HEAD-NOUN ELLIPSIS IN HITTITE AND ELSEWHERE
A STUDY IN RECOVERABILITY CONDITIONS

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1. Definition of ellipsis: Typology of phrasal ellipsis

Ellipsis can be synchronically defined as a syntactic operation consisting of the deletion of an underlying element from the sentence surface structure[1]. From the diachronic perspective, ellipsis is the meaning-preserving omission of a historically reconstructed syntactic element. The two definitions have very different scopes of application. If a woman, when asked about her name, answers "Penelope", this can be taken (under certain assumptions) as a fragmentary answer implying the underlying "[My name is] Penelope", but it is clearly futile to attempt to reconstruct a stage in the history of English when such fragmentary answers were impossible. On the other hand, the English word *ambulance* is historically elliptical for an erstwhile *ambulance car*, but many people who are not aware of this fact are nevertheless able to use the word *ambulance* properly.

One of the tasks of twentieth century synchronic linguistics was to delineate the borders of synchronic ellipsis. It is reasonable to assume that linguistic material cannot be left freely unpronounced in structures, but rather, ellipsis is licensed by recoverability. This means that a constituent may be elided only if its content is recoverable from the surrounding context. The exact definition of this context is a matter of much debate, however. Within the generative tradition, one can identify two broad approaches to recoverability: syntactic/semantic and pragmatic.

The syntactic/semantic approach to ellipsis has dominated the field in the last decade. Under a syntactic isomorphism approach to recoverability, every constituent marked for ellipsis (E) must have a linguistic antecedent (A) There must be a structural relationship between E and A, typically one of identity. Such an approach is found, for example, in Hartmann 2000, who provides a generative account for Right Node Raising in German[2]. The semantic isomorphism approach requires not a morphosyntactic, but rather a semantic relationship between E and A, for example, one of mutual entailment. Semantic approaches to ellipsis can be

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[2] Right Node Raising is a traditional name for the type of ellipsis that can be illustrated by the German sentence *Julian liebt [Pepsi-Cola] und Robert verachtet Pepsi Cola* "Julian loves and Robert despises Pepsi-Cola". Hartmann argues that Right Node Raising involves the reduction of identical material at the phonology-syntax interface.

exemplified by Merchant's (2001) and Potsdam's (forthcoming) treatment of sluicing in English and Malagasy respectively[3].

The pragmatic approach to ellipsis is introduced in Merchant (forthcoming). The author of this article rejects the claim that ellipsis requires linguistic antecedents. He cites the example of a thirsty man approaching the vendor on the street and uttering "water". Even though this utterance lacks linguistic context, the vendor will be able to figure out that it implies a request for water, and not, e.g., the water's description, which means that he will be able to process it as an elliptical statement. This is possible due to the fact that syntactic structures used during the interaction between a customer and a vendor are a part of shared knowledge of the linguistic community. Once a vendor can identify a man who approaches him as a potential customer, this pragmatic context enables him/her to recover the missing parts of the elliptical statement.

In support of his argument, Merchant (ibid.) adduces similar examples from the languages with morphological case-marking. The elliptical statements preserve the case assignment one expects from the deleted verb:

| (1) | Gk. | [~~Ferte mu~~] | (enan) kafe | [~~parakalo~~] |
| | | [Bring me] | a coffee.ACC | [please] |

| (2) | Russ. | [~~Dajte mne~~] | vody | [~~pozhalujsta~~] |
| | | [Give me] | water.GEN | [please] |

Only the contrastive focus of the underlying sentences given above made its way to the surface structure. It is possible to argue that the focus movement logically precedes the IP/TP deletion, and, therefore, we are dealing with a phrasal ellipsis[4]. In the example below, taken from colloquial Russian, two patterns of ellipsis correlate with two strategies of focus movement.[5]

(3)	Russ.	Poprobujesh	sol'onyx	gribov?
		try 2SG.FUT	pickled GEN.PL	mushrooms GEN.PL
		'Will you try pickled mushrooms?'		

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[3] Sluicing is a type of ellipsis that can be illustrated by the English sentence *Gary visited somebody but he did not say who* [~~Gary visited~~]. The semantic, rather than syntactic identity condition is necessary to account for the cases like *Someone will arrest Alex, but he does not know who will* [~~arrest him~~]. Potsdam (forthcoming) must be consulted for the most updated list of generative linguists that used either syntactic or semantic approaches to ellipsis in the recent past.
[4] Cf. similar conclusions of Merchant (forthcoming) made in connection with fragmentary answers, e.g. *Who is Beth bringing?* – [~~She is bringing~~] *Alex.*
[5] The contrastive (argument) focus movement is a common discourse device not limited to Russian. A similar phenomenon in Greek is described in Mathieu and Sitaridou 2004. For a more general discussion of the argument focus and its syntactic correlates see Lambrecht 1994 : 228-33, 286-91.

Strategy 1: Focus (N) fronting > TP deletion.

| Gribov | poprobujesh | sol'onyx? | > | Gribov? |
| mushrooms | try | pickled | | mushrooms |

Strategy 2: Focus (Adj) fronting > TP deletion

| Sol'onyx | poprobujesh | gribov ? | > Sol'onykh? |
| pickled | try | mushrooms | pickled |

The pragmatic approach to ellipsis is not compatible with the notion of isomorphism. No formal representation can serve as a common denominator of a customer's thirsty look and an elided part of the expression "[Give me] water [please]". It is precisely this lack of meta-language that makes one restrict the sort of pragmatic ellipsis discussed here to a finite number of conventional situations. Merchant (forthcoming) makes it clear that the semantic isomorphism approach retains its value for the absolute majority of the cases discussed in his paper.

2. Nominalization / non-phrasal ellipsis in Greek and Russian

So far, our discussion of synchronic ellipsis was limited to the cases when the deleted constituent represents a syntactic phrase. Now, we have to consider the cases of NP-internal ellipsis[6], which can be illustrated by the following examples:

| (4) | Engl. | Lee's youngest son ran away with Dawn's oldest [~~son~~]. | | | |

| (5) | Russ. | On kupil | dve butylki | belogo vina | i odnu [~~butylku~~] | krasnogo [~~vina~~]. |
| | | 'He bought | two bottles | of white wine | and one [bottle] | of red [wine]'. |

| (6) | Gk. | I Maria | ehi polus filus | ke i aderfi tis | ehi ligus [~~filus~~]. |
| | | 'Maria | has many friends | and her sister | has few [friends]'. |

In all the three cases given above, the head-noun ellipsis is licensed by the occurrence of the same lexeme(s) elsewhere in the relevant linguistic context. The question arises, whether or not this restriction must be imposed on every case of synchronic phrase-internal ellipsis. Giannakidou and Stravrou (1999) answer this question affirmatively, at least with respect to the head-noun ellipsis in modern Greek DPs. They argue that the instances of genuine ellipsis, such as (4-6) must be clearly distinguished from the cases of substantivization, such as those given below (Russian equivalents are mine):

(7)	Gk.	I tifli		xriazonde	ti noithia mas
	Russ.	Slepyje		nuzhdajutsia	v nashej pomoshchi
		'Blind	[people]	need	our help'.

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[6] The claim of Lobeck 1995 : 26 that ellipsis necessarily operates on phrasal categories seems to be falsified by her own examples of NP-internal ellipsis, such as *Although John's friends were late for the rally, Mary's* [~~friends~~] *arrived on time* (Lobeck 1995 : 20).

(8) Gk.   *I plusii*   *ksexnun*   *apo pu ksekinisan*
     Russ. *Bogatyje*   *zabyvajut*   *otkuda oni vyshli*
            'The rich   forget   from where they started'.

Two main criteria help to distinguish substantivized Greek adjectives from constructions with DP-internal ellipsis. First, the substantivized adjectives have a fixed interpretation: *i plusii* can refer to the rich people', but not, e.g., to the rich districts[7]. Second, the substantivized adjectives have restricted productivity: Gk. *to agnosto* 'the unknown' can be substantivized, while Gk. **to gnosto* 'known' cannot. On the contrary, head noun ellipsis can potentially yield all types of adjectives in Greek, but the elided head-noun cannot be recovered without context.

If we accept this line of argumentation, then in (7-8) we are dealing not with headless adjectives, but rather with derived nouns. Nothing contradicts this assumption from the synchronic point of view: Greek adjectives do not have peculiar inflectional endings, and substantivized adjectives do not even show gender variation, which is the only morphological feature that separates adjectives from nouns in Greek. It is not even possible to argue that all of these examples illustrate ellipsis in the diachronic sense. There is no doubt that the Greek noun *tifli* 'blind people' and the Greek adjective *tiflos* 'blind' historically go back to the same lexeme, but it is not logically necessary to regard the adjectival meaning as original. The homonymy of adjectives and nouns denoting kinds is observed in Ancient Greek and reconstructed for Proto-Indo-European. An attempt to establish the chronological priority of one of the two categories would bear resemblance to the chicken and the egg discussion.

The ellipsis-based account seems to be more promising, once we turn to phrasal idioms. Consider the following examples from modern Russian:

(9)   (electronic forum of wine-lovers) *Mojej glavnoj oshibkoj bylo to chto ja schitala rozovoje* [ ] *rodstvennikom krasnogo* [ ], *togda kak ono, vidimo, blizhe k belomu* [ ]. 'My main mistake was that I considered the pink [wine] a relative of the red [wine], while it is, probably, closer to the white [wine]' ("pink wine" = rosé wine).

(10) (revolutionary song). *Tak pust' zhe Krasnaja* [ ] *vzdymajet vlastno svoj shtyk mozolistoj rukoj!* 'Let the Red [Army] powerfully elevate its bayonet with the callous hand'.

(11) (tale of an angry pedestrian) *Segodnia na Krasnoj* [ ] *pereshel na krasnyj* [ ] *i popal priamo v lapy serzhantu* 'Today on the Red [street] I crossed at the red [light] and got straight into sergeant's hands'.

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[7] Kester 1996 : 227 makes a somewhat different claim with respect to the English DPs of the type *the rich, the poor, the homeless* etc. She maintains that they contain an empty category e (*the poor e* etc.) specialized as [+human, +generic, +plural]. I believe that syntactic deletion does not have any obvious advantages over lexical derivation in this case. English has other plural nouns that do not have morphological plural marking, e.g. *the people*, the *sheep, the deer, the shrimp*.

(12) (interview with a high-tech manager) *Antivirus – eto ne bukhanka belogo* [ ], *u kazhdoj proglammy jest' svoi tonkosti.* 'Antivirus is not a loaf of white [bread], every program has its peculiar features'. ("white bread" = wheat bread).

(13) (children's joke about the Russian Civil War hero Vasilij Ivanovich Chapaev) *Vasikij Ivanovich, belyje poshli! - Davaj korzinu, poshli sobirat.* 'Vasilij Ivanovich, the Whites are coming! – Fetch me a basket, and let us go to pick them up' (Chapaev mistook the Whites – Royalists for the "white [mushrooms]" = porcini).

In each of the passages given above, we are dealing with the truncation of Russian idiomatic phrases. The full phrases, such as *krasnoje vino* 'red wine', *Krasnaja Armija* 'Red Army', *krasnyj svet* 'red light', *beloje vino* 'white wine', *belyj khleb* 'wheat bread' or *belyje griby* 'porcini' occur more frequently in Russian than their shorter equivalents, which may have either colloquial or poetic connotations. It is necessary to assume that the truncated forms of idioms are chronologically secondary: otherwise, it would be impossible to explain why the same substantivized adjectives have three different meanings. But one can also make a stronger claim: the examples (9-13) must be analyzed as instances of synchronic ellipsis. In order to verify this claim, it is enough to put these idioms in the position that is devoid of the relevant context. The following short dialogs illustrate a linguistic experiment where the informer is asked to describe the object:

(14) *Chto lezhit na stole?*   *Belyj*   khleb   / **Belyj*.
      'What is lying on the table?'   white   bread   / *white

(15) Chto lezhit na stole?   *Belyj*   grib   / **Belyj*.
      'What is lying on the table?'   white   mushroom   / *white

(16) *Chto ty vidish vperedi*   *Krasnyj svet*   / **krasnyj*
      'What are you seeing in front of you?'   red   light   / *red

The head-noun cannot be omitted in these cases since the informer knows that the adjectival modifier alone is not sufficient for recovering the missing information. On the contrary, the contexts given in (9-13) contain additional semantic cues. In (12), the lexeme 'loaf' belongs to the same semantic field as 'bread', while in (9) the paradigmatically connected adjectives 'red', 'white' and 'pink' imply 'wine' as their head-noun. To this one should add obvious pragmatic cues that are provided by the genres of most contexts. If someone chooses the idiomatic interpretation that contradicts the available cues, it produces a comic effect, as in (13).

The recoverability model introduced here must be distinguished from recoverability through antecedent, usually discussed in the literature on ellipsis. Our model implies the finite, and reasonably small, number of alternatives which can be ranked by the recipient of the message based on the available cues. This predicts that our pattern of non-phrasal ellipsis can be applied only to a limited set of DPs, and so its restriction to phrasal idioms in Russian was not coincidental. In

this respect, it is appropriate to compare the restricted usage of constructions with pragmatically driven phrasal ellipsis, introduced in the previous section[8].

There is, however, an important difference between the discussed cases of the antecedent-free phrasal and non-phrasal ellipsis. The sentences with the omitted TP are syntactically anomalous irrespectively of whether or not one understands their meaning. The Russian phrasal idioms with head-noun ellipsis can be confused with the cases of nominalization, as in (7-8). Thus, (13) illustrates a world-play based on the homonymy of the substantivized adjective "the Whites" and the elliptical expression "the white [mushrooms]". Under these conditions, discriminating between the cases of syntactic deletion and lexical derivation ultimately becomes the matter of fine semantic judgment. This is probably the reason why Russian head-noun deletion and similar cases do not occupy a prominent place in the literature on ellipsis. The rest of my article will be dedicated to a more clear-cut case of a non-phrasal ellipsis that is not conditioned by a linguistic antecedent.

3. Non-phrasal ellipsis in Hittite: general discussion

Hittite is a member of the Anatolian subfamily of the Indo-Hittite language family. It was spoken in Asia Minor in the second millennium BC. It was characterized by consistent left-branching phrase structure, a developed case system, and the absence of articles. The normal word order in a noun phrase is GN N, as in the following example[9]:

(17)   *parnas*   *ishas*
        house.*GEN*   lord.*NOM*
        'lord of the house'

As is the case in many Indo-European languages, the Hittite head-noun can be omitted in coordination:

(18)   *hurtiyalli=ma*   <AN.B>AR-*as nepis*   1-*EN*   *kitta*
        h-vessel.*DAT=PTC*   iron.*GEN* heaven.*NOM* one.*NOM*   lie *3SG.PRES.*
        URUDU-*ass=a*   1-*EN*   *kitta*
        bronze.*GEN=*and   one.*NOM*   lie *3SG.PRES.*
        'In the h.-vessel lies one iron "heaven" and one bronze ["heaven"]'.

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[8] Some cases of pragmatically recoverable NP-internal ellipsis are also attested in English. The missing head nouns in a common idiom *Show me yours, and I'll show you mine* will obviously receive a different interpretation in a sexual and poker contexts. In most cases, however, the pragmatically driven omission of an English NP head noun results in pronominalization rather than ellipsis, as it is the case in the parting formula *Have a good one* !

[9] All the Hittite examples are taken from the actual texts. The references to most of them are available in Yakubovich, forthcoming, while the rest are cited in Friedrich 1960.

A peculiar feature of Hittite syntax is the optional deletion of certain head-nouns in the absence of a linguistic antecedent. This phenomenon can be illustrated by the variation between the idiomatic noun phrase *linkiyas antuhsas* 'man of the oath' (i.e. 'sworn ally/vassal') and its truncated variant *linkiyas* (referred to as "free-standing genitive" in Hittitological tradition)[10].

(19)   *mashuiluwas =wa = mu*   *linkiyas*   *antuhsas*   *ēsta*
        Mashuiluwa=*PTC=*me.*OBL*   oath.*GEN*   man.*NOM*   be *3SG.PRET*
        'Mashuiluwa was my "man of the oath" (i.e. sworn vassal)'.

(20)   *nu=za*   *linkiyas*   *lē*   *kuiski*   *kuedanikki*   *kisari*
        PTC=PTC   oath.*GEN*   not   someone.*NOM*   someone.*DAT*   become.*3SG.PRES*
        'Let none [of you] become anybody's "[one] of the oath" (i.e. sworn ally).

Like in the Russian case discussed above, the truncated noun phrases do not have the fixed interpretation; the head noun is to be supplied based on the available semantic cues. This can be illustrated with the following "minimal pairs".

(20)   *nu=za*   *linkiyas*   *lē*   *kuiski*   *kuedanikki*   *kisari*
        PTC=PTC   oath.*GEN*   not   someone.*NOM*   someone.*DAT*   become.*3SG.PRES*
        'Let none [of you] become anybody's "[one] of the oath" (i.e. sworn ally).

(21)   *lenkiy[as=wa]=ta*   *ēsdu*
        oath.*GEN=PTC=*you.*OBL*   be *3 SG.IMPV*
        'Let it be [a matter] of oath for you: (do not change the direction of your flow)'.

(22)   *mahhan*   *dayazilas*   *apass=a*   *QATAMMA*
        as   theft.*GEN*   he=and   in the same way
        '[It is] in the same way, as if he [were] [one] of the theft (viz. 'thief')'.

(23)   *tayazilas*   6 GÍN   KÙ.BABBAR   *pāi*
        theft.*GEN*   6 shekel   silver   pay *3SG.PRES*
        '[He] will pay [a fine] for the theft, [namely] 6 shekels of silver'.

The recoverability of the missing head-noun crucially depends on the finite number of alternatives. In both cases, we are essentially dealing with the opposition '[he] of X' vs. '[that] of X'. The choice between these two options may be more or less straightforward; in (21), for example, "that of the oath" is directly entailed by the content of the following clause, whereas recovering the ellipted constituents in (22-3), which is taken from the difficult Hittite "legalese", require significant exegetical efforts on the part of a modern scholar. Although the scholarly consensus on the general meaning of these passages suggests that this

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[10] See Friedrich 1960, § 211 for the descriptive treatment of this phenomenon, and Yakubovich, forthcoming, for the justification of its explanation through ellipsis.

task is not beyond human powers, the exact algorithm of choosing the missing head-noun must be specific in each individual case..

The problem of Hittite head-noun ellipsis has another dimension. In addition to recovering the lexical meaning of the deleted item, one needs to do the same with its grammatical function. This problem does not arise in the Russian examples (9-13) since the case marking of the omitted head-noun is always duplicated by the preserved adjective. Before we see how this problem is solved in Hittite, we need to take a closer look at another syntactic phenomenon attested in this language.

4. Excursus: Case attraction in Hittite

A peculiar feature of Hittite syntax is the nominal phrase where the dependent noun appears not in the expected genitive case, but rather assumes the case-marking of its head-noun. This construction, inauspiciously labeled "partitive apposition" in the Hittitological tradition, can be illustrated by the following examples (cf. Friedrich 1960 : 123-4).

(24)   *nu=kan*   GAL-*in*   *arunan*   *Kumarbiyaza* É-*irza*   *uwater*
      and=*PTC* great.*ACC* sea.*ACC* Kumarbi.*ABL* house.*ABL* brought.*3PL.PRET*
      'They carried away Great Sea from the house of Kumarbi'.

(25)   *takku* A.ŠÀ-*an*   ZAG-*an*   *kuiski*   *parsiya*
      if   field.*ACC* boundary.*ACC* someone.*NOM* break.*3SG.PRES*
      'If someone transgresses the boundary of a field ...'.

(26)   *mān* *apē=ma*   *kuiski*   *ITTI* ^DUTU-ŠI *wastai*
      if   they.*NOM=PTC* someone.*NOM* against My Sun sin.*3SG.PRES.*
      'If someone of them sins against My Majesty...'

The replication of the head-noun case marker on dependent nouns occurs in some other ancient languages of Anatolia. In most cases, we are dealing with the so-called *Suffixaufnahme* construction, where the dependent noun has double case marking, one marker being conditioned by the predicate and the other one expressing the agreement with the head noun. The example below[11] is from Hurrian, a non-Indo-Hittite language regarded by some scholars as having affinities with East Caucasian. Hurrian was a close neighbor of Hittite in the second millennium BC, and was likely to exert on it an areal influence.

(27)   (URU)*Ihibe=ne* URU *Šimige=ne=ve=ne=mān*   *un=ož=a*
      Ihibe.*ALL*   city   Šimige=*DEF=GEN=ALL=PTC*   bring.=*PRET=3SG*
      '(He) brought (it) to Ihibe, the city of Šimige'.(?)

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[11] Wegner 2000 : 157-9. While the precise function of the Hurrian case marker *–ne* remains a matter of much debate, the presence of "Suffixaufnahme" in this example is well established.

The next two examples, belonging to the one and the same inscription, are from Luwian, an Anatolian language that exhibits various degrees of *Suffixaufnahme*, depending on dialect. It appears from the examples under consideration that case agreement may be sensitive to the distinction between individual cases. As one can see[12], the nominative case ending is not duplicated by the dependent noun, but the dative is:

(28)   *sipis=pa=wa*   ^I*niyas*   LEPUS-*riyalata*
      Sipis.*NOM=PTC=PTC*   Nis.*GEN*   govern.*3SG.PRET*
      'Sipis, [son] of Nis, was a governor'.

(29)   *sipiya=pa=wa=ta*   *niyas(s)an*
      Sipis..*DAT=PTC=PTC=PTC*   Nis.*GEN.LOC.*
      'For Sipis, [son] of Nis ...'

Luraghi (1993 : 163 ff. with ref.) suggested that case attraction, as attested in Hittite, represents an attempt to copy the areal construction with "Suffixaufnahme" with the means available in an inflectional language. She cites the example of another language of the Caucasus, Classical Armenian, where case attraction is attested in oblique cases, and ascribes the rise of this construction there to the influence of Classical Georgian, another language with "Suffixaufnahme". The construction with case attraction, however, would be an imperfect image of "Suffixaufnahme" since a language that does not tolerate double case-marking does not have syntactic means to distinguish a noun phrase with case attraction from a true appositional construction. Hitt. *Kumarbiyaza* É-*irza* can mean not only 'from the house of Kumarbi', but also 'from Kumarbi, from the house'. Note that the Hurrian language, which was in close contact with Hittite and Luwian in the second millennium BC, is characterized by zero case-marking in the nominative case, and therefore a nominative head-noun cannot trigger "Suffixaufnahme" in Hurrian. This correlates nicely with the Luwian data presented above.

An interesting semantic constraint on case attraction has been discovered in Yakubovich, forthcoming. In order for the case attraction in Hittite to become possible, the syntactic complement must not be lower in the animacy hierarchy than the head-noun. In other words, case attraction is impossible in noun phrases like 'man of the oath' or 'gods of Heaven'. Since the prototypical case of the noun phrase GN N is the possessive construction, and since the possessor is prototypically animate, but the possessum is prototypically inanimate, this type of a nominal phrase is functionally marked. It is reasonable to assume that a chance

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[12] Examples are selected from Hawkins 2000 : 480.

of mistaking case attraction for a true appositional construction would increase in such marked cases. And hence the original genitive case marking must be implemented there in lieu of case copying.

5. Hittite non-phrasal ellipsis: licensing conditions

Below I will argue that that Hittite non-phrasal ellipsis is licensed by formal rules that have to do with the case recoverability of the omitted head-noun. As a rule, only the head-nouns in structural cases, i.e. nominative and accusative, can be deleted, as the following examples illustrate:

(30) *parsnāuwas=kan* [~~LÚSAGI-a*s*~~] *uizzi*
   squatting.*GEN=PTC* [cup-bearer.*NOM*] come.*3SG.PRES*
   'The cup-bearer "of squatting" comes' vs. ' [One] of squatting (= a squatter) comes'.

(31) *sāwātaras* *halzāi*
   horn.*GEN*   call.*3SG.PRES*
   '[One] of the horn calls' = 'A hornist calls'.

(32) *mān=as* *harkannas*
   If=he.*NOM* death.*GEN*
   'If he is [one] of death' = 'If he deserves death'.

(33) LUGAL-*s=a* *duddumili* *kardiyas=sas* *iezzi*
   king.*NOM*=and quietly heart.*GEN*=his.*GEN* do *3SG.PRES*
   'And the king will fulfill [the wish] of his heart in peace'.

(34) *ABI* DUTU-*ŠI* *tuk* ¹*madduwattan* *l[i]nkiyas=sas* *iēt*
   My Sun's dad you.*ACC* Mad.*ACC* oath.*GEN*=his.*GEN* make.
                               3SG.PRET

   'My Majesty's father made you, Madduwatta, [one] of his oath'.

The functional reasons for this distribution are obvious. Structural cases are purely relational categories, and the information about their assignment must be available from the lexical entries of the respective predicates (thus *ie-* 'do, make' requires an accusative Goal). Therefore, the information about the missing structural case is contained in a sentence even if the respective constituent is deleted. On the contrary, inherent cases, such as locative, allative, ablative, or instrumental, denote semantic information that may be unrecoverable.

An important exception to the rule stated above concerns noun phrases with case attraction. Since the syntactic complement in these constructions has the same case marking as its head-noun, the deletion of the latter would not obfuscate the grammatical structure of the sentence. And, indeed, one can observe that the ellipsis is licensed in Hittite in such cases:

(35) *kinun=an* *kāsa* <...> *linkiyas* *pedi* *dasuwahhir*
   now=he.*ACC* lo!   oath.*GEN* place.*LOC* blind.*3PL.PRET*

  'Now, look, < > have blinded him on the place of the oath'.

(36) *mān* ERÍN.MEŠ-*an* *lenkiya* *pēhudanzi*
   if army.*ACC*   oath.*LOC* lead *3PL.PRES*
   'When they conduct troops to [the place of] the oath'.

(37) < > *arzanas*   *parna*   *paizzi*
       porridge.*GEN* house.*ALL* go.*3SG.PRES*
   < > goes to the "house of porridge" (i.e. inn)'.

(38) *nu* MUNUS*ammamas* É*arzanaz* *uizzi*
   PRT Ammamma.*NOM* porridge.*ABL* come.*3SG.PRES*
   'The Ammamma-woman comes from the inn (lit. from the porridge)'.

Examples (35) and (37) illustrate idiomatic nominal phrases without case attraction. Since the head-nouns in these phrases bear inherent cases, no head-noun ellipsis is possible. Examples (36) and (38) show the same underlying noun phrases, where the implementation of case attraction licenses head-noun deletion. Since both sentences (34) and (36) are well-formed syntactically, one may wonder whether it is synchronic or historical ellipsis. Hittite being a dead language, one cannot conduct a set of tests that would provide us with a definite answer to this question, but an educated guess can be made based on the available data. Since (35) and (36) occur in the same text, it is reasonable to assume that *lenkiya* was a synchronic elliptical variant of *linkiya pedi* for its author. On the other hand, the determinative É 'house' in front of *arzanaz* suggests that this word lost its original meaning 'porridge' and acquired an new one 'inn' for some Hittite speakers[13]. This process is analogous to the semantic change undergone by *ambuance* after the elliptical shortening of the phrase *ambulance car*. There is no doubt, however, that this historical ellipsis was licensed by the same factors as synchronic ellipsis in (36).

At this point, it is appropriate to mention that antecedent free non-phrasal ellipsis could also occur in some other languages of the Ancient Near East. The examples from Akkadian and Hurrian show that the deleted head-nouns did not necessarily need to be in the direct cases in these languages:

(38) Akk. 1 (BÁN) 1 SÌLA ZÍD.DA *ana* REL head.*OBL*
      1 x 1 y flower to *ša* *reši*
     ' 1x 1y flower for those of the head (i.e. attendants)'.

(39) Hurr. *adi=nin* *Šimige=ne=ve=ne=mamman* *amm=ož=a*
      thus=*PTC* Šimige=*DEF*=*GEN*=*ALL*=*PTC* reach(?)=*PRET*=*3SG*

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[13] Cf. also Hitt. LÚ/MUNUS *arzanala-* 'inn-keeper' or *arzanai-* 'to quarter' which, more likely than not, are derived from a base that has already undergone the semantic change 'porridge'>'inn'. The lack of spacing between É and *arzanaz* indicates that É functions here as a graphic determinative, inserted by a purely orthographic convention, and not an ideogram.

'Thus he/she/it reached (?) [the city] of Šimige'.[14]

In spite of superficial differences, the functional recoverability hypothesis advanced for Hittite seems to make the right predictions also in these cases. In Akkadian, the only oblique (=genitive) case must be regarded as a structural one, while the meaning of Hittite inherent cases is conveyed in Akkadian by means of prepositions. Since the preposition *ana* introducing the beneficiary is present in (37), the omission of the redundant case marker does not render this sentence syntactically ambiguous. In Hurrian, double case marking on the dependent noun licenses head-noun ellipsis in just the same way as case attraction does it in Hittite. It appears that the recoverability of grammatical function represented one of the key factors licensing non-phrasal ellipsis in the languages of the Ancient Near East.

6. Conclusions

In contrast to the traditional approach that regards the presence of a linguistic antecedent as a necessary condition for non-phrasal ellipsis, I submit that this constraint can be lifted in idiomatic constructions. This conclusion is supported by the analysis of phrasal ellipsis presented in Merchant 2003. Certain conventional statements can be reduced to a single word-form, while the rest of their content can be understood based on the available pragmatic information.

The linguistic antecedent is not required if the recovery of an elided non-phrasal constituent is a matter of choosing between a reasonably small number of lexical alternatives. These alternatives can be ranked based on the available semantic and pragmatic cues. The Hittite examples, however, suggest that the information about the grammatical function of the constituent marked for deletion must be unambiguously deducible from the sentence surface structure in order for the ellipsis to take place. I am not aware of data from any language that would contradict this hypothesis.

The prominence of Hittite and other Ancient Near Eastern Languages for the present account may reflect something more than my personal research interests. The importance of the "free-standing genitive" for the structure of Hittite, reflected in its descriptive grammars, is likely to correlate with the rich stock of Hittite idioms. In a modern socio-linguistic situation, languages tend to coin specialized terminology, frequently borrowed or calqued from foreign sources, for the designation of cultural concepts and artifacts. The phrasal idioms are gradually shifted to the sphere of the poetic, which can be illustrated by the contrast between the Hittite term "man of the oath"="vassal", and the English expression "man of his word". In the languages of pre-modern societies, where communication was more often with intimates than strangers, the set phrases that could be inferred based on their fragments were likely to play a more significant

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[14] See Wegner 1995 : 143-5 for a more extended discussion of NP- internal ellipsis in Hurrian.

role[15]. And hence, there could be more space for synchronic phrase-internal ellipsis.

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[15] A general question about distinguishing between those syntactic phenomena that reflect Universal Grammar common to the human species, and those that are culturally specific, obviously cannot be resolved in this essay. For a recent attempt to connect the expansion of final complements in Akkadian with the development of more complex communicative needs, and for a more general discussion of linguistic adaptivity, see Deutscher 2001 : 164 ff.