Beyond syntacticocentric and lexicalist: Event-structural force-dynamic approach to noun incorporation and promotion to direct object in Amguema Chukchi

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Abstract: There are two most common approaches to analyzing noun incorporation: syntacticocentric, which derives this construction via syntactic movement, and lexicalist, which argues that this complex verbal stem is formed by compounding in the lexicon via rules operating in a verbal lexical entry. Without discussing the general theoretical possibility of such analyses, in this paper I advocate a much less widespread analysis of noun incorporation. I argue that noun incorporation rules are directly derivable from the event structure. Taking W. Croft's approach to argument and event structure, I review previous studies and provide some new field data which point towards event-structural analysis of noun incorporation and promotion to direct object formulated in concepts of force dynamics, affectedness and subevents' ordering. I also argue that the force-dynamic analysis I propose does not postulate idiosyncratic rules: the restrictions I formulate for noun incorporation and promotion in Amguema Chukchi are simultaneously cognitively and diachronically grounded.

Keywords: Chukchi, Chukotko-Kamchatkan, cognitive linguistics, construction grammar, event structure, incorporation, syntax

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Без лексикализма и без трансформаций: подход от структуры события и силовой динамики к инкорпорации и продвижению в позицию прямого дополнения в амгуэмском чукотском

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Аннотация: Существует два основных подхода к анализу инкорпорации имени. Согласно первому, ориентированному на синтаксис подходу, конструкция инкорпорации имени возникает благодаря перемещению (или его отсутствию) в синтаксической структуре. Согласно второму,

лексикалистскому подходу, инкорпорация имени возникает благодаря операции в лексической репрезентации глагольной основы. В этой статье я предлагаю анализ, основанный на других принципах. Инкорпорация имени не ограничивается ни правилами, оперирующими только в лексиконе, ни операциями над синтаксическими структурами. Правила, ответственные за инкорпорацию имени, проистекают напрямую из структуры события. Пользуясь подходом к структуре события, изложенным в книге У. Крофта «Verbs», я разбираю материалы предыдущих исследователей и привожу новые данные, полученные в ходе полевой работы с амгуэмским говором чукотского языка. Эти данные указывают, что исследования инкорпорации должны опираться на изучение структуры события и оперировать такими понятиями, как силовая динамика (force dynamics), пребывание под воздействием (affectedness) и порядок подсобытий в каузальной цепи. Кроме того, я утверждаю, что правила, сформулированные для инкорпорации и продвижения в позицию прямого дополнения таким образом, не являются случайными и произвольными. Напротив, такого рода ограничения на синтаксис инкорпорации обоснованы когнитивно, отражают возможные диахронические пути развития и могут быть проверены на материале типологического исследования.

Ключевые слова: грамматика конструкций, инкорпорация, когнитивная лингвистика, синтаксис, структура события, чукотский язык, чукотско-камчатские языки

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1. Introduction and main results

Amguema Chukchi[1], like other Chukchi varieties (see [Polinskaja, Nedjalkov 1987; Dunn 1999]), makes a productive use of a Noun Incorporation Construction (henceforth NIC): a noun stem denoting P/S_P-like participant[2] can be expressed not only as a syntactic Direct Object (henceforth DO) marked by nominative case, but also as a part of a verbal stem (compare (1b), regarded as pragmatically odd by some speakers, and (1a)).

(1) a. *nute-wiriŋə-ɬʔ-e* *ɸ-piɬɣə-swi-ni-n* *ʔeqe-ɬʔə-n*
land-protect-ATTR-INS 2/3.S/A-throat-cut-3SG.A.3.O-3SG.O bad-ATTR-NOM.SG

[1] All the data I use in this paper is obtained during my fieldwork in the village of Amguema. Amguema (*ʔomwaam* or *omwaan* in Chukchi) is a village in the North-Eastern part of the Chukotka peninsula, which is administratively a part of the Iultin district of the Chukotka Autonomous Okrug. More information about the Amguema variety and elicitation techniques is provided in the end of Section 1.1.

[2] It has been noted since Bogoras [1922] and Skorik [1948] that Instrument- and Locative-like core arguments and adjuncts can be incorporated in Amguema Chukchi. Additionally, Nedjalkov [1982] and Polinsky [1990] provide some evidence that Cause-like and Agent-like S participants can be incorporated, too. However, as this paper is focused only on the restrictions on the Nominative-marked syntactic Direct Object "promoted by" the NIC incorporating P-like participant of two-place verbs, discussion of patterns of NI of other roles is left for other studies.

b. *ʔnute-wiriŋə-ɬʔ-e* *Ø-swi-ni-n* *ʔeqe-ɬʔ-in* *piłyə-n*
land-protect-ATTR-INS 2/3.S/A-cut-3SG.A.3.O-3SG.O bad-ATTR-GEN throat-NOM.SG
'The protector of the Motherland cut the enemy's throat (in a movie).'

In this paper, I analyze such Amguema Chukchi constructions containing incorporation of P-like participant of a transitive event and promotion of another participant to the DO slot. S-Incorporation and Adjunct-incorporation are left for further studies.[3]

The NIC in (1) expresses the P participant as a part of complex verbal stem of a transitive verb. Hence, the privileged DO syntactic position becomes "vacant" and is instead occupied by another affected participant (here — the Possessor of the body-part P), which otherwise would have been expressed as a less a prominent syntactic (sub)constituent. As discussed in [Polinskaja, Nedjalkov 1987: 265], this construction provides means for manipulating the pragmatic prominence of the affectedness of participants: the change happening to the throat (the notional verbal P argument) is less pragmatically prominent than the possible effects of this change for the enemy (the notional P's Possessor). In this paper, I adopt Polinskaja and Nedjalkov's [1987] perspective on the functions of constructions like (1a) in the constructionist-cognitive framework with the help of the notion of "**profiling**", a syntactic mechanism connected to human cognitive mechanisms of attention (see [Croft, Cruse 2004: 40–53]). As a general framework-free label for the process of a non-core argument NP "acquiring" the DO syntactic position by virtue of incorporation of the core P-like participant, I use the term "**promotion**".

The goals of this paper are threefold. The first is to provide a nuanced **description of restrictions** on various subtypes of profiling a participant as a DO achieved by incorporation of a P-like participant of an event in the Amguema variety of Chukchi (see Sections 3.1–3.5). In doing so, I study similar cases described for other varieties by previous researchers, see [Skorik 1948; 1961; 1977; Nedjalkov 1976; 1977; 1982; Kozinsky et al. 1988; Polinskaja, Nedjalkov 1987; Polinskaja 1991; T. Kurebito 1998; 2012; Dunn 1999; Muravyova et al. 2001]. Additionally, I present and analyze some novel pieces of data on previously relatively understudied subtypes of P-participant NICs profiling another participant as a DO, namely the NICs profiling spatial participants of change-of-location or change-of-state events (see Section 3.3), constructions where both an Incorporated Noun (IN) and a Beneficiary / Maleficiary profiled as a DO denote human beings (see the end of Section 3.4) and constructions which can profile different participants depending on the difference in an event's construal (see Section 3.5).

The second goal is to provide an alternative to the analyses dominant in previous "lexicalist" and "syntacticocentric" studies analyses of P-incorporation and promotion to the DO slot (see the discussion in Section 4). The alternative I offer is based on the **event structure** properties and not on the "semantic (proto-)roles" and their hierarchies (see [Rosen 1989; Spencer 1995]) or the types of syntactic configurations and copying / movement mechanisms operating in them (as some "syntacticocentric" analyses are, see [Baker et al. 2005; Muro 2009]). Although I adopt the theory of event structure and argument structure developed in [Croft 1991; 2012], I acknowledge that a similar analysis can be transferred to other formal, constructionist or cognitive frameworks. Hence, my goal is to show that **event structure can and should be studied in detail** by any analysis of NICs at least for Amguema Chukchi. The essentials of the event structure analysis are presented in Section 2.2. The comparison of my analysis to the previous ones and its advantages are discussed in Section 4.

The final goal of this study is to argue that the event-structural restrictions I formulate and pose upon the NICs in Amguema Chukchi are not arbitrary but can be **explained by the diachronic**

[3] For detailed description of S-Incorporation in other Chukchi varieties, see Nedjalkov [1977; 1982] and Polinsky [1990; 1994]. Adjunct incorporation is briefly analyzed in Spencer [1995]. Additionally, Vinyar & Gerasimenko [2018] discuss a subtype of it and provide some evidence that it is not fully idiosyncratic, although requires a separate analysis.

paths noun incorporation takes. In Section 5, I argue that the restrictions formulated in Section 2.2 are naturally caused by the origin of these constructions in the Body-Part Incorporation Construction.

1.1. Amguema Chukchi: Notes on data collection and some grammar basics

Many[4] of my consultants[5] who helped me in collecting the data of Amguema Chukchi were born in the tundra and had little or no competence in Russian before they were taken to boarding school. Amguema can be regarded as a "central" group of Chukchi varieties which is close to the Eastern group of varieties (see [Pupynina 2018: 114]).

The majority of Chukchi data I use in this paper is elicited. Elicitation included translation from Russian and/or evaluating constructed Chukchi sentences and asking consultants to produce sentences with a specific wordform. For a sentence to be considered grammatical, at least 2–3 consultants needed to either produce it or accept it as a well-formed one (the opposite procedure with the same number of consultants was required for a sentence to be considered ungrammatical). All elicitation sessions were recorded, transcribed, and analyzed morphologically. The analyzed materials are stored and (partially) available on demand.

Another type of linguistic data I use in my study is sentences from spontaneous texts. The texts were analyzed by the members of Chukchi language research group (see https://chuklang.ru/about) and are available online (https://chuklang.ru/full_texts). For the purposes of navigation, I provide the text title and the number of the sentence in it after the text examples. Additionally, some non-elicited examples of spontaneous Chukchi speech are given (the (1a) example is a representative of this type).

In morphological glossing, I tried to indicate as much morphological information as possible. Thus, in the data presentation I avoid the question of whether a given complex (either due to compounding or due to derivation) stem is well-established or produced in the course of speech.[6] I used the glosses developed in the Chukchi description field project, which can be found at https://chuklang.ru/static/chukchi_glosses_20171020.pdf. The translation of the lexical stems is in general given according to Weinstein's [2018] splendid dictionary.

Chukchi is a language with both head and dependent marking of core arguments [Nichols 1986]. The case system is strictly ergative: the S and P participants are marked with nominative case[7] and the A participant is marked with instrumental case irrespective of the

[4] All ethnographic and sociolinguistic information in this section is based either on Stenin [2018] or on my personal knowledge.

[5] During four fieldtrips to Chukotka (2016–2021, total duration is about 4 months), I had an opportunity to work with at least twenty Chukchi people (listed on https://chuklang.ru/speakers), mostly bilingual (Chukchi / Russian) and aged between 40 and 70, only two of them being male. However, the most data on Chukchi noun incorporation I discuss here was provided by 12 speakers (mentioned in Acknowledgements).

[6] An anonymous reviewer suggested that not fully semantically compositional complex stems denoting well-established concepts in Chukchi culture should be glossed in a more integrative way. Although I acknowledge that doing so may be more transparent for a reader and may sometimes better reflect the lexicalized nature of such stems, I still preserve more "literal" glossing because it is difficult to draw a sharp distinction between semantically compositional (although probably lexicalized) stems like *ine-n-meɬew-etə-ɬʔə-n* (ANTI-TR-get.better-VB-ATTR-NOM.SG) 'doctor' and semantically non-compositional stems like *tərkə-ɬʔə-n* (testicle-ATTR-NOM.SG) 'stud buck reindeer'.

[7] There are some reasons for labelling the Chukchi case which marks the A-participant as instrumental and not ergative: it is not only morphologically identical to the case which marks an Instrument, but

participant's animacy and clausal TAM (2). The case-marking and indexing in the ditransitive construction is organized following indirect-object patterns [Haspelmath 2013]. Chukchi exhibits a "free" pragmatics-based word order and extensive pro-drop [Dunn 1999].

(2) *ətłəy-e* *ekk-in* *wałə-Ø* *Ø-pəne-ni-n*
father-INS son-GEN knife-NOM.SG 2/3.S/A-sharpen-3SG.A.3.O-3SG.O
'The father sharpened the son's knife.'

1.2. Introducing the force-dynamic approach to argument structure

The force-dynamic approach to argument structure is partially similar to better known approaches to event decomposition (see the discussion in [Croft 2012: 187–205]). As in these approaches, it is argued that the syntactic properties of a construction are dependent on the event structure. Some of the differences between Croft's and other approaches are the following:

— Event structure is not hierarchical but is a flat ordered causal chain;
— It is a whole event which is analyzed, not only the verbal lexical entry;
  — Hence, no distinction between "arguments" and "adjuncts" exists a priori;
— The force-dynamic (or causal, I use these terms interchangeably) chain as a whole represents a semantic frame of an event (see [Croft, Cruse 2004] for an introduction to frame semantics);
— Different segments of the event's frame are profiled by different parts of the construction's syntactic component;

Croft [2012: 197–205] argues that the properties of syntactic coding which other approaches predict on the basis of semantic (proto-/macro-)roles and their ranking are predicted in a force-dynamic approach by the limits of verbal profile and order of participants in the causal chain. He formulates the following principles of argument coding with respect to the verbal profile and the order of subevents:

(i) The rules of participants' realization, adapted from [Croft 2012: 207]

a. The verbal profile is delimited by the Subject (Initiator) and Object (Endpoint), if any;

b. The Subject is antecedent to Object in a causal chain: SBJ → OBJ;

c. An Antecedent Oblique (see below) is antecedent to the Object in the causal chain; a Subsequent Oblique is subsequent to the Object in the causal chain: A.OBL → OBJ → S.OBL;

d. Incorporated arguments are between the Subject and Object in the causal chain: SBJ → IN → OBJ.

The following English example illustrates Croft's model of event-structure: *Sue* is the Subject, *hammer* is an Antecedent Oblique, *coconut* is the Object, and *Greg* is a Subsequent Oblique.

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also the internal syntax of NPs marked with this case is (at least partially) is identical to the internal syntax of other Oblique-marked NPs (see the discussion of NP structure in [Dunn 1999] for Telqep variety and [Kozlov 2018] for Amguema variety). I label the case which marks the S/P argument (and whose NPs exhibit a special internal syntax) as nominative (and not absolutive) following Muravyova et al. [2001].

(3) *Sue broke the coconut for Greg with a hammer*. [Croft 2012: 198]

Sue - - - - - - - ➤ hammer ——— ➤ **coconut** - - - - - - - - - Greg

Croft [Ibid.] introduces a three-dimensional event representation which integrates force-dynamic structure with temporal dimension and qualitative dimension (*q*). The latter is needed to indicate the presence / absence of change of state. In this model, each participant has its own subevent. The order of force-dynamic interactions of different participants' subevents is indicated on the vertical dimension. For each participant, the *q* axis represents the qualitative dimension of its subevent: if a participant changes through time, then its part of a diagram changes on the *q* axis. The *t* axis represents how a subevent unfolds over time. The participant is indicated on the left of each subevent. The type of force-dynamic interaction of a subevent is represented on the right.

Let me describe some aspects of my representational conventions and analysis of causal chains which slightly differ from Croft's.

First, Croft distinguishes causal and non-causal interactions between participants: the former ones are marked with arrows, while the latter ones are marked with arrowless lines. In this study, I rather make a distinction between interactions which involve force transmission (e.g., *hitting* events, which involve direct contact between two participants) and force-dynamically neutral events (such as Benefit subevent of *Greg* in (3)). Second, Croft [2012: 215] includes all participants between the Subject and Object into the verbal profile (e.g., *with a hammer* in (3)), although he considers the possibility that these participants are not part of a verbal profile. I regard elements which are not profiled by the verb (the verb does not describe their subevents of a force-dynamic chain) as excluded from the verbal profile. Following Croft [Ibid.], I mark with boldface the subevents which are parts of a verbal profile and use dashed lines to mark the subevents which are profiled by some other elements (e.g., Oblique cases). Additionally, I also use dotted lines to express a **deprofiled** participant (a participant whose subevent is not profiled by any morpheme, see below), namely an IN, see the discussion in Section 2.1. Finally, because volitional Initiators' segments of the causal chain seem to rarely impact the NI phenomena, I often omit them from the force-dynamic representations.

Croft briefly discusses how noun incorporation is related to event structure and argument realization[8], linking the incorporated noun to a more general class of Indefinite Null Instatiations like English *Scarface killed again* [Ibid.: 334–335], which are present in the event's causal chain. However, Croft's analysis does not predict that INs in the majority of cases correspond to the DO (a profiled participant) in the corresponding non-incorporating structures. I argue that INs' subevents represent a special type of causal chain segments, relating the participants low in information structure to the event and excluded from verbal profile (deprofiled), although present in the event structure.

Let me provide the representation of (3) in Fig. 1 (p. 120). Note that the arrows indicate the application of force while plain lines indicate the force-dynamically neutral interaction. Note that bold lines represent the interaction profiled by the verb. Here two participants (*coconut* and *Greg*) undergo a change of state which is represented by vertical lines. The new state they acquire is represented by a horizontal line. Note that the level of horizontal lines of these participants differs before the event and after it (the new state is higher on *q* dimension): that is because *Greg*'s and *coconut*'s states have changed.

While Croft's theory has many interesting implications, only some of them are important for my study. One of these important implications is the difference between events involving change of states and/or the force-dynamic impact and other events (see Fig. 2, p. 120): this is important for the possibility of NICs (see Section 2.2).

[8] An advantage of my study is that it not only makes the force-dynamic restrictions on NI more detailed, but also provides a cognitive and diachronic explanation to these restrictions (see Section 6).

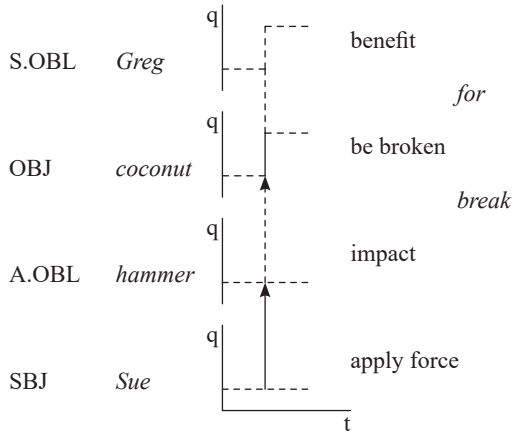

Fig. 1. The force-dynamic structure for *Sue broke the coconut for Greg with a hammer* [Croft 2012: 214]

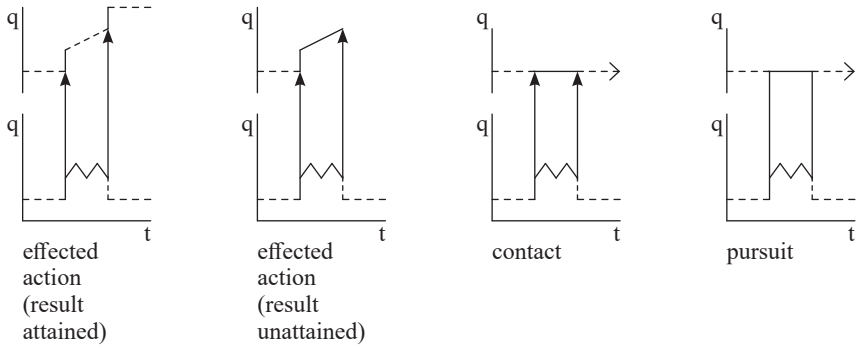

Fig. 2. Affectedness types of events from [Croft 2012: 318]

2. Properties of NICs in Amguema Chukchi and essentials of the current proposal

2.1. Basic properties of Amguema Chukchi NICs

NI in Chukchi (like incorporation of other dependents in other heads, see [Skorik 1948]) attaches a dependent (a noun stem in case of NI) immediately before a head (a verb stem). The INs are devoid of all nominal inflection (case and number) and their semantics is also number-neutral[9] (and dependent on context), see (4).

[9] Polinsky [1990] presents some evidence that the plurality of IN can be implied by verbal plurality / pluractionality derivation having the scope over an IN. Earlier, I presented similar cases for the Amguema variety and also discussed some nominal derivational affixes which can signal out IN's plurality [Vinyar 2021: 89–91]. However, IN number in Chukchi begs for a separate study.

(4) *Ø-ʔəttʔə-n-qametwa-k-wʔ-e*
2/3.S/A-dog-TR-eat-CS-TH-2/3SG.S
'She fed dogs / She fed a dog.'

As in other languages which can be classified as exhibiting Mithun's [1984] Types I–III NI and lacking Type IV ("classifying" incorporation), incorporated participants become inactive for the syntax external to the verbal stem.[10] As the contrast between (5a) and (5b) shows, one can see that the IN is "invisible" for the polypersonal indexation system — the verb becomes intransitive, which is reflected by the change of case marking of the semantic A participant from instrumental to nominative.

(5) a. *epeqej-ne* *Ø-əpan-ne-n* *ənneen*
grandmother-AN.INS 2/3.S/A-cook-3SG.A.3.O-3SG.O fish.NOM.SG

b. *epeqej-Ø* *Ø-ənn-əpat-ɣʔ-e*
grandmother-NOM.SG 2/3.S/A-fish-cook-TH-2/3SG.S
'Grandmother cooked some fish.'

The "invisibility" of INs to external syntax also holds for the constructions which are the focus of this paper, namely the NICs in which the clause and the verb are transitive (6). Despite being transitive, the Object-indexing verb always references a profiled participant distinct from the participant denoted by an IN.

(6) *epeqej-ne* *Ø-ənn-əpan-ne-n*
grandmother-AN.INS 2/3.S/A-fish-cook-3SG.A.3.O-3SG.O
'Grandmother cooked some fish for someone (e.g., her grandchild).'
Impossible interpretation: 'Grandmother cooked some fish.'

The IN's reference cannot be specified by means employed to narrow down the reference of non-incorporated heads of NPs. That is, INs cannot be modified[11] by free-standing adjectives (7a), demonstratives, numerals, relative clauses, or genitives (7b). The last property is important for my study because some non-incorporating constructions involving genitive modifiers of P participants can be paraphrased (if meeting requirements discussed in Section 2.2) as NICs with incorporated P participant and its "Possessor" profiled as a DO (8).

(7) a. *nə-mejəŋ-qin* *Ø-ʔəttʔə-n-qametwa-k-wʔ-e*
ST-big-ST.3SG 2/3.S/A-dog-TR-eat-CS-TH-2/3SG.S
'Someone big fed dogs.'
Impossible interpretation: 'Someone fed a big dog.'

b. **ətłəɣ-in* *Ø-ʔəttʔə-n-qametwa-k-wʔ-e*
father-GEN 2/3.S/A-dog-TR-eat-CS-TH-2/3SG.S
Intended: 'He fed father's dogs.'

(8) *ekke-te* *ətłəɣə-n* *Ø-ʔəttʔə-n-qametwa-w-ne-n*
son-AN.INS father-NOM.SG 2/3.S/A-dog-TR-eat-CS-3SG.A.3.O-3SG.O
'Son fed father's dogs / Son fed dogs for the father.'

[10] There is putative evidence that at least some constructions with classifying NI are marginally possible in some Chukchi varieties: Polinsky [1994] reports stranding-like construction in the variety she studied, and I was able to find at least one semi-compositional doubling-like construction for the Amguema variety. However, all such cases are marginal and require further study.

[11] Here I use terms the "modify" and "modifier" in a purely descriptive sense: in some theories of NP syntax elements I call modifiers can pertain to different syntactic positions (e.g., "complements" and "specifiers"). In Amguema Chukchi (like in other varieties) it is possible to incorporate some modifiers into head noun stem. This stem can "subsequently" be incorporated into a verb stem. However, such constructions are beyond the scope of this paper.

Polinskaja and Nedjalkov [1987] provide some evidence that Chukchi INs are less referential and less information-structurally salient compared to nominative NPs and even demoted oblique NPs. Their observations and conclusions seem to be compatible with the Amguema Chukchi data, too. However, the nuances of INs referentiality and information-structural functions go beyond the scope of this paper and require a separate study (both elicitation- and corpus-based).

To sum up, INs in Chukchi exhibit several semantic, syntactic, and information-structural signs of being less salient: they are invisible to syntax, number-neutral, have very restricted modification possibilities and express participants of lesser information-structural importance (compare this with morphosyntactic properties commonly associated with verbal profiles [Croft 2012: 207; Langacker 2008: 367]). I argue that they represent a case of deprofiled parts of a causal chain (a type absent from Croft [2012]): not only are they absent from the verbal profile (as many Oblique NPs are), but there is also no non-verbal element to profile them in a way similar to the way Obliques are profiled by oblique cases or adpositions. INs are unmarked morphologically and deprofiled semantically: they only serve to establish or enforce the verbal profile (as the *dogs* are acting together with the verb stem to profile the *father* in (8b)).

2.2. Force-dynamic restrictions on DO-Profiling P-Incorporation: The current proposal

In this section, I propose restrictions which are imposed upon all subtypes of DO-profiling P-Incorporation in Amguema Chukchi and highlight it with examples. Note that the restrictions on the morphosyntactic structure I propose are stated (following Croft [2012]) in purely force-dynamic event-structural terms.

In (ii), the restrictions on the formation of NICs in Amguema Chukchi are stated. Note that only the fourth restriction (ii-d), highlighted with boldface, is fully devoted to the constructions studied in this paper; previous restrictions are also responsible (at least partially) for other NICs in Amguema Chukchi. Hence, only (ii-d) is thoroughly discussed below. The first three restrictions are given for the sake of consistency and to show that a force-dynamic approach is able to account not only for DO-Profiling P-Incorporation but also for other NICs.

(ii) Restrictions on the formation of NICs in Amguema Chukchi

a. The IN is prototypically the participant to which the force is transmitted and/or which undergoes a change on the *q* (qualitative) scale.

b. The IN is deprofiled (it is not salient for information structure).

c. The IN cannot follow the participant which undergoes a (potential) change on the *q* scale in the causal chain.

d. The profiled participant is most immediately affected by the IN's subevent and directly follows the IN in the causal chain.

Before turning to the illustration and explanation of (ii-d), I discuss other restrictions.

Restriction (a) is equivalent to the common requirement for an IN to represent either an S_P ("unaccusative") or P participant (for lexicalist-like analyses), or to be an internal argument of a V head (for syntacticocentric-like analyses, see Section 4.1). Roughly, it excludes Agent-like and Beneficiary-like participants from the list of potential INs. This requirement is met in Chukchi, see (9)[12].

[12] This restriction needs a clarification because it also "mistakenly prohibits" incorporation of Instruments and Locative participants of non-caused motion. The NICs of this type require separate discussion

(9) *Ø-ɣakaŋ-qor-peła-ne-n* *ətłəɣə-n*
2/3.S/A-team-reindeer-leave-3SG.A.3.O-3SG.O father-NOM.SG
'He left a team reindeer for the father.'
Impossible interpretations: 'He left the father for a team reindeer'; 'A team reindeer left the father.'

Restriction (b) encompasses pragmatic / information-structural function of the NI in Amguema Chukchi. It is important for the DO-Profiling P-Incorporation NIC: recall the discussion of the difference between NIC in (1a) and the non-incorporating clause in (1b) due to the the notion of pragmatic saliency. A detailed discussion of these issues applicable to Amguema Chukchi is provided by Polinskaja and Nedjalkov [1987].

Restriction (c) is provided to explain the behavior of some "two-Theme" verbs in Amguema Chukchi and is redundant for DO-Profiling P-Incorporation Constructions. Some events in which two participants seem to undergo a directed change (like some change-of-location-and-state events) incorporate the second participant in the force-dynamic chain (11) ("Locatum" corresponding to the Oblique) and not the third participant ("Location", DO), see [Vinyar 2021: 75–82]. It is only possible to incorporate a "Location" in the absence of the Locatum (12).[13]

(10) *ʔaasek-a* *ŋərkir-e* *Ø-te-jəŋe-ŋə-ni-n* *orwo~or*
young.man-INS old.clothes.bag-INS 2/3.S/A-MAKE-load-MAKE-3SG.A.3.O-3SG.O sledge~NOM.SG
'The young man loaded the sledge with the bags for old clothes.'

(11) a. *Ø-ewirʔə-te-jəŋe-ŋə-ni-n* *orwo~or*
2/3.S/A-clothes-MAKE-load-MAKE-3SG.A.3.O-3SG.O sledge~NOM.SG

b. **Ø-orwə-ta-jəŋa-ŋə-ɣʔ-e* *ewirʔ-e*
2/3.S/A-sledge-MAKE-load-MAKE-TH-2/3SG.S clothes-INS
'(The father) loaded the sledge with clothes.'

(12) *Ø-orwə-ta-jəŋa-ŋə-ɣʔ-e*
2/3.S/A-sledge-MAKE-load-MAKE-TH-2/3SG.S
'(The father) loaded the sledge.'

Finally, I discuss restriction (d), which encompasses minor restrictions on NIC subtypes discussed in Section 3. If one takes a Croft-like view of event structure as an ordered sequence of interactions between participants, one can come up with the idea that participants which are commonly called "affected Possessors" (13), "Recipients" (14), "Beneficiaries / Maleficiaries" (see below), and "Goals / Sources" of caused motion (see below) all follow the IN in the causal chain (see Fig. 4, p. 124).

(13) *tə-ŋojŋə-kəpłə-ɣʔa-n*
1SG.S/A-pelvis-strike-TH-3SG.O
'I kicked him in the buttocks' ("Hooligan", sentence 7).

(14) *ətłʔa-ta* *Ø-riłqə-jəł-ni-n* *ŋeekək-Ø*
mother-INS 2/3.S/A-porridge-give-3SG.A.3.O-3SG.O daughter-NOM.SG
'Mother gave "green porridge"[14] to the daughter.'

because there are pieces of evidence that these NICs, although being licit, differ drastically in productivity from the incorporation of S/P participants: consider [Vinyar, Gerasimenko 2018] and [Vinyar 2021].

[13] Here Amguema Chukchi differs from the variety studied by Nedjalkov [1976] and analyzed by Spencer [1995].

[14] A porridge-like mix of herbs semi-digested by a reindeer, berries, and sometimes reindeer blood, see discussion below.

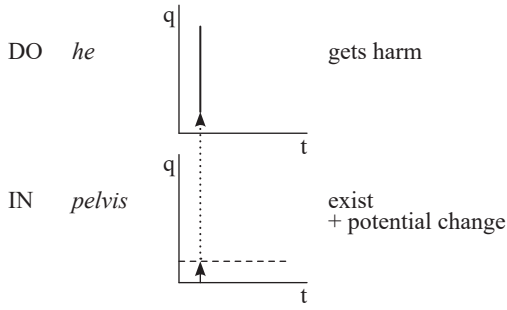

Fig. 3. Force-dynamic structure of (13)

It is quite straightforward that the Recipient-like participant directly follows the IN participant (the Theme-like participant which undergoes literal or metaphorical directed change-of-location subevent): it is hard to imagine a transfer-of-possession event in which some participant intervenes between the moving participant (IN) and the participant getting benefit (unless this participant is Recipient-like himself). However, as I discuss in Sections 3.4 and 3.5, the situation is much more complex in the case of some Beneficiary/Maleficiary-like participants.

For "Affected Possessors" of body-parts and parts-of-objects, the contiguity between the IN's and profiled DO's subevents seems even more straightforward: it is hard to imagine an event which is performed to X's body-part in such a way that someone else is affected prior to X. However, as I discuss in Section 3.4, the situation becomes more complex for other types of possession.

3. Profiling as a DO via P-Incorporation: An NIC subtypes and requirements

In this section, I discuss P-Incorporation Constructions which profile another participant as a DO. The constructions are classified on the basis of types of nominal elements that occupy their slots.[15]

3.1. The Body-Part-Incorporating Animate-Profiling NIC

This section is devoted to the construction in which the IN slot is occupied by the noun denoting a body part of an animate whole profiled as DO, see (15).

(15) *ɣətɣa-k* *ʔajŋa-ma* *tərkə-łʔ-e*
late.autumn-LOC snort.during.the.rutting.season-SIM testicle-ATTR-INS
ɣa-jeɣje-nto-łen
PF-small.intestine-take.out$_{INC}$-PF.3SG
'In the fall, during the rut, a stud buck reindeer pulled his intestines out…' ("Incident", sentence 2).

[15] As I discuss in Section 5, identifying different lower-level constructions makes sense even for languages with such productive NICs as Chukchi.

Such constructions are formed productively in Amguema Chukchi — see (1a), repeated below as (16a). For some events which imply the affectedness of the whole participant, the non-incorporating paraphrase is even considered odd by some consultants (16b).[16]

(16) a. *nute-wiriŋə-ɬʔ-e* *Ø-piłɣə-swi-ni-n* *ʔeqe-ɬʔə-n*
land-protect-ATTR-INS 2/3.S/A-throat-cut-3SG.A.3.O-3SG.O bad-ATTR-NOM.SG

b. ?*nute-wiriŋə-ɬʔ-e* *Ø-swi-ni-n* *ʔeqe-ɬʔ-in* *piłɣə-n*
land-protect-ATTR-INS 2/3.S/A-cut-3SG.A.3.O-3SG.O bad-ATTR-GEN throat-NOM.SG
'The protector of the Motherland cut the enemy's throat (in a movie).'

The Profiling Body-Part NIC straightforwardly satisfies the restriction in (ii-d). It is difficult to imagine a subevent happening to X's body-part to be followed by a subevent pertaining to someone else (not X): normally, (sub)events happening to parts of sentient beings are most immediately experienced by the possessors of these parts.

The event does not need to be high on the affectedness scale to be coded by the Body-Part NIC. Consider (13) above, where the force is transmitted to the man which is kicked (represented by pronominal indexation) via his pelvis and the change of neither physical nor mental state is presupposed (see Fig. 3 above).

Constructions analogous to Chukchi (13) have been recognized as typical for NI cross-linguistically since Sapir [1911]. Moreover, in some languages NI is limited to body-part incorporation constructions (e.g., Wayana and Trió < Guianan < Cariban [Tavares 2005: 263; Meira 1999: 265–267]). However, in Chukchi these constructions represent only a subtype (although an important one, see Section 6) of Profiling NICs.

3.2. Part-Incorporating Inanimate Whole-Profiling NICs

Parts of inanimate non-sentient beings can also be incorporated, providing their wholes with a vacant slot of profiled DO:

(17) *Ø-kayərɣajpə-n-təmŋ-ew-ne-n* *saj-kok-Ø*
2/3.S/A-cover-TR-get.lost-CS-3SG.A.3.O-3SG.O tea-pot-NOM.SG
'She lost the teapot's cover.'

(18) *qətəjɣ-a* *ɣe-retem-rəsimirʔew-łin* *jara-ŋə*
wind-INS PF-roof.of.jaranga-tear.apart-PF.3SG house-NOM.SG
'The wind tore the roof of jaranga apart.'

As in the case of the Body-Part NIC, this construction satisfies the NI requirement in (ii-d). The Whole is introduced in the force-dynamic chain only as following its Part, as shown in Fig. 4 (p. 126), which represents the roof's separation and damage happening to the jaranga (traditional nomadic Chukchi house).

The degree of DO's affectedness is variable in this construction. What is important is that the profiled DO be a part of the event's causal chain and not a mere specification of the reference of the incorporated noun (compare translations of (19) and (20)).

(19) *Ø-ɬʔu-ni-n* *jara-ken* *ŋəłɣəł-Ø*
2/3.S/A-see-3SG.A.3.O-3SG.O house-REL smoke-NOM.SG
'He saw the smoke of a yaranga / He saw the yaranga by its smoke.'

[16] This goes in line with Polinskaja & Nedjalkov's [1987: 253–254] observation that such incorporation constructions have an assertion of the importance of change of DO's state.

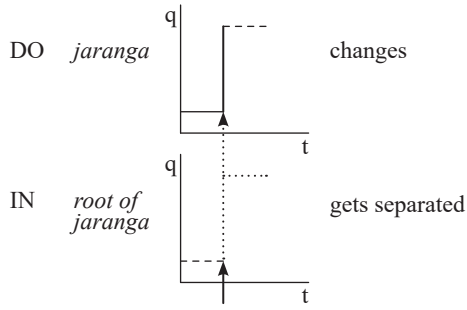

Fig. 4. The force-dynamic structure of (18)

(20) *Ø-ŋəɬɣəɬ-ɬʔo-ne-n* *jara-ŋə*
2/3.S/A-smoke-see-3SG.A.3.O-3SG.O house-NOM.SG
'He saw the yaranga by its smoke.'

3.3. Theme-Incorporating Space-Profiling NICs

In this construction, an IN represents an inanimate moving "Theme" and the "Goal / Source / Location" participant affected by the IN's movement is coded as DO. The profiled DO's subevent directly follows the IN's subevent in a causal chain (see (21)). But in this construction, the IN and the profiled DO are not connected by Part-Whole relations. When two entities are not connected by Part-Whole relations, the effect of a subevent happening to the IN is not obligatorily transferred to the participant subsequent to it. Hence, it is almost always possible to code the Spatial-like participant as a Subsequent Oblique and not as an Endpoint of Verbal Profile, compare (21) and (22):

(21) *ətɬʔa-ta* *məsəkwə-n* *Ø-mumkəɬ-nə-tip-en-ni-n*
mother-INS shirt-NOM.SG 2/3.S/A-button-TR-be.pinned-VB-3SG.A.3.O-3SG.O
'Mother sewed a button to the shirt.'

(22) *ətɬa* *Ø-mumkəɬ-nə-tip-et-ɣʔ-i* *məsəkwə-tkənə-k*
mother.NOM.SG 2/3.S/A-button-TR-be.pinned-VB-TH-2/3SG.S shirt-TOP-LOC
'Mother sewed a button on the top of the shirt.'

Unlike previously discussed constructions, this construction imposes more severe restrictions on the degree of DO's affectedness. While in (22) the shirt is changed in an observable property, in (23)–(24) the Goal and Source (respectively) are much less affected and thus cannot be profiled.

(23) a. *ətɬa* *Ø-kojŋə-treɬ-ʔ-e* *stoɬə-tkənə-k*
mother.NOM.SG 2/3.S/A-cup-put.down-TH-2/3SG.S $table_R$-TOP-LOC
'Mother put the cup on the table.'

b. *ətɬʔa-ta* *Ø-kojŋə-treɬ-ne-n* *stoɬ-Ø*
mother-INS 2/3.S/A-cup-put.down-3SG.A.3.O-3SG.O $table_R$-NOM.SG
'Mother put the cup for a table' (pragmatically odd).

(24) a. *ətɬa-Ø* *Ø-awerʔə-ŋəto-ɣʔ-e* *sanɬa-jpə*
mother-NOM.SG 2/3.S/A-clothes-take.out_{INC}-TH-2/3SG.S box-ABL
'Mother took the clothes out of the box.'

b. *#ətɬʔa-ta* *Ø-awerʔə-ŋəto-ne-n* *seŋəɬ-Ø*
mother-INS 2/3.S/A-clothes-take.out$_{INC}$-TH-2/3SG.S box-NOM.SG
'Mother took the clothes out for a box' (pragmatically odd).

Although the exact degree of the DO's affectedness needed for the construction's usage to be felicitous is not yet determined, the data suggest that the more evident the DO's change, the more appropriate the construction. The sentences (25) and (26) show that the same verb stem *jəto/ŋəto* 'to take out' as in (24) can be employed in an NIC (26). However, the events are slightly different, as the translation suggests. While removing the clothes from the box does not change the box's shape in any way, removing the supplies from the bag does have such an effect on the bag. The representation for the event in (26) is given in Fig. 5.

(25) *alʲek-na* *taqʔa-t* *Ø-jəto-ne-na-t* *awes-səko-jpə*
Oleg-AN.INS supply-NOM.PL 2/3.S/A-take.out-3SG.A.3.O-3SG.O-PL bag-IN-ABL
'Oleg took the supplies out of the bag.'

(26) *alʲek-na* *Ø-taqʔa-nto-ne-n* *ewis-Ø*
oleg-AN.INS 2/3.S/A-supply-take.out$_{INC}$-3SG.A.3.O-3SG.O bag-NOM.SG
'Oleg emptied the bag by taking the supplies out.'

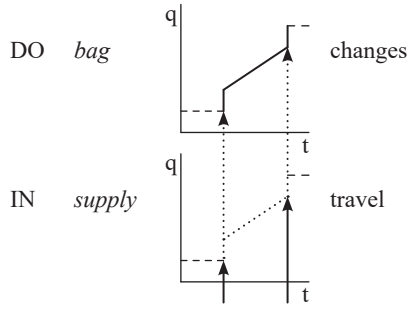

Fig. 5. The force-dynamic structure for (26)

3.4. The P-Incorporating Beneficiary/Maleficiary-Profiling NIC

In constructions like (27c), the profiled animate DO undergoes the positive (so-called Engager-Beneficiary, according to the classification in Song [2010]) or negative change in her dimension of ownership. This means that the possessive relations between the DO and NI are either facilitated or weakened.

A type of event commonly coded by this construction is transfer of possession. Consider (27) and (28). In (27), the possessive relations between the DO and the IN are created, and in (28), the possessive relations are terminated.

(27) a. *ətɬʔa-ta* *riɬqə~riɬ* *Ø-jəɬ-ni-n* *enaraɬʔ-etə*
mother-INS porridge~NOM.SG 2/3.S/A-give-3SG.A.3.O-3SG.O neighbor-DAT
'Mother gave some "green porridge" to the neighbor.'

b. *ətɬa* *Ø-riɬqə-jəɬ-ɣʔ-i* *enaraɬʔ-etə*
mother.NOM.SG 2/3.S/A-porridge-give-TH-2/3SG.S neighbor-DAT

c. *ətɬʔa-ta* *Ø-riɬqə-jəɬ-ni-n* *ŋeekək-Ø*
mother-INS 2/3.S/A-porridge-give-3SG.A.3.O-3SG.O daughter-NOM.SG
'Mother gave some "green porridge" to the daughter.'

(28) a. *tʔuɬ-ŋinqej-e* *tumɣ-in* *mane-t* *Ø-tʔuɬ-en-ni-ne-t*
thief-boy-INS friend-GEN money-NOM.PL 2/3.S/A-thief-VB-3SG.A.3.O-3SG.O-PL

b. *tʔuɬ-ŋinqej-e* *Ø-mane-tʔoɬ-an-ne-na-t* *tumɣə-t*
thief-boy-INS 2/3.S/A-money-thief-VB-3SG.A.3.O-3SG.O-PL friend-NOM.PL
'A boy-thief stole money from his friends.'

The change in the IN's subevent (the change of location (27) and/or possession (28) and/or state (29)) should directly cause the change in DO's state of well-being, i.e. the DO should either directly benefit or be harmed. Example (29) illustrates that the IN changes its state (*the dogs* become less hungry) so that the DO benefits from it (*father* can use the dogs more effectively), see Figure 6.

(29) *ekke-te* *ətɬəɣə-n* *Ø-ʔəttʔə-n-qametwa-w-ne-n*
son-INS father-NOM.SG 2/3.S/A-dog-TR-eat-CS-3SG.A.3.O-3SG.O
'The son fed the dogs for his father.'

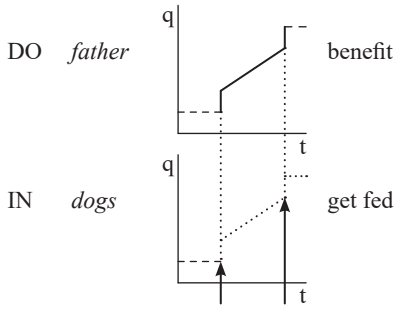

Fig. 6. Force-dynamic structure for (29)

Some change-of-location events do not affect the possessive relations between the IN and the DO (i.e., do not have an impact on how the DO can usethe IN) and so cannot be coded by the Beneficiary/Maleficiary-Profiling NIC. In (30), the clothes undergo change of location; however, the girl cannot manipulate them more effectively. This event can be contrasted with the "opposite" event of taking the clothes from the drying stick (31). In this event, it becomes easier for the girl to manipulate the clothes (because she does not need to take them off herself).[17]

(30) a. *Ø-awerʔə-jme-ɣʔ-e* *pʔa-jme-joɬɣə-tkənə-k* *ŋaakka-ɣtə*
2/3.S/A-clothes-hang-TH-2/3SG.S dry-hang-CONT-TOP-LOC daughter-DAT

b. **ŋeekək* *Ø-awerʔə-jme-ne-n* *pʔa-jme-joɬɣə-tkənə-k*
daughter.NOM.SG 2/3.S/A-clothes-hang-3SG.A.3.O-3SG.O dry-hang-CONT-TOP-LOC
'[The mother] hung up clothes on the drying stick for the daughter.'

(31) *Ø-ewirʔə-nwiriw-ni-n* *ŋeekək-Ø* *pʔa-jme-joɬɣə-tkən-epə*
2/3.S/A-clothes-take.off-3SG.A.3.O-3SG.O daughter-NOM.SG dry-hang-CONT-TOP-ABL
'[The mother] took the clothes from the drying stick for the daughter.'

There is an indication that the DO slot in this construction is constrained by (ii-d). In principle, "taking from" events can contain two participants: the one who directly loses the object taken and the one who loses the possession of this object only by virtue of the former participant

[17] Examples (30) and (31) represent a non-prototypical case of branching of causal chains: both 'daughter' and 'drying stick' follow 'clothes' in the causal chain. Such cases are discussed in Section 3.5.

losing the object. Example (32) allowed two interpretations: either the money belonged to the boy, or the boy had someone else's money with him. Both cases can in principle be encoded by the Maleficiary-Profiling NIC because the boy is the participant most directly experiencing the loss of the money. In (33), however, the boy is the first participant to experience the loss of the money, whereas the father (the real owner of the money) experiences the loss only indirectly (see Fig. 7, which displays the impossible relationship between the causal chain and NIC for ungrammatical sentence (33c)).

(32) *ʔaasek-a* *Ø-man-enewna-ne-n* *ŋinqej-Ø*
young.man-INS 2/3.S/A-money-take.away-3SG.A.3.O-3SG.O boy-NOM.SG
Interpretation A: 'The young man took away the money from the boy (the money could belong to someone else).'
Interpretation B: 'The young man took away the boy's money.'

(33) a. *ʔaasek-a* *Ø-enewna-ne-na-t* *ŋenqaj-epə* *ətłəɣ-in* *mane-t*
young.man-INS 2/3.S/A-take.away-3SG.A.3.O-3SG.O-PL boy-ABL father-GEN money-NOM.PL

b. **ʔaasek-a* *ətłəɣə-n* *Ø-man-enewna-ne-n* *ŋenqaj-ɣəpə*
young.man-INS father-NOM.SG 2/3.S/A-money-take.away-3SG.A.3.O-3SG.O boy-ABL

c. **ʔaasek-a* *ətłəɣə-in* *Ø-man-enewna-ne-n* *ŋinqej-Ø*[18]
young.man-INS father-GEN 2/3.S/A-money-take.away-3SG.A.3.O-3SG.O boy-NOM.SG
'The guy took the father's money from the boy.'

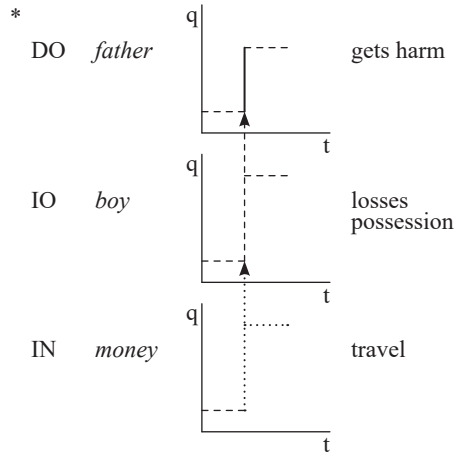

Fig. 7. The force-dynamic structure of *(33b)

Let me discuss this example in more detail. Unlike body-parts discussed in Section 3.1, alienably possessed objects can directly affect different participants, so in some situation there could be more than one "candidate" for profiling as a DO. Here the principle of immediate affectedness ((ii-d), see Section 2.2) comes into play. The participant who is the first to experience the positive / negative effect of the IN's subevent occupies the profiled DO slot for her/himself. Due to this principle, (37b) is ungrammatical: the *father* cannot become the DO because this slot belongs to the *boy*, who experiences the loss of money in the most direct way. Neither can the *father* stay as a genitive modifier (because INs cannot be modified by genitives, see Section 2.1). Hence, NI is ungrammatical in this context.

[18] Exampled (33c) is impossible for purely morphosyntactic reasons: it is impossible for genitive constituents in Amguema Chukchi to modify INs.

In addition to these cross-linguistically common constructions with inanimate incorporated P, Amguema Chukchi also exhibits a profiling-via-NI construction which codes a force-dynamic interaction between two human referents.[19] Consider (34):

(34) *tełenjep* *maraw-ma* *unił?-e* *ɣ-akka-nmə-łena-t* *ʔəttʔəjot-łʔa-t*
long.ago war-SIM Chaplino.Yupik-INS PF-son-kill-PF.3SG-PL before-ATTR-NOM.PL
'Long ago during wars Eskimos used to kill our ancestors' sons.'

In (34), the subevent happening to the sons (IN) transfers its effect (harm) upon the ancestors via the kinship link between the two. As in previously discussed constructions, the order of subevents is IN-DO: the ancestors are affected only by virtue of IN's affectedness.

The NIC in question poses restrictions on the type of relations between IN's and DO's subevents: if both IN and DO are human, the event must either strengthen or weaken the link between the IN and the DO.

In the case of (34), the link between the ancestors and their sons is destroyed due to the murder of the latter. In (35) below, on the contrary, the NI construction encodes an event which establishes a link between two human participants.

(35) *tə-ŋewəsqet-łʔu-ɣʔe-n* *van^{j}a-Ø*
1SG.S/A-girl-see-TH-3SG.O Vanya-NOM.SG
'I found Vanya his future girlfriend.'

The event expressed by this construction can not only terminate or establish a link but also can merely have an impact on this link. Consider (36). Here a woman is affected because of the empathy link between her and her son.

(36) *toptər-a* *ŋewʔen-jərʔə-n* *Ø-ekke-n-meɬew-en-ni-n*
doctor$_{R}$-INS woman-content-NOM.SG 2/3.S/A-son-TR-recover-VB-3SG.A.3.O-3SG.O
'The doctor healed the woman's son.'

One can hypothesize that the construction is sensitive to the degree of IN's affectedness and semantic transitivity of an event. However, I argue that the impact on the link between an IN and a DO is more important for this construction than the degree of IN's affectedness. To begin with, some events low on the transitivity (see [Malchukov 2005]) or affectedness scale (see [Beavers 2011]) cannot be expressed by this NIC, see (37):

(37) **tas^{j}a-na* *Ø-ŋawətłəwe-jaɣna-ne-n* *epeqej-Ø*
Tasya-AN.INS 2/3.S/A-granddaughter-go.to.meet-3SG.A.3.O-3SG.O Granny(nickname)-NOM.SG
Intended: 'Tasya went to meet Epeqej's granddaughter.'

However, affectedness and semantic transitivity cannot fully account for the (im)possibility of incorporation of this type: the effect of the subevent chain upon the relations between the IN and DO should be considered. Consider (35) above, which does not encode an effected action. In terms of affectedness and semantic transitivity, (35) is like (37) and less semantically transitive as compared to (38), which denotes a contact/impact situation with a possible attained result (see the summary of affectedness types in [Croft 2012]).

(38) **termesʔə-ŋinqej-e* *enarałʔə-n* *Ø-akka-tałajwə-ne-n*
bully-boy-INS neighbor-NOM.SG 2/3.S/A-son-hit-3SG.A.3.O-3SG.O
Intended: 'The bully-boy beat the neighbor's son.'

[19] While incorporation of human referents is not a rare feature (see some examples in [Baker 1996]), the transitive NI construction in which a human DO is indirectly affected by a subevent happening to a human IN seems rather rare. To my knowledge, it occurs in Oluta Popoluca (< Mixe-Zoquean; see [Zavala 2000: 365]) and Nadëb (< Nadahup; see [Weir 1990]) and also probably in Ese Ejja (< Pano-Tacanan, see [Vuillermet 2014]).

As mentioned above, the event properties important for this NIC are the ones which impact the link between an IN and a DO. Hence, events which destroy (34) or establish (35) such links can be coded by NI irrespectively of the general degree of transitivity.

The diverse behavior of certain change-of-state verbs is instructive here. Above I have shown that the healing event can be coded by an NI construction (36). This is not surprising, because the change-of-state event in question impacts the empathy/possession link between the IN and the DO (without healing, the link could have been terminated). However, a change-of-state event in (39) below cannot be coded by an NIC. I argue that this is due to the fact that the washing event leaves the link between two participants intact.

(39) **ŋewəsqet-e enarałʔə-n Ø-nenen-iłɣətew-ni-n*
girl-INS neighbor-NOM.SG 2/3.S/A-baby-wash-3SG.A.3.O-3SG.O
Intended: 'The girl washed the neighbor's baby.'

There is some evidence that the restrictions on the P-Incorporating Beneficiary/Maleficiary-Profiling NIC with two human referents being the IN and the DO are rooted in the possibility of construing (see [Croft 2012: 13–19] for the notion of construal) the DO's segment as a harm/benefit change subtype. Hence, these restrictions depend on the degree of how closely the two participants are linked as well as on the event type. As (34)–(39) show, the stronger the impact on the empathy link and the stronger the empathy link itself, the more felicitous the construction. Compare (36) to (39) for the role of event structure and (40)–(41) (less felicitous and infelicitous respectively) to (35)–(36) for the role of relation closeness between participants.

(40) *ʾətłəɣ-e ekək Ø-ine-nə-ɣəjiw-etə-łʔə-łʔu-ni-n*
father-INS son.NOM.SG 2/3.S/A-ANTI-TR-sign-VB-ATTR-see-3SG.A.3.O-3SG.O
Intended: 'The father found his son a teacher/mentor.'

(41) **ine-n-meɬew-etə-łʔ-e ŋinqej-Ø Ø-ine-nə-ɣəjiw-etə-łʔə-nə-meɬew-en-ni-n*
ANTI-TR-recover-VB-ATTR-INS boy-NOM.SG 2/3.S/A ANTI-TR-sign-VB-ATTR-TR-recover-VB-3SG.A.3.O-3SG.O
Intended: 'The doctor healed the boy's teacher.'

The lesser-studied NIC with both IN and DO referring to humans provides us some insights. First, this construction also follows the IN-DO order in the causal chain (see (ii-d) in Section 2.2). Second, the possibility of using this NIC is constrained by the nature of the possession link between an IN and a DO and the event type, which effect is "transferred" through this link.

3.5. Constructions with several profiling possibilities

In Section 3.3, I discussed the Space-Profiling NIC with affected inanimate spatial participant occupying the DO slot, while Section 3.4 was devoted to the Beneficiary/Maleficiary-Profiling NIC with an animate participant, which, if it receives benefit or harm from the event, can take the privileged DO slot. Both constructions respect the IN-DO order in the causal chain (see (v)) and additionally impose some more subtle restrictions on the possible event structures they code. However, an open question remains: if an event structure is in principle compatible with both types of constructions, which construction would be used, and which participant would occupy the DO slot?

Some complex events are straightforward in terms of NI because the constraints of one of the constructions is not met by the event structure in question. The event of hiding in the box, for example, does not affect the shape or state of the box and thus does not meet the requirement of the Space-Profiling NIC, see (42b) and also Section 3.3. The requirements of the Beneficiary/Maleficiary-Profiling NIC, on the contrary, are fully met: it is harder for the boy to interact with the toys now, and so the boy can be profiled, see (42a):

(42) a. *ətłʔa-ta* *Ø-uwisw-ineŋe-numkew-ni-n* *ŋinqej-Ø* *seŋłe-səku*
mother-INS 2/3.S/A-play-TOOL-hide-3SG.A.3.O-3SG.O boy-NOM.SG box-IN

b. **ətłʔa-ta* *ŋenqaj-ɣəpə* *seŋəł-Ø* *Ø-uwisw-ineŋe-numkew-ni-n*
mother-INS boy-ABL box-NOM.SG 2/3.S/A-play-TOOL-hide-3SG.A.3.O-3SG.O
'The mother hid the toys from the boy in the box.'

In (43), on the other hand, the event of putting the clothes on the drying stick does not facilitate the interaction between the daughter and her clothes; hence, only the drying stick (which is covered) can be profiled:

(43) a. *Ø-awerʔə-jme-ne-n* *pʔa-jme-jołɣə-n* *ŋaakka-ɣtə*
2/3.S/A-clothes-hang-3SG.A.3.O-3SG.O dry-hang-CONT-NOM.SG daughter-DAT

b. **ŋeekək* *Ø-awerʔə-jme-ne-n* *pʔa-jme-jołɣə-tkənə-k*
daughter.NOM.SG 2/3.S/A-clothes-hang-3SG.A.3.O-3SG.O dry-hang-CONT-TOP-LOC
'[The mother] hung the clothes on the drying stick for the daughter.'

However, there are some complex events that meet the requirements of both constructions and seem to violate the global requirement for the DO's subevent to immediately follow the IN's subevent (see (ii-d)). Consider (44)–(45). The translation is given according to the consultants who commented on the semantic difference.

(44) *alʲek-na* *Ø-taqʔa-təjo-ne-n* *ŋewəsqet-Ø* *tejusɣə-səku*
Oleg-AN.INS 2/3.S/A-supply-put.in$_{INC}$-3SG.A.3.O-3SG.O girl-NOM.SG sack-IN
'Oleg put the supplies in the sack for the girl.'

(45) *alʲek-na* *Ø-taqʔa-təjo-ne-n* *ŋawəsqat-etə* *tejusɣə-n*
Oleg-AN.INS 2/3.S/A-supply-put.in$_{INC}$-3SG.A.3.O-3SG.O girl-DAT sack-NOM.SG
'Oleg prepared the sack full of supplies for the girl.'

At first glance, these two sentences contradict the immediate affectedness requirement or argue in favor of generally undesirable branching causal chains (see [Croft 2012: 221–248]). However, the translation difference between the two examples indicates that the event construals in (44) and (45) are different. The translation implies that the branching causal chain in Fig. 8 is a suitable representation only for (44) but not for (45). The translation of (44) indicates that the subevent of *supplies* directly precedes both the *girl* and the *sack* (the girl gains possession simultaneously with the supplies' transfer). For (45), the representation in Fig. 9 is more appropriate: the girl benefits from the fact that the sack is full of supplies but not from the mere fact of supplies' movement to the sack.

Hence, the difference between two construals can be summarized as following: if the event is construed just as a transfer of possession and no change of the spatial participant is specified, then the event can be represented as a branching causal chain with the animate participant undergoing a benefit change and the spatial participant undergoing no change. Consequently, it is only the animate participant which is profiled (see Fig. 8, p. 133).

If, on the other hand, the spatial participant undergoes a directed change and the animate participant benefits from this change but not from the mere motion of the Theme participant (express by the IN), then the spatial participant directly follows in the Theme participant in the causal chain and only afterwards the animate participant's benefit-like subevent is introduced (see Fig. 9, p. 133). Hence, the spatial participant directly follows the IN's subevent and is profiled as a DO.

Consider another event that permits two construals and can be coded by both the Beneficiary/Maleficiary-Profiling and Goal/Source-Profiling NICs. The event presented in (46) can be regarded as either a transfer-of-possession event (the boy can now more easily manipulate the books irrespectively of the box) (46b) or as an event with an affected Location (not only the books become ordered but the box itself is put in order) and with a Beneficiary which benefits from the change of Location (46a).

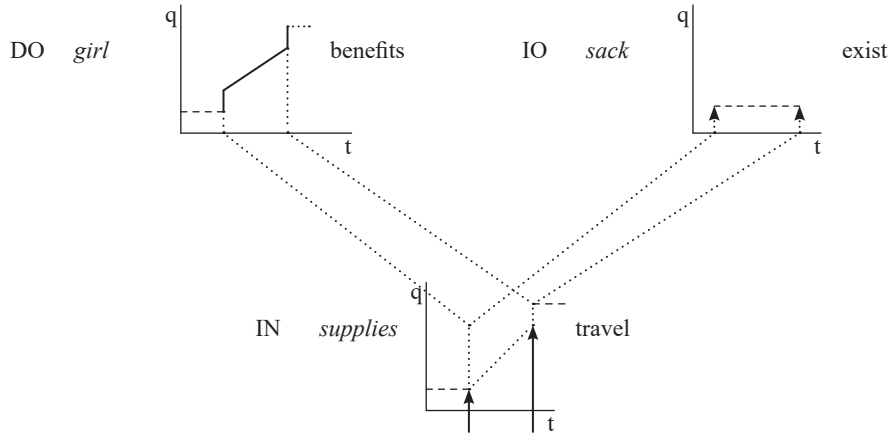

Fig. 8. The force-dynamic structure for (44). The *girl* benefits directly from the supplies' transfer (left part) and no *sack*'s change is specified (horizontal representation in the right part)

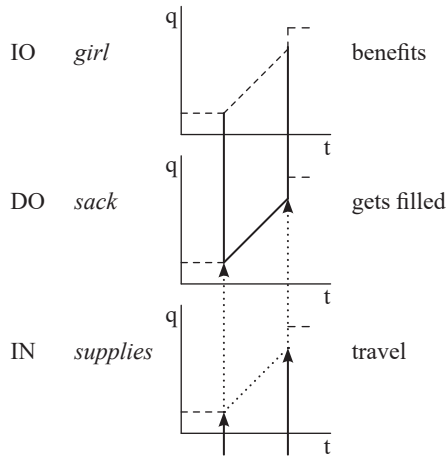

Fig. 9. The force-dynamic structure for (45)

(46) a. *ətɬʔa-ta* *keɬi-n-umek-ew-ni-n* *seŋəɬ-Ø* *ŋenqaj-etə*
mother-INS 2/3.S/A-book-TR-group$_N$-CS-3SG.A.3.O-3SG.O box-NOM.SG boy-DAT

b. *ətɬʔa-ta* *keɬi-n-umek-ew-ni-n* *ŋinqej-Ø* *sanɬa-səko-ɣtə*
mother-INS 2/3.S/A-book-TR-group$_N$-CS-3SG.A.3.O-3SG.O boy-NOM.SG box-IN-DAT
'The mother put the books together (in order) in the box for the boy.'

To sum up, the profiled DO in Amguema Chukchi NICs always directly follows the IN's subevent. The picture becomes more complicated because of events which can be construed as either transfer-of-possession events (the Beneficiary/Maleficiary-Profiling NIC) or affected Goal/Source events (the Goal/Source-Profiling NIC). However, I argue that in the case of such events two different types of construal and hence two different types of force-dynamic structure are employed.

4. Comparison with previous analyses

In this section, I discuss previous analyses of promotion triggered by NI which various scholars applied to Chukchi and other languages.

4.1. Lexicalist and syntacticocentric analyses

The majority of proposed analyses of NICs which formulate their hypotheses in a more or less strict framework can be classified as either "syntacticocentric" or "lexicalist" (terms and analysis taken from [Haugen 2015]). Roughly speaking, the proponents of syntacticocentric analyses argue that NI is a result of some syntactic processes and are thus subject to restrictions imposed on the syntactic structure. Notable syntacticocentric analyses are [Baker 1988; 1996; Baker et al. 2005; Muro 2009; Barrie 2011; Barrie, Mathieu 2016]. The linguists arguing for the lexicalist analyses, on the other hand, consider NI to represent a subtype of the general word-formation process of compounding, which is an operation in the lexicon. According to this family of analyses, syntactic processes cannot affect NI and all restrictions on NI are posed upon the verbal lexical entry. Among lexicalist analyses, works such as [Mithun 1984; Mithun, Corbett 1999; Rosen 1989; Spencer 1995; Anderson 2000] should be mentioned.

Baker [1988; 1996; Baker et al. 2005] argues for a syntacticocentric analysis which posits that the promoted participant is a possessor and a part of the internal argument's NP, whose Head is stranded via incorporation. Barrie [2009; 2011] and Barrie & Mathieu [2016] developed a slightly similar syntacticocentric analysis for promotion in Northern Iroquoian: the analysis makes the promotion of indirect objects possible and draws a distinction between alienable and inalienable possession while still not posing any event-structural restrictions.

Despite the differences, the two analyses have the following commonalities:

— The verb neither subcategorizes nor posits restrictions on the promoted participant;
— The promotion is a by-product of the head N/XP movement to become an IN and its interaction with a complex syntactic configuration in a nominal domain;
— NICs are derived from the same syntactic structures as their non-incorporating (quasi)synonyms.

Rosen's [1989] approach to DO-promoting P-Incorporating Constructions is far from ideal. Rosen considers promoted participants to represent just another type of modifier stranding (probably a genitive one) [Ibid.: 301–302]. However, she fails to account for the fact that in all constructions she discusses this participant is marked as a verbal syntactic argument but not as a nominal modifier. Additionally, her analysis violates Mithun's [1984] heirarchy.[20]

In response to syntacticocentric analyses, lexicalist ones argue that the promoted participant is a part of verb's lexical entry. Spencer's [1995] approach to Chukchi NICs is lexicalist and is based on Rosen's [1989] paper, although it substantially modifies her analysis, borrowing some ideas from Michelson [1991].

On the basis of second-hand data, Spencer analyses various argument structure alternations connected with Chukchi NICs (see Section 2.2) and manages to prove that the possibility of incorporation is connected to a Patientivity hierarchy similar to Dowty's [1991] features indicating Proto-Patient. The verbal lexeme poses a restriction that the promoted participant be affected as a result of the event (see [Spencer 1995: 474–477]).

[20] Note also the recent abandonment of the [Rosen 1989]-like idea of possessor modifier stranding in [Olthof 2020].

To sum up, the main analytical difference between lexicalist and syntacticocentric approaches to DO-Profiling P-Incorporationare that:

— In lexicalist approaches, the promoted DO is argued to be subcategorized by the verbal lexeme; usually it is the affectedness requirement which is discussed. No such requirement is stated in syntacticocentric ones;
— In lexicalist approaches, the promoted participant is argued to be accessible for lexical-structural rules and not to be merely an NP-internal modifier. In syntacticocentric approaches, the promoted participant enters the relations with the verb due to incorporation.

Additionally, there is at least one analysis which incorporates the "lexicalist" affectedness requirement into a syntacticocentric analysis: Muro's theory of excorporation.[21] Muro [2009: 86–91] proposes different clause structures and syntactic features for languages in which (in)alienability is important for NICs and languages in which the affectedness is prominent.

Let me also briefly identify the commonalities between two quite different cognitive / constructionist analyses: [Tuggy 1981] for Tetelcingo Nahuatl and [Velázquez-Castillo 1996] for Paraguayan Guarani.

— Although the two languages have similar or identical morphosyntax, several minor sub-constructions composing a NI (macro)construction can be identified;
— Constructions and restrictions on their formation can operate in a prototype-like fashion [Velázquez-Castillo 1996: 149–161];
— Effected action performed upon Human Body-Part can be regarded as a prototype [Ibid.: 155–161].

4.2. Amguema Chukchi data and previous analyses

In Section 3, I described the system of Amguema Chukchi DO-Profiling P-Incorporating Constructions and their formational restrictions. I tried to formulate the restrictions purely in event-structural terms, without any reference to global syntactic or semantic "roles" not derived from event structure. Although some construction subtypes have construction-specific event-structural requirements (see the end of Section 3.4 for specific restrictions of the construction with DO and P-like participant slots occupied by human referents), all of them obey the force-dynamic principle (ii-d) stated in Section 2.2 and repeated here as (iii).

(iii) The profiled participant is the most immediately affected by the IN's subevent. The profiled participant's sybevent directly follows the IN's subevent in the causal chain.

In this section, I discuss the advantages of the force-dynamic approach to NICs I presented over previous syntacticocentric and lexicalist analyses.

Let me first start with the syntacticocentric analysis in its version which derives the promotion to DO via stranding of IN's possessor (see [Baker 1988; Baker et al. 2005], or [Barrie 2009], to a lesser extent). There is some quite straightforward evidence that such analyses fail to capture Chukchi data such as (51), where the DO can be only interpreted as the receiver of the book, not its owner. This indicates that the profiled DO is a part of the event's causal chain, not a mere syntactic possessor of the IN.

(47) *alʲoša-na* *Ø-keɬi-ren-ni-n* *ivan-Ø*
Alyosha-AN.INS 2/3.S/A-book-bring-3SG.A.3.O-3SG.O Ivan-NOM.SG
'Alyosha brought the book to Ivan', but not 'Alyosha brought Ivan's book (here).'

[21] INs are left in the lower levels of the verbal syntactic structure, while free-standing NPs/DPs are escaping these lower domains due to semantic and syntactic reasons.

Note that the verb *ret-* ‘bring’ seems to be monotransitive in Chukchi (even when it is a three-place verb, the third argument being a spatial one, not a Recipient/Beneficiary). Consider (48):

(48) *alʲoša-na* *keɬi~keɬ* *Ø-ren-ni-n*
Alyosha-AN.INS book~NOM.SG 2/3.S/A-bring-3SG.A.3.O-3SG.O
‘Alyosha brought the book (here).’

It is natural to say such sentence without any implication that there is someone who will receive the book (Alyosha can bring book here, read it, and take it back with himself). Hence, it cannot be said that the recipient-like participant is syntactically the verb’s argument and thus somehow outranks the syntactic possessor. Examples like (48) provide strong evidence[22] against the “possessor-raising-like” analysis.

Promotion of non-possessor participants instead of possessors poses problems for previous syntacticocentric analyses like [Baker et al. 2005]. On the other hand, promotion of non-arguments can pose problems for lexicalist analyses like the one proposed by Spencer [1995] for Chukchi.

First of all, Spencer [Ibid.: 483–484] provides some evidence that possessors in Chukchi can be treated not as a part of an NP but as verbal dependents, which makes it easier to argue that they can be represented in the Predicate-argument structure. However, such data is not confirmed for Amguema Chukchi. Consider (49), where the profiled DO in (49c) can only correspond to the part of the complex NP in a relational form (53a) and cannot be marked by the case assigned by the verb (53b), contrary to Spencer. Hence, there is no evidence that the participant profiled as the DO in (53c) is present in the lexical structure of the verb *rətəmŋew* ‘lose’.

(49) a. *Ø-rə-təmŋ-ew-ni-n* *saj-koka-ken* *kaɣərɣajpə-n*
2/3.S/A-TR-get.lost-CS-3SG.A.3.O-3SG.O tea-pot-REL cover$_N$-NOM.SG

b. **Ø-rə-təmŋ-ew-ni-n* *kaɣərɣajpə-n* *saj-koka-jpə* / *saj-koka-k*
2/3.S/A-TR-get.lost-CS-3SG.A.3.O-3SG.O cover$_N$-NOM.SG tea-pot-ABL / tea-pot-LOC

c. *Ø-kaɣərɣajpə-n-təmŋ-ew-ne-n* *saj-kok-Ø*
2/3.S/A-cover-TR-get.lost-CS-3SG.A.3.O-3SG.O tea-pot-NOM.SG
‘She lost the teapot’s cover.’

Let me move to the data which can be problematic to previous lexicalist and syntacticocentric analyses which do not focus on the event structure and argue for some sort of semantic or syntactic hierarchies. Consider (50)–(51) in the following context explained to my consultants: Ivan and Timur both wear glasses with similar optical power (so that each of them can wear the other’s glasses). For some reason, Timur put on Ivan’s glasses and went outside. There a bully broke those glasses. I asked my consultants to retell this short story in Chukchi and then offered them two constructed examples, shown in (50) and (51). My consultants commented that (50) sounds much more natural than (51)[23], which indicates that the person who experiences the event directly (Timur, who wears the glasses) is the best candidate for the profiled DO slot. The person who experiences the event only indirectly (Ivan, who owns the glasses) is not a suitable candidate to occupy the DO slot.

(50) *timur-na* *ɣa-jpə-łena-t* *tin-łəłe-t* *ivan-nen* *i* *e-wiłu-kə-ŋinqej-e*
Timur-AN.INS PF-put.on-PF.3SG ice-eye-NOM.PL Ivan-GEN and$_R$ CAR-hear-CAR-boy-INS

[22] Note that I am discussing here only those syntacticocentric analyses of NICs which ignore the affectedness property of a promoted “Possessor”. More sophisticated analyses, such as those discussed by Deal [2017] or developed by Landau [1999] (thanks to Maria Polinsky for drawing my attention to these papers) may solve the problems the Chukchi data poses for Baker et al.’s [2005] and Barrie’s [2009] analyses without totally abandoning Possessor Raising.

[23] Some consultants created sentences like (50) directly translating from Russian. However, no one offered (51) as a translation from Russian.

Ø-tin-łəłe-n-sime-w-ni-n *timur*
2/3.S/A-ice-eye-TR-break-CS-3SG.A.3.O-3SG.O Timur.NOM.SG
'Timur put on Ivan's glasses and a bully broke those glasses (on Timur).'

(51 *timur-na* *ɣa-jpə-łena-t* *tin-łəłe-t* *ivan-nen* *i* *e-wiłu-kə-ŋinqej-e*
Timur-AN.INS PF-put.on-PF.3SG ice-eye-NOM.PL Ivan-GEN and$_R$ CAR-hear-CAR-boy-INS
Ø-tin-łəłe-n-sime-w-ni-n *ivan*
2/3.S/A-ice-eye-TR-break-CS-3SG.A.3.O-3SG.O Ivan.NOM.SG
The most natural nterpretation: 'Timur put on Ivan's glasses and a bully broke some other glasses on Ivan.'

Note that it is difficult to explain the difference between (50) and (51) with some sort of syntactic or semantic hierarchy. Consider (52), which some of my consultants offered instead of (51) to improve the latter.

(52) *timur-na* *ɣa-jpə-łena-t* *tin-łəłe-t* *ivan-nen* *i* *e-wiłu-kə-ŋinqej-e*
Timur-AN.INS PF-put.on-PF.3SG ice-eye-NOM.PL Ivan-GEN and$_R$ CAR-hear-CAR-boy-INS
ivan-nen *tin-łəłe-t* *rə-sime-w-ni-ne-t*
Ivan-GEN ice-eye-NOM.PL TR-break-CS-3SG.A.3.O-3SG.O-PL
'Timur put on Ivan's glasses and the bully-boy broke Ivan's glasses (on Timur).'

The possibility of (52) gives us several insights. First, there are no purely information-structural restrictions for Ivan (the owner of the glasses) to be mentioned in the second clause. Second, Timur (the temporary user) should not be syntactically present in the second clause unless incorporation happens, so it is difficult to attribute NI restrictions to some sort of syntactic blocking rules. In a similar vein, it is hard for the proponents of lexical-structural rules to argue that it is the lexical entry which determines the impossibility of the owner of the glasses to become a DO in this NI context: the lexical entry of the verb *rəsimew* 'to break$_{TR}$' hardly specifies any of the participants. To sum up, what makes the events of 'breaking glasses affecting their owner' and 'breaking glasses affecting their user' different is the nuance of the event structure itself. The DO slot is restricted to the participant whose benefit/harm subevent is most directly influenced by the IN's subevent.[24]

I argue that both syntacticocentric and lexicalist approaches which do not focus on the event structure suffer from similar problems when dealing with Chukchi data: the possibility of promotion depends on contextually-determined event structure. Obviously, those syntacticocentric approaches which model event structure[25] in syntax are not subject to this criticism (this is also true for lexicalist approaches which focus not on semantic role hierarchies but on event structure). For example, a possible approach to NI working in the spirit of [Lundquist, Ramchand 2012] or [Ramchand 2019] would probably be able to capture nuances of event structure syntactically.

Finally, let me briefly consider two cognitive / constructionist approaches to NICs and promotion. Velázquez-Castillo [1996] (and Tuggy [1981] to a lesser extent) posit that it is the degree of affectedness which is responsible for argument's promotion. However, as it is not the

[24] An anonymous reviewer suggested that the proposed analysis of this piece of data does not contradict the basic lexicalist claims: the event structure requirements can be specified in the verb entry without the direct specifications of which participant is profiled as a DO. However, I argue that it probably would be problematic for lexicalist approaches to NICs to provide a distinction between the two affected participants (the one whose property is damaged and the one who experience the event of property damage): this event-structural distinction is contextual and presumably cannot be accounted by the structure of verb's lexical entry itself.

[25] The question of whether different theories of event structure and syntactic/lexical representation can be successfully applicable to Chukchi data lies beyond the scope of this paper. For example, Muro [2009: 86-91] manages to include affectedness in his syntacticocentric analysis, however it is not clear whether his binary distinction is sufficient.

degree but the immediateness of affectedness that happens to be crucial for NICs' restrictions, these analyses may be incomplete for Amguema Chukchi. Moreover, I argue that the restriction for a DO to be most immediately affected by the IN's subevent can receive a functional-diachronic explanation.

5. Restrictions explained. A view from diachrony?

In Section 3, I showed that DO-profiling in Amguema Chukchi obeys the event-structural restriction of immediate affectedness of DO (see (ii-d) in Section 2.2, repeated here as (iii)).

(iii) The profiled participant is the most immediately affected by the IN's subevent. The profiled participant's sybevent directly follows the IN's subevent in the causal chain.

This restriction has an important disadvantage: what is the external (cognitive, functional, diachronic, generative) reason for it? To put it differently — why is the restriction the way it is?

I argue that at least (iii) can be explained diachronically, through functions and origin of sub-constructions which together form the macroconstruction of the DO-Profiling NIC in Chukchi.

Unfortunately, there is no historical record of the Chukotko-Kamchatkan languages (despite the profound reconstruction by Fortescue [1998]) and NI in Koryakic languages is not described in sufficient detail to provide a reconstruction for each developmental step (despite the presence of insightful papers by T. Kurebito [1998] and M. Kurebito [2017]). Here I provide a preliminary hypothesis about the diachrony of the DO-Profiling NICs, on the basis of typological evidence, which does not go against comparative data from Koryakic branch.

I argue that the origin of DO-Profiling NIC is a construction in which the profiled DO is affected by an action directed to a Body-Part (which was incorporated), as in (53).

(53) *trampə-na* *frantsuženka* *kaɣ-małe-ne-n*
Trump-AN.INS french.woman$_{R}$.NOM.SG hand$_{INC}$-rub-3SG.A.3.O-3SG.O
'Trump stroked a French girl's hand' (volunteered by a consultant).

First, this construction is obviously present and productive in all Chukotko-Koryakic, see [Skorik 1948; Dunn 1999; Kurebito 2017; Kibrik et al. 2000; Nagayama 2003: 50]. Second, as Velázquez-Castillo [1996] argues, this construction can be regarded as cognitively and functionally basic (the IN is very low in animacy, the DO is high in animacy, and the two are strongly connected).[26] Finally, there is at least one language where the only P-Incorporating NIC present is a Body-Part-Incorporating DO-Profiling Construction: Madngele[27] (< Eastern Daly, Northern Australia) [Zandvoort 1999: 96–97].

I argue that after the Body-Part$_i$-Incorporating DO$_i$-Profiling Construction was established (probably in Proto-Chukotko-Koryakic), it gave birth to two distinct constructions. Due to the extension of possible INs to non-body-part items close to the personal sphere and through which bodies are often affected (like clothes), the feature of force-dynamic affectedness of the Possessor through its Body-Part (53) was extended to force-dynamic affectedness of an Owner / User through a Possessum close to its body (see (50)–(51) above) and finally to affectedness of the Beneficiary / Maleficiary through that property. Similar development can be postulated for Koryak (see [T. Kurebito 2001: 37]).

[26] Also see discussion of semantically similar constructions for external possession in general in [Payne, Barshi 2001].

[27] This list can be expanded only by nouns denoting bodily liquids or one's words or path (see [Zandvoort 1999: 97–98]).

An intermediate stage of such a proposed pathway was described and analyzed for the External Possession Construction in Czech by Fried [2010: 223] and by Velázquez-Castillo [1996: 160] for Paraguayan Guarani.

It is possible to imagine how this line of construction's development and extension continued. As restrictions on control of the DO over the IN gradually became weaker, close and culturally important animals (like dogs, see (8)) became able to occupy the IN's slot (available for Koryak [T. Kurebito 1998: 37], too). Later the construction was extended even to interpersonal relations, see (34) (I was not able to find indisputable evidence of this change for Koryak). Along this development path, the force-dynamic restrictions remained intact.

Another line of constructional evolution hypothetically proceeded through the weakening of the pragmatic requirement of the DO's affectedness: the DO could be inanimate if it changed its state under direct impact of the IN's subevent. Most probably, the bridging context was exhibited by something like (54), where the IN slot was still occupied by a noun denoting a body-part term, — this made the metaphorical transfer (Body-Part > Part-of-Object) easier. The same construction can be found in Koryak [Kurebito 2001: 46].

(54) *svetłana-na* *ɣriɣorievna-na* *ajmak-Ø* *Ø-ɣətołqəłə-swe-ne-n*
Svetlana-AN.INS Grigoryevna-AN.INS carcass-NOM.SG 2/3.S/A-rib-cut-3SG.A.3.O-3SG.O
'Svetlana Grigoryevna cut ribs from the (reindeer) carcass.'

I argue that this line of development eventually led to the emergence of Goal/Source-Profiling NICs. The bridging construction probably involved contexts in which either a former Part (the moving Theme) detached from a former Whole (the Source) or a moving Theme (the future Part) attached to an affected Goal (the future Whole), see (55). Over time, the strength of connection between IN and DO could become weaker and weaker (compare (55) and (56)).

(55) *ətłʔa-ta* *məsəkwə-n* *Ø-mumkəł-nə-tip-en-ni-n*
mother-INS shirt-NOM.SG 2/3.S/A-button-TR-be.pinned-TR-3SG.A.3.O-3SG.O
'Mother sewed a button to the shirt.'

(56) *ŋewəsqet-e* *neɬɣə-n* *Ø-titi-npen-ni-n*
girl-INS skin-NOM.SG 2/3.S/A-needle-stick.into-3SG.A.3.O-3SG.O
'The girl stuck a needle in the skin.'

There is some evidence that the DO-Promoting NI in modern Western Frisian is nowadays in the middle of this process, see [Dijk 1997: 158].

Finally, the construction extended to the point when it became possible for merely affected (which does not necessarily formor cease to form a single Whole with an IN) Goal / Source / Location to occupy the profiled DO slot. This stage can be observed in Yucatec Mayan, see [Lehmann, Verhoeven 2005: 159].

The pathway I propose for the NIC's development is summarized in Fig. 10 (p. 140).

Such a pathway explains why the IN cannot follow the DO in the causal chain (ii-c) and no participant can intervene between an IN and a profiled DO (ii-d), i.e., the DO should be the most immediately affected participant.

If all Profiling NICs arose from the Body-Part-Incorporating Animate-Profiling NIC, such restrictions are natural — nothing can intervene between a body-part and its Possessor and the Possessor is always of more importance than its body-part.

6. Conclusions

In this paper, I have shown (see Sections 2.2 and 3) that there is an alternative to previous lexicalist and syntacticocentric analyses of noun incorporation. A detailed examination of Amguema

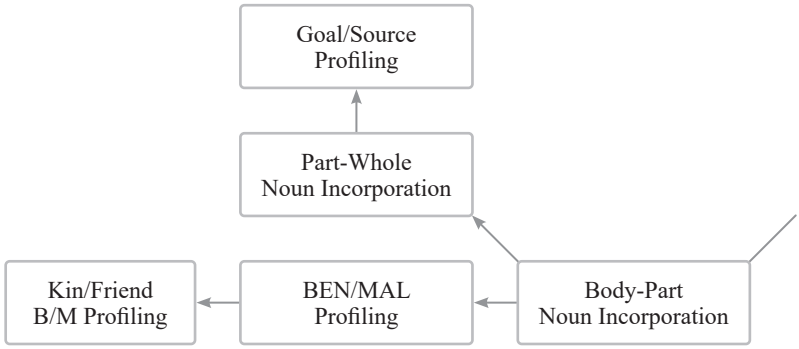

Fig. 10. The development of the Profiling NIC in Amguema Chukchi

Chukchi data reveals some nuances (like the requirement of immediate affectedness of the direct object) which can hardly be analyzed without direct reference to event structure (see discussion in Section 4). This does not mean that lexicalist or syntacticocentric analyses are inapplicable in general. However, such analyses need to pay attention to event structure itself.

Moreover, the event-structural restrictions I pose (see Section 2.2) are not arbitrary and can be explained if one takes a functional-cognitive approach to diachronic syntax (see Section 5). The plethora of Amguema Chukchi DO-profiling noun incorporation constructions stem from the Body-Part-Incorporating Human-Profiling Noun Incorporation Construction, which represents a prototype for the pragmatic function of profiling these constructions serve (see discussion in [Polinskaja, Nedjalkov 1987]). While the restrictions on the degree of affectedness and the strength of the link between in the Incorporated Noun and the Direct Object are weakened for the descendant constructions, the general force-dynamic requirement for the Direct Object to be the participant most directly by the Incorporated Noun's subevent remains inherited.

ABBREVIATIONS

In glosses:

1, 2, 3 — 1st, 2nd, 3rd person
A — transitive subject
ABL — ablative
AN — high in animacy
ANTI — antipassive
ATTR — attributive
CAR — caritive
CS — change of state
CONT — container
DAT — dative
GEN — genitive
IN — inside an object
INS — instrumental
LOC — locative
NOM — nominative
O — direct object
PF — perfect
PL — plural
REL — relational
S — intransitive subject
SG — singular
SIM — simultaneous
ST — stative
TR — transitivizer
TH — thematic suffix
TOOL — instrument for V
TOP — top of an object
VB — verbalizer

Elsewhere:

DO, OBJ — direct object
IN — incorporated noun
IO — indirect object
NI — noun incorporation
NIC — noun incorporation construction
NP — noun phrase
SBJ — subject

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