К ТИПОЛОГИИ ЛИЧНО-ПАДЕЖНЫХ ОГРАНИЧЕНИЙ: ДАННЫЕ ХЕТТСКОГО ЯЗЫКА^{*}

Е. А. Лютикова¹, А. В. Сидельцев² ¹МГУ имени М. В. Ломоносова, ²Институт языкознания РАН

В статье мы анализируем конфигурации, демонстрирующие личнопадежные ограничения, в хеттском языке. Эти конфигурации включают активные и пассивные битранзитивные конструкции, а также неаккузативные конструкции с аппликативным аргументом. Мы показываем, что хеттский язык уникален внутри класса языков с лично-падежными ограничениями субъектных слабых местоимений (баскский, чинук, исландский), поскольку обладает двумя локусами лицензирования местоименных клитик. Во-первых, поскольку аргументные клитики в хеттском языке могут быть только внутренними аргументами, лицензирование клитик, связанное с лично-падежными ограничениями, должно происходить на уровне vP. Во-вторых, поскольку субъектные клитики падежно зависимы от финитного Т, падежное лицензирование и предикативное согласование должны происходить на уровне ТР. Таким образом, хеттский язык занимает особое место в типологии языков с личнопадежными ограничениями и показывает, что такие ограничения могут быть следствием согласовательных процессов, не связанных с приписыванием падежа.

Ключевые слова: лично-падежные ограничения, согласование, падеж, аргументные клитики, хеттский язык.

^{*} Работа над статьей была поддержана грантом РФФИ 20-012-0017А. Мы признательны анонимным рецензентам за критические замечания и предложения.

TOWARDS THE TYPOLOGY OF PERSON CASE CONSTRAINT: EVIDENCE FROM HITTITE^{*}

Ekaterina Lyutikova¹, Andrei Sideltsev² ¹Lomonosov Moscow State University, ²Institute of Linguistics RAS

In this paper, we analyse the configurations of Person Case Constraint (PCC) in Hittite, which include both ditransitive and passive/unaccusative construals. We show that Hittite is unique among languages exhibiting PCC with subject weak elements (e.g. Basque, Chinook, Icelandic) in that it involves two loci of licensing clitic pronouns. First, since clitics are only licit as internal arguments in Hittite, clitic licensing characterized with the PCC effects should take place at the *v*P level. Secondly, since subject clitics are case-dependent on the finite T, they should be case-licensed at the TP level, after their *v*P-level clitic-licensing. In this way, Hittite introduces a new cell in the typology of PCC languages and demonstrates that PCC may result from agreement processes distinct from case assignment.

Keywords: Person Case Constraint, agreement, Case, argument clitics, Hittite.

^{*} This work has been supported by the grant RFBR 20-012-0017A. We are grateful to the anonymous reviewers for the helpful criticism and suggestions.

1. Background

In this section we introduce background information on Person Case Constraint (PCC) and licensing conditions behind it. The key notion here is ϕ -agreement, which is syntactic agreement in person and number. In the minimalist literature, ϕ -agreement is modelled as a generalized Agree operation, which establishes a relation between a lexical item α — a probe — and a feature F — a goal — in some restricted search space (domain) of α [Chomsky 2000]. ϕ -agreement is generally found in verbal predicates, as in (1a) from Tatar; in this case, functional heads T (for subject agreement) and ν (for object agreement) act as probes. Another configuration where ϕ -agreement is regularly found is possessive agreement on nouns ((1b) from Tatar), with a nominal functional category (Poss/D) serving a probe.

- (1) Tatar
 - a. *min kil-di-m / *kil-di-Ø*. I.NOM come-PST-1SG come-PST-(3) 'I came.'
 - b. *minem kijem-em / *kijem-e / [?]*kijem* I.GEN clothing-1sG clothing-3 clothing 'my clothing'

In the formal syntactic literature, ϕ -agreement has been claimed to be a licensing condition for at least two linguistic phenomena — structural case licensing and marked person licensing.

Since [Chomsky 2000], ϕ -agreement is considered as a precondition for valuation of the structural case feature on DP. Minimalism inherits GB's idea of Case as a licensing condition for nominal constituents [Chomsky 1981]; consequently, any DP that is not lexically governed needs to agree with a functional head in order to be licensed. In the feature-driven computation, case licensing is conceived of as valuation of *u*Case feature: "Taking structural Case to be a reflex of an uninterpretable ϕ -set, it too erases under matching with the probe" [Chomsky 2000: 122]. The need for valuation follows from legibility conditions: unvalued uninterpretable features cannot be erased and, consequently, provide an illegitimate input to interface levels.

Competing conceptions of case dissociate case assignment from ϕ -agreement (and other unmediated relations with functional heads). The most influencial

alternative is a family of configurational case theories [Marantz 1991; Bobaljik 2008], where structural case assignment is independent of agreement (but agreement can be case-discriminating).

Typological consideration gave rise to a more moderate position, involving Case-Dependency of Agreement Parameter [Baker 2008; Baker, Vinokurova 2010; Baker 2015], which states that there is a parametric variation among languages and even within a single language with respect to the one-to-one correspondence between structural case assignment and ϕ -agreement.

(2) Case-Dependency of Agreement Parameter [Baker 2008: 155]F agrees with DP/NP only if F values the case feature of DP/NP or vice versa.

Numerous cross-linguistic studies of agreement phenomena in the last decades revealed specific restrictions on the distribution of weak pronominal elements involving their person feature and syntactic position — the Person Case Constraint (PCC) [Perlmutter 1971; Kayne 1975; Bonet 1991, 1994; Anagnostopoulou 2003, 2005, 2017; Béjar 2003; Béjar, Rezac 2003; Rezac 2007, 2011; a.m.o.]. The constraint is exemplified in example (3) from French.

(3) French

- a. Paul la / *me / *te lui présentera.
 Paul 3SG.F.ACC 1SG.ACC 2SG.ACC 3.SG.DAT present.FUT.3SG
 'Paul will introduce her / *me / *you to him.'
- b. **Paul me te présentera*. Paul 1sg.acc/DAT 2sg.acc/DAT present.FUT.3sg Int.: 'Paul will introduce me to you / you to me.'
- c. **Paul te me présentera.* Paul 2sg.acc/DAT 1sg.acc/DAT present.FUT.3sg Int.: 'Paul will introduce you to me / me to you.'

Example (3) demonstrates restrictions on cooccurrence of argument clitics with specific features in French: in combinations of a direct and indirect object, both of which are phonologically weak, the direct object may not be 1^{st} or 2^{nd} person.

PCC effects differ crosslinguistically as for the combinations of values excluded — there are attested strong, weak, "me first", ultrastrong versions of PCC [Bonet 1991; Nevins 2007]. However, specific restrictions on the distribution of weak pronominal elements can be subsumed under a uniform requirement that marked values of the interpretable person feature ([+person]) have to enter agree relation with a functional head. This requirement has been formulated as Person Licensing Condition axiom (4).

 (4) Person Licensing Condition axiom [Béjar, Rezac 2003: 53] An interpretable 1st / 2nd person feature must be licensed by entering into an Agree relation with a functional category.

PCC configurations are structurally defined as domains where two weak elements check their features against the same functional head, and the lower element cannot license its marked person feature. In the ditransitive configuration exemplified with French (5a), phonologically weak indirect and direct objects check their features against v. The indirect object intervenes, and the person feature on the DO remains unchecked. In the unaccusative or passive configuration exemplified with Icelandic (5b), indirect and direct internal arguments compete for agreement with T. Again, person agreement with the nominative object is prevented by intervening quirky subject. In this way, PCC follows from the PLC.

- (5) a. ditransitive configuration (French) $\begin{bmatrix} \nu & \begin{bmatrix} ApplP & IO & Appl & \begin{bmatrix} vP & DO & V \end{bmatrix} \end{bmatrix}$
 - b. unaccusative / passive configuration (Icelandic)

 $\begin{bmatrix} T & [ApplP & IO & Appl & [VP & DIA & V] \end{bmatrix} \end{bmatrix}$

Many approaches to PCC [Anagnostopoulou 2003; Béjar, Rezac 2003; Rezac 2007, 2011, a.m.o.] assume that the failure of the structural case assignment is a driving force of PCC. Thus, Rezac states that "...the assimilation of [+person] and Case licensing as a single failure seems promising..." [Rezac 2011: 193]. This move is motivated by theoretical considerations and empirical data. From the theoretical point of view, it is desirable that licensing conditions with overlapping explanatory range be unified. Empirical evidence boils down to the fact that repair strategies for PCC often have to do with alternative case-licensing strategies for the offending argument. In the literature, the following case-related repair strategies are identified: use of a PP with a strong pronoun

instead of an indirect object clitic pronoun in French [Bonet 1991]; "ergativization" of the absolutive agreement in Basque and Chinook [Rezac 2010]; "accusativization" of the unaccusative subject in Finnish [Rezac 2011]; change of clitic in Catalan and French, e.g. "locativization" of the dative clitic [Bonet 2008; Rezac 2011]. All these strategies have to do with alternative syntactic categorization and, consequently, case-licensing of one of the competing arguments.

The line of reasoning bringing together structural case licensing and marked person licensing is as follows. In the situation where a single functional head agrees with two goals, the lower goal cannot have its case feature valued — either because the probe is not ϕ -complete or because the indirect object intervenes. In this way, the PLC axiom becomes epiphenomenal and derives from a single case-licensing condition on DPs.

An alternative of case-based accounts is that PCC follows from PLC axiom, which is an independent requirement, coupled with some structural condition on the licensing agreement, e.g. a strict locality condition in (6).

(6) Structural condition on person agreement (SCOPA) [Baker 2008: 52]
 A category F can bear the features +1 or +2 if and only if a projection of F merges with a phrase that has that feature and F is taken as the label of the resulting phrase.

If multiple specifiers are prohibited, only the higher argument can enter into the local configuration with F by moving to the specifier of F. Consequently, in double object configurations, only the higher argument is allowed to be 1^{st} or 2^{nd} person.

In this paper we present evidence for the latter approach, severing [+person] licensing from case licensing. Specifically, we discuss data from Hittite (Indo-European language of the Anatolian group, attested in the $17^{th}-12^{th}$ centuries BC in cuneiform writing on clay tablets found in Central Anatolia). Identifying major properties of the two licensing conditions — [+person] licensing in clitics and case licensing in nominal arguments — for Hittite, we argue for two distinct processes of licensing in Hittite clitics. This distinction is a rationale of the proposed analysis which derives PCC effects in Hittite clitics independently of structural case assignment.

The rest of the paper is organized as follows. In section 2, we present Hittite data and draw generalizations capturing clitic licensing and case assignment in this language. Section 3 discusses problematic aspects of case-based approaches to PCC in Hittite, which call for an alternative analysis. This analysis is presented in section 4. Section 5 concludes.

2. Data

In this section, we discuss the two relevant issues of Hittite grammar: the syntax of argument clitics and the syntax of agreement and case.

Argument clitics in Hittite are positioned within Wackernagel enclitic chain, which can host the following clitics: quotative particle -wa(r); argument clitics; reflexive particle -za; locative adverbs -an, -ap(a), -(a)šta, -kan, and -šan. We see one of the longer chains in (7) where four enclitics simultaneously occur in the enclitic chain: the quotative particle -war, the 3^{rd} person singular common argument clitic -aš, the reflexive pronoun -za and the locative clitic adverb -kan:

(7) nu = war = aš = za = kan anda [wa]ršiya-zi
CONN = QUOT = 3sG.C.NOM = REFL = LOCP in be_satisfied-3sG.PRS
'And she will show herself satisfied with it.'
(NH/NS (CTH 583) KUB 15.5 + obv. i 15 following [de Roos 2007: 72]).

As for the linear order, clitic clusters in Hittite are consistently arranged in the template of six slots (Table 1). The three slots reserved for argument clitics are identified by shading.

Slot i	Slot ii	Slot iii	Slot iv	Slot v	Slot vi
quotative	argument clitics:	argument clitics:	argument clitics:	reflexive	locative
particle	1/2PL.DAT/ACC,	3sg/pl.nom/acc	1/2sg.dat/acc,	particle	adverb
	3pl.dat		3sg.dat		

Table 1. The structure of clitic clusters in Hittite

Argument clitics are true arguments, not agreement markers. Hittite does not employ clitic doubling, that is, argument clitics are not used for indexing verbal arguments. This follows from the complementary distribution of clitics and DP-arguments, illustrated in (8)–(10).

(8) ... = CL_i ... (*stressed pronoun_i/DP_i) $k\bar{e}zza = ma = mu$ ^DHebat ^{URU}Kummanni ANA EZEN this.ABL = but = I.DAT Hebat Kummanni to festival $halz\bar{i}ya$ -uwaš nakkēš-ta invoke-INF trouble-3SG_PST

'At that time Hebat of Kummanni troubled me with regard to the festival of invocation.' (NH/NS (CTH 61.II.4) KUB 19.30 rev. iv 11-13 following [CHD L-N: 371]).

(9) ... $(= *CL_i) ... DP_i$

[*nu ap*] $\bar{a}t$ $\bar{e}shar$ *apēdani* UN- si^1 *nak*[$k\bar{e}s-z$]iCONN that.NOM.SG blood.NOM.SG that.DAT.SG person.DAT.SG trouble-3SG.PRS 'And that act of bloodshed troubles that person.' (NH/NS (CTH 277.4.B) KBO 14.68 + obv. i 16'-7' following [Dardano 2006: 150–151], [CHD L-N: 372]).

(10) $\dots (= *CL_i) \dots$ stressed pronoun_i

n=aš ammuk nakkēš-tat
CONN=3SG.C.NOM I.DAT trouble-3SG.PST.MED
'She troubled me.' (NH/NS (CTH 70.1.A) KUB 14.4 + rev. iii 25 following
[Singer 2002: 76], [CHD L-N: 371]. Cf. [Miller 2014: 521]).

As for case paradigm, Hittite argument clitics distinguish three cases: NOM (subject), ACC (direct object), DAT (indirect object) (see also Table 1). Other nominals have a wider paradigm, which comprises also genitive and ablative case forms.

The essential generalization restricting the distribution of argument clitics is that argument clitics, including subject clitics, are only licit as internal arguments [Garrett 1990]. Accordingly, accusative and nominative clitics are complementarily distributed: nominative subject clitics only appear in passives and unaccusatives, whereas accusative direct object clitics only turn up in transitives (Table 2).

	Transitives	Passives	Unaccusatives	Unergatives
subject clitic	_	+	+	
DO clitic	+	_		_

Table 2. Distribution of subject / direct object clitics

Dative clitics can instantiate both "thematic" datives (Recipient, Addressee, Experiencer), cf. (11), and "free" datives (e.g. possessive dative, dative of interest), cf. (12).

- (11) nu = šmaš = at pe-ħħi CONN = you.PL.DAT = 3SG.N.ACC give-1SG.PRS
 'I will give it to you.' (NH/NS (CTH 378.2.A) KUB 14.8 rev. 36' following [Rieken et al. (eds.)], hethiter.net/: CTH 378.2 (INTR 2016-01-18)).
- (12) n=aš=ta=kkan BA.ÚŠ
 CONN=3SG.C.NOM=YOU.DAT=LOCP died
 'She died on you!' (NH/NS (CTH 180) KUB 23.85 obv. 6 following [Hoffner 2009: 365].

¹ Hyphen separates morphemes, en dash separates components of a single morpheme written in different scripts.

Traditionally, restrictions on the cooccurrence of argument clitics is described as a ban on doubly filled slots in the clitic cluster: one slot cannot be filled twice. Additionally, slots (ii) and (iv) are mutually exclusive. This amounts to the following list of empirical generalizations:

(i) the Hittite clause licenses at most two argument clitics;

(ii) in a combination of two argument clitics, one is dative and the other is either accusative or nominative;

(iii) in a combination of two argument clitics, the accusative / nominative clitic can only be 3^{rd} person.

In [Lyutikova, Sideltsev 2020], we reinterpret the generalization (iii) as an instance of the strong PCC, often attested in languages with argument clitics [Bonet 1994]. PCC in Hittite affects both transitive (13) and intransitive (14) configurations.

- (13) $nu = \check{s}ma\check{s} = at$ $l\bar{e}$ $\bar{a}ra$ *iyenzi* CONN = you.PL.DAT = 3PL.ACC PROHIB right do.3PL.PRS 'They will not make them right for you.' (NH/NS (CTH 42.A) KBo 5.3 + obv. ii 8).
- (14) n=aš=mu ariyašešna-za GIM-an SI×S[Á-at]
 CONN=3SG.C.NOM=I.DAT inquiry-ABL as determine-3SG.PST.MED
 'And just as she has been ascertained for me through the inquiry.'
 (NH/NS (CTH 578) KUB 50.87 rev.? 7, similar to 12' following [van den Hout 1998: 156]).

Importantly, non-clitic arguments do not cause PCC violation either as indirect objects or as direct objects / subjects. That is, they are licit as $1^{st}-2^{nd}$ person direct internal arguments, even in the presence of the dative clitic (15), and do not intervene as datives when the clitic direct internal argument is $1^{st}-2^{nd}$ person (16).

- (15) a. nu=wa=mu=za zik EN-aš ēš
 CONN=QUOT=I.DAT=REFL YOU.NOM lord.NOM.SG.C be.2SG.IMP
 'Be my lord!' (NS (CTH 341.III.1) KUB 33.123 rev. iv 4, cf. [Rieken et al. (eds.)], hethiter.net/: CTH 341.III.1 (INTR 2009-08-12)).
 - b. $nu = \check{s}\check{s}i = kan$ *zik* DINGIR–*LUM anda aššuli tīya* CONN=3SG.C.DAT=LOCP you.NOM.SG goddess in favourably step.2SG.IMP 'You, goddess, be favourable to him.' (NS (CTH 406) KUB 7.8 + obv. ii 18, cf. [Mouton (ed.)], hethiter.net/: CTH 406 (INTR 2017-01-12)).

- (16) a. nu=mu=za kēdani kēzza tuppiazza katta [p]unušš-andu conn=I.ACC=REFL this.DAT this.ABL tablet.ABL down ask-3PL.IMP
 'They may ask me about this on the basis of this tablet.' (NH/late NS (CTH 203) KUB 40.1 rev[!]. 30-31, Cf. [Hoffner 2009: 361]).
 - b. DINGIR-*LIM*-*n*-*i*=*wa*=*tta* ammuk tarna-ħħi deity-DAT.SG=QUOT=you.ACC.SG I.NOM.SG lead-1SG.PRS
 'To the deity of the process I will lead you!' (NH/NS (CTH 81.A) KUB 1.1+obv. i 37-8 following [Otten 1981: 6–7], [van den Hout 2003: 200]).

Predicate agreement in Hittite targets the subject irrespective of whether it is instantiated by a clitic (17) or by another nominal (18).

- (17) n=aš āppa QATAMMA kiš-aru
 CONN=3SG.C.NOM back likewise become-3SG.IMP.MED
 'May he become likewise.' (MH?/MS CTH 331.1 KUB 33.66 + obv. ii 21' following [Rieken et al. (eds.)], <u>hethiter.net/: CTH 331.1 (INTR 2009-08-12)</u>).
- (18) k[u]itman=wa=za weš INA ^{URU}Hattuš-i eš-wen while=QUOT=REFL we.NOM in Hattusa-DAT.SG be-1PL.PST
 'While we were in Hattusa...' (MH/MS (CTH 186) HKM 17 obv. 5–6).

Predicate agreement appears to be in one-to-one correspondence with subject licensing. Non-finite clauses (infinitives, participial clauses, nominalizations) lack agreement and do not license a subject (overt subjects are only available in raising/ECM configurations, see [Lyutikova, Sideltsev, to appear]). Thus, Hittite nominative can be said to be dependent on predicate agreement (CDAP: yes). It seems plausible that accusative direct objects are licensed by the transitive v / active Voice: on the one hand, accusative DOs are licit in control infinitives of transitive verbs; on the other hand, they are not found with unaccusatives and passives.

Importantly, non-clitic noun phrases (strong pronouns, DPs) are licit in those structural positions where clitics are attested. This fact provides a significant contrast with French, where strong pronominal arguments are excluded and only appear under PCC repair. Specifically, various types of datives, including "free" datives, are available for non-clitic nominals, cf. (19)–(20).² Therefore,

² This excludes analyses which rely on the dichotomy of applicative and prepositional datives in explaining why strong elements do not cause PCC.

weak and strong arguments do not differ as to their base position, caselicensing and agreement-inducing properties.

- (19) n=aš ammuk nakkēš-tat
 CONN=3SG.C.NOM I.DAT trouble-3SG.PST.MED
 'She troubled me.' (NS/NH (CTH 70.1.A) KUB 14.4 rev. iii 25 following [CHD L-N: 371]).
- (20) n=an=kan UN-š-i imma tāi-tteni
 CONN=3SG.C.ACC=LOCP man-DAT.SG FOC steal-2PL.PRS
 'Are you stealing it from just a man?' (MH/NS (CTH 264.A) KUB 13.4 rev. iv 21 following [Miller 2013: 262–263]).

To sum up, argument clitics in Hittite are like other nominals with respect to case issues but are special in that they show PCC and are only licensed vP-internally. These properties of the two classes of arguments are summarized in Table 3.

	Structural	[+person]	Intervention in	Case-	Predicate
	positions	licensing	PCC contexts	licensing	agreement
argument	internal	+	+	+	+
clitics	arguments				
non-clitic	whatever	_	_	+	+
nominals					

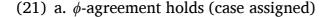
Table 3. Properties of argument clitics vis-à-vis non-clitic nominals

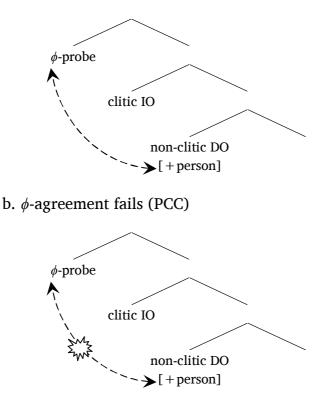
3. Problem

The approach unifying the two agreement-based licensing conditions and reducing them to a single case-related filter is highly appealing. However, it encounters several problems, both general and language-specific.

For one thing, this approach cannot capture the difference between weak and strong pronouns. The problem is that all types of DPs are subject to Case filter (therefore, should be assigned case under ϕ -agreement), but only phonologically weak elements show restrictions like PCC which result from the failure of ϕ -agreement.

This is shown schematically in (21). Since non-clitic nominals are caselicensed in PCC configurations (21a), ϕ -agreement should be successful. But, in the very same configuration, [+ person] clitic arguments are not licit (21b).





Another problem arises when languages like Hittite are incorporated into the whole picture. The peculiarity of Hittite is that in this language, [+person] licensing and case licensing are associated with different functional heads.

Let us consider the minimal typology of PCC configurations represented in Table 4. We see that the configurations where PCC is attested — transitive, in-transitive, or both — are generally determined by the structural case assigned by the head licensing the weak argument — clitic or agreement marker. In Hittite, however, PCC arises in both transitive and intransitive configurations, whereby only the lower head can license clitics.

	weak element	PCC in	PCC in unac-	Structural	Locus of
		ditransitives	cusatives /	case in PCC	[+person]
			passives	configuration	licensing
French	clitic	+	_	ACC (<i>v</i>)	ν
Icelandic	agreement	_	+	NOM (T)	Т
Basque /	agreement	+	+	ABS (V)	ν
Chinook					
Hittite	clitic	+	+	NOM (T),	ν
				ACC (<i>v</i>)	

Table 4. Case assignment in PCC configurations: A minimal typology

French, Icelandic, Basque and Chinook show correlation of [+person] agreement and case assignment to the direct internal argument: the structural case attested in PCC configuration (accusative, nominative, or absolutive) is associated with the functional head responsible for [+person] licensing agreement. Accusative languages employ different functional heads to case-mark the direct internal argument in transitive and intransitive configurations. Consequently, if the clause contains only one [+person] licensing probe, PCC would appear either in transitive clauses, if this probe is associated with ν , or in intransitive clauses, if the probe is associated with T, but not in both cases. In contrast, ergative languages case-mark the direct internal argument uniformly with absolutive. Since absolutive licensing in various configurations can be associated with the same functional head — the light ν , as in Tsez and Basque [Polinsky 2016], or T, as in Georgian [Legate 2008] — PCC can emerge in both transitive and intransitive configurations.

(22) a. ditransitive configurations exclusively (e.g. French)

 $\begin{bmatrix} \nu_{TR} & \begin{bmatrix} ApplP & IO & Appl & \begin{bmatrix} VP & DIA & V \end{bmatrix} \end{bmatrix}$

b. unaccusative / passive configurations exclusively (e.g. Icelandic)

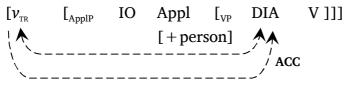
 $\begin{bmatrix} T & [ApplP & IO & Appl & [VP & DIA & V] \end{bmatrix} \end{bmatrix}$

c. ditransitive **and** unaccusative / passive configurations (e.g. Basque) [v [_{ApplP} IO Appl [_{VP} DIA V]]] \uparrow ______/ ABS

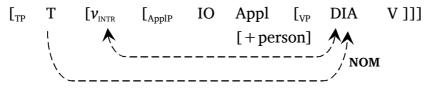
Hittite, however, departs from this model and provides clear evidence for dissociating [+person] licensing and case licensing. Indeed, it instantiates the following bundle of properties. On the one hand, clitics are restricted to internal arguments, hence licensed at the *v*-level. On the other hand, subject clitics are assigned nominative and control ϕ -agreement at the T-level. Therefore, structural case assignment in Hittite can depend on a higher functional head (T) that has not yet entered the derivation at the moment when PCC-inducing agreement (at *v*-level) takes place.

Schemes in (23) represent the two configurations where PCC is attested in Hittite. Whereas (23a) with a ditransitive configuration can be identified with French (22a), (23b) is different: in unaccusative and passive configurations, clitic licensing and case assignment diverge.

(23) a. ditransitive configurations: clitic licensing and case assignment depend on v



b. unaccusative / passive configurations: clitic licensing depends on v, case assignment depends on T



To sum up the problem, we observe that in Hittite, [+person] licensing and case licensing do not match. As Table 5 states, they differ with respect to various parameters: the licensee, the licensor, the possible interveners, and the exponence.

	[+person] licensing	Case licensing
Licensee	weak elements (clitics)	any nominal
Licensor	ϕ -probe on ν	ϕ -probe on v_{TR} / ϕ -probe on T
Intervention	weak elements (clitics)	_
Exponence	(clitic climbing)	morphological case; predicate agreement

Table 5. [+person] licensing and case licensing in Hittite

In the next section, we are going to develop the analysis relying on two separate licensing conditions for Hittite. One condition is the [+person] licensing condition, which is based on ϕ -agreement. It is independently stated and does not follow from the Case filter. The other condition is case licensing. For simplicity, we adopt the standard theory of structural case assignment under ϕ -agreement. However, our approach is perfectly compatible with other views on structural case, in particular, with a family of configurational approaches, which abandon ϕ -agreement as a precondition of structural case licensing.

4. Analysis

Our analysis includes the following ingredients. First, we propose structural and featural differentiation of weak and strong pronominal arguments. Secondly, we assume the independent requirement of licensing interpretable person feature being operative as a generalized Person Licensing Condition. Thirdly, we propose a system with two licensing conditions based on ϕ -agreement: [+person] licensing and case licensing.

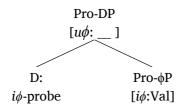
We start by examining the syntactic category of weak and strong pronouns in Hittite. Table 3 in section 2 summarizes their properties. We see that weak pronouns are found in the subset of syntactic positions available for strong pronouns. Both types are case-marked and control predicate agreement, bit only weak pronouns are subject to PCC restrictions and can produce PCC effects as interveners.

Evidently, properties of strong pronouns are problematic for two reasons. First, since they can have [+person] feature, how is this feature licensed? Secondly, why do they not intervene in PCC contexts?

[Rezac 2011: 190–191] charts a way to solving the first problem. He proposes that strong pronouns may "have their own Agree/Case system, at least for their [+person], while remaining visible to clausal accusative assignment... The outcome must be such that the clausal Agree/Case system see some ϕ -features on the strong pronoun, which will be a goal for Case assignment, even if these features are already licensed in the DP and incapable of valuing the clausal probe".

Our analysis elaborates on this proposal. In order to ensure the visibility of clitic pronouns for the [+person]-licensing probe and the invisibility of strong pronouns for it, we propose that in Hittite, clitic pronouns and strong pronouns represent two different classes of Pro-forms in the typology of [Déchaine, Wilt-schko 2002]: strong pronouns are DP-proforms, whereas clitic pronouns are ϕ P-proforms. ϕ P possesses the full set of ϕ -features in their interpretable variant, whereas DP aquires ϕ -features' values via agreement of D with its complement ϕ P (cf. (24)).

(24)



Crucially, ϕ -features on ϕ Ps and DPs have the same values, but differ in the interpretability: ϕ Ps possess interpretable ϕ -features, and DPs — uninterpretable ϕ -features. The properties of weak and strong pronouns can now be reformulated in the following way: all pronouns possess ϕ -features, but weak pronouns are special in that their ϕ -features are interpretable.

This generalization opens a new perspective in differentiating licensing processes based on ϕ -agreement: [+person] licensing is associated with specified ϕ -probes, which look for interpretable ϕ -features exclusively, whereas case-licensing probes are unspecified and look for any variants of ϕ -features.

	Specified $i\phi$ -probe: looks for $i\phi$		Unspecified ϕ -probe: looks for ϕ	
	[+person] Intervention		Case-licensing	Predicate
	licensing	in PCC contexts		agreement
φP [<i>i</i> φ:Val]	+	+	+	+
DP [<i>u\phi</i> :Val]	_	_	+	+

Table 6. Properties of weak and strong pronouns in Hittite reformulated

This approach allows us to effectively solve the two problems posed by strong pronouns: their invisibility to ϕ -probes responsible for the PCC and their ability to license marked person features on their own.

Recall that the person licensing condition requires interpretable marked person feature to be licensed by agreement. In our approach, interpretable marked person is only found in ϕ Ps, which can appear in argumental positions on their own, as clitic pronouns, or in DP-shell, as strong pronouns. Accordingly, there are two ways of licensing interpretable person of ϕ Ps. In weak pronouns, ϕ P agrees with the clausal functional system. We represent this in (25) as the clitic-licensing head H equipped with a specified $i\phi$ -probe. Intervention effects caused by clitic applicative arguments exclusively follow naturally.

(25)
$$[H + i\phi$$
-Probe $[_{ApplP}$ IO Appl $[_{VP} \phi P [iPerson:Val] V]]]$

In strong pronouns, ϕP agrees with its sister D, which is equipped with a specified $i\phi$ -probe as well (cf. (24)). Sisterhood is the most local configuration, and intervention is not expected (26).

(26) [_{DP} D+
$$i\phi$$
-Probe ϕ P [i Person:Val]]

Finally, let us introduce case licensing into the picture and determine positioning of various ϕ -probes in the clausal functional system. Since clitics are only licensed as internal arguments, the interpretable person licensing functional head can only be lower than the light *v*P. It can be the case that the transitive *v* combines the two functions — clitic licensing and structural case assignment, and therefore associated with two ϕ -probes — the specified $i\phi$ -probe, which searches for interpretable ϕ -features, and non-specified ϕ -probe, which searches for whatever ϕ -features. This decision, however, would require additional stipulation about the order of probing. This is why we prefer to introduce a specialized head H. For case-licensing heads — the transitive *v* and T — we follow standard assumptions about their positions.

Thus, in (27), a configuration with the two kinds of ϕ -probes obtains. The lower specified $i\phi$ -probe undergoes Agree with clitic goals exclusively and licenses their marked person feature, unless intervention produces PCC. The higher unspecified ϕ -probe enters the Agree relation with any nominal goal and case-licenses it in a standard manner.

(27) $[_{TP} T + \phi$ -Probe	\rightarrow NOM
[$_{\nu P}$ (EA) ν (+ ϕ -Probe)	\rightarrow ACC
$[_{\rm HP} H + i\phi$ -Probe	\rightarrow [+person] licensing
[_{ApplP} IO Appl	\leftarrow DAT
[_{VP} DIA V]]]]]	

5. Conclusions

In this paper, we have shown that the Hittite PCC has a number of peculiar properties that make conventional models of PCC reducing the person licensing condition to case issues inadequate. The fact that in Hittite, direct object clitics and unaccusative / passive subject clitics participate in PCC forces us to assume that structural case assignment and [+person] licensing are two distinct processes. In order to implement this assumption, we have developed an analysis that implies two distinct mechanisms of licensing: interpretable person licensing based on the Person Licensing Condition and case licensing based on a feature-driven version of the Case filter. Keeping the two types of licensing apart allows us to consider clitic and non-clitic nominal arguments as having identical requirements with respect to case-licensing but different requirements with respect to [+person] licensing. In this way, Hittite gives us an opportunity to see that Person Licensing Condition is not necessarily connected with case licensing but constitutes a separate type of licensing.

Abbreviations

HKM — Hethitische texte aus Maşat-Höyük; MH — Middle Hittite; MS — Middle Hittite script; NH — New Hittite; NS — New Hittite script; CTH — Catalogue des texts Hittites; KBo — Keil-schrifttexte aus Boğazköy; KUB — Keilschrifturkunde aus Boğazköy;

1–3 — 1st–3rd person; ABL — ablative; ACC — accusative; APPL — applicative; C — common gender; CONN — clause connective; DAT — dative; DO — direct object; F — feminine; FOC — focus; FUT future; IMP — imperative; INF — infinitive; LOCP — locative particle; MED — middle; N — neuter gender; NOM — nominative; IO — indirect object; PL — plural; POSS — possessive; PROHIB prohibitive; PRS — present; PST — past; QUOT — quotative; REFL — reflexive; SG — singular.

References

- Anagnostopoulou 2003 Anagnostopoulou E. The syntax of ditransitives. Evidence from clitics. Berlin, New York: Mouton de Gruyter. 2003.
- Anagnostopoulou 2005 Anagnostopoulou E. Strong and weak person restrictions: A feature checking analysis. Heggie L., Ordoñez F. (eds.). Clitic and Affix Combinations. Amsterdam, Philadelphia: John Benjamins Publishing Company. 2005. P. 199–235.
- Anagnostopoulou 2017 Anagnostopoulou E. The Person Case Constraint. Everaert M., van Riemsdijk H. (eds.). The Wiley Blackwell companion to syntax, 2nd edition, Oxford: Blackwell, 2017. P. 1–47. <u>https://doi.org/10.1002/9781118358733.wbsyncom101</u>.
- Baker 2008 Baker M.C. The syntax of agreement and concord. Cambridge: Cambridge University Press. 2008.
- Baker 2015 Baker M.C. Case. Its principles and parameters. Cambridge: Cambridge University Press. 2015.
- Baker, Vinokurova 2010 Baker M.C., Vinokurova N. Two modalities of case assignment: Case in Sakha. Natural Language and Linguistic Theory. 2010. 28(3). P. 593–642.
- Béjar 2003 Béjar S. Phi-syntax. A theory of agreement. Ph.D. thesis. University of Toronto. 2003.
- Béjar, Rezac 2003 Béjar S., Rezac M. Person licensing and the derivation of PCC effects. Perez-Leroux A.T., Roberge Y. (eds.). Romance linguistics: Theory and acquisition. Amsterdam, Philadelphia: John Benjamins Publishing Company. 2003. P. 49–62.
- Bobaljik 2008 Bobaljik J. Where's phi? Agreement as a post-syntactic operation. Adger D., Harbour D., Bejar S. (eds.). Phi-theory: Phi features across interfaces and modules (Oxford Studies in Theoretical Linguistics 16). Oxford: Oxford University Press. 2008. P. 295–328.
- Bonet 1991 Bonet E. Morphology after syntax: Pronominal clitics in Romance languages. Ph.D. thesis, MIT. 1991.
- Bonet 1994 Bonet E. The Person-Case Constraint: A morphological approach. MIT Working Papers in Linguistics 22. The Morphology-Syntax Connection. 1994. P. 33–52.
- Bonet 2008 Bonet E. The Person-Case Constraint and repair strategies. D'Alessandro R., Fischer S., Hrafnbjargarson G.H. (eds.). Agreement restrictions. Berlin: Mouton de Gruyter. 2008. P. 103–128.
- CHD Güterbock H., Hoffner H. van den Hout T. (eds.). The Hittite dictionary of the Oriental Institute of the University of Chicago, Chicago: The Oriental Institute of the University of Chicago. 1989–.
- Chomsky 1981 Chomsky N. Lectures on Government and Binding. The Pisa lectures. Dordrecht: Foris. 1981.

- Chomsky 2000 Chomsky N. Minimalist inquiries: The framework. Martin R., Michels D., Uriagereka J. (eds.). Step by step: Essays on minimalist syntax in honor of Howard Lasnik. Cambridge, MA: MIT Press, 2000. P. 89–155.
- Dardano 2006 Dardano P. Die hethitischen Tontafelkataloge aus Hattusa (CTH 276–282) (StBoT 47), Wiesbaden: Harrassowitz. 2006.
- Déchaine, Wiltschko 2002 Déchaine R.-M., Wiltschko M. Decomposing pronouns. Linguistic Inquiry. 2002. 33(3), P. 409–442.
- Garrett 1990 Garrett A. The syntax of Anatolian pronominal clitics. Ph.D. thesis. Harvard University. 1990.
- Hoffner 2009 Hoffner H.A.Jr. Letters from the Hittite Kingdom (SBL WAW 15), Atlanta. 2009.
- van den Hout 1998 van den Hout T. The purity of Kingship. An edition of CTH 569 and related oracle inquiries of Tudhaliya IV, Leiden Boston Köln. 1998.
- van den Hout 2003 van den Hout T. Apology of Hattusili II. Hallo W., Younger K. (eds.). The context of scripture, Vol. 1, Leiden, Boston. 2003. P. 199–204.
- Kayne 1975 Kayne R. French syntax. Cambridge MA: MIT Press. 1975.
- Legate 2008 Legate J. Morphological and Abstract Case. Linguistic Inquiry. 2008. 39(1). P. 55–101.
- Lyutikova, Sideltsev 2020 Lyutikova E., Sideltsev A. On the syntax of argument clitics in Hittite. Transactions of the Philological Society. 2020. 118(1). P. 29–78.
- Lyutikova, Sideltsev (to appear) Lyutikova E., Sideltsev A. Voice neutrality in Hittite infinitives: a restructuring analysis. Journal of Historical Syntax. To appear.
- Marantz 1991 Marantz A. Case and Licensing. Westphal G., Ao B., Chae H.-R. (eds.). Proceedings of ESCOL 91, Cornell University, Ithaca, NY, Cornell Linguistics Club. 1991. P. 234–25.
- Miller 2013 Miller J. Royal Hittite instructions (SBL WAW 31), Atlanta. 2013.
- Miller 2014 Miller J. Mursili II's Prayer concerning the misdeeds and the outstanding of Tawananna. Proceedings of the 8th International Congress of Hittitology, Warsaw, September 5–9, 2011. Warsaw. 2014. P. 516–557.
- Nevins 2007 Nevins A. The Representation of third person and its consequences for Person-Case effects. Natural Language and Linguistic Theory. 2007. Vol. 25. P. 273–313.
- Otten 1981 Otten H. Die Apologie Hattusilis III. (StBoT 24), Wiesbaden: Harrassowitz. 1981.
- Perlmutter 1971 Perlmutter D.M. Deep and Surface Structure constraints in syntax. New York: Rinehart and Winston Inc. 1971.
- Polinsky 2016 Polinsky M. Deconstructing ergativity: Two types of ergative languages and their features. Oxford: Oxford University Press. 2016.
- Rezac 2007 Rezac M. Escaping the Person Case Constraint: Referential computation in the phi-system. Linguistic Variation Yearbook. 2007. No6. P. 97–138.
- Rezac 2010 Rezac M. On the unifiability of repairs of the Person Case Constraint: French, Basque, Georgian, and Chinook. Etxepare R., Gómez R., Lakarra J.A. (eds.). Beñat Oihartzabali Gorazarre — Festschrift for Beñat Oyharçabal, UPV-EHU, Special issue of Anuario del Seminario de Filología Vasca "Julio de Urquijo" XLIII: 1-2. 2010. P. 769–790.
- Rezac 2011 Rezac M. Phi-features and the modular architecture of language. Berlin: Springer. 2011.
- de Roos 2007 de Roos J. Hittite votive texts (PIHANS 109), Leiden. 2007.
- Singer 2002 Singer I. Hittite prayers (SBL WAW 11), Atlanta. 2002.

Статья поступила в редакцию 02.10.2020 The article was received on 02.10.2020

Екатерина Анатольевна Лютикова

доктор филологических наук; профессор, МГУ имени М. В. Ломоносова

Ekaterina A. Lyutikova

Dr. Phil. Hab.; professor, Lomonosov Moscow State University

lyutikova2008@gmail.com

Андрей Владимирович Сидельцев

доктор филологических наук; заместитель директора, Институт языкознания РАН

Andrei V. Sideltsev

Dr. Phil. Hab.; deputy director, Institute of Linguistics, Russian Academy of Sciences

acidelcev@gmail.com