".
- ⁴⁶ The relationships among Hittite, Hieroglyphic Luvian, and the other Anatolian languages remain very unclear: the most recent account is Melchert (2003a), who anyway "reject[s] categorically the validity of a stemma or cladistic model for elucidating the dialectal relationships" of these languages since they were "in close and long-term contact with each other", including even "prehistoric contact *after* the period of Proto-Anatolian" (265); compare also Watkins (2001).
- ⁴⁷ Even if Melchert is right to derive ni(n)k- from *nem-K-, this verb differs so greatly from the noun *lammar* (< unextended *nem-) in both meaning and form that it is impossible to believe that any speaker would have connected them.