

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

There are two most common approaches to analyzing noun incorporation: the one which derives this construction via syntactic movement – syntactocentric one – and the one which argues that this complex verbal stem is formed by compounding in the lexicon via rules operating in a verbal lexical entry – a lexicalist one (see Haugen [2014]). In this paper I advocate a much less widespread analysis of noun incorporation. I argue that noun incorporation is constrained neither by syntactic nor lexico-semantic rules, but its rules are directly derivable from the event structure. Taking Croft's [2012] approach to argument and event structure, I review previous studies and provide some new field data which points 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 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 grounded and diachronically grounded.

Key words: noun incorporation; promotion; force dynamics; possessor raising: absolutive; cognitive grammar; construction grammar; Chukchi

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 – инкорпорация имени возникает благодаря операции в лексической репрезентации глагольной основы (ярлыки для двух типов анализа заимствованы у [Haugen 2014]). 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, изложенном в Croft [2012], 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 force dynamics, пребывание под воздействием (affectedness) и взаимный порядок подсобытий. Кроме того, я утверждаю, что правила, сформулированные для инкорпорации и продвижения в позицию прямого объекта 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: именная инкорпорация, продвижение, подъем посессора, force dynamics, грамматика конструкций, когнитивная грамматика, чукотский язык.

1. Introduction and main results

Amguema Chukchi¹, as other Chukchi varieties (see Polinskaja & Nedjalkov [1987]; Dunn [1999]), makes a productive use of N(oun) I(ncorporation) C(onstruction): noun stem denoting P/S_p-like participant² can be expressed not only as a syntactic D(irect) O(bject) marked by Nominative case, but as a part of verbal stem (compare (1b), regarded as pragmatically odd, by some consultants, and (1b)).

- (1) a. *nute-wiriŋə-lʔ-e* *Ø-piʔə-swi-ni-n*
 land-protect-ATTR-INS 2/3.S/A-throat-cut-3SG.A.3.O-3SG.O
 ʔeŋe-lʔə-n
 bad-ATTR-NOM.SG
- b. *ʔnute-wiriŋə-lʔ-e* *Ø-swi-ni-n*
 land-protect-ATTR-INS 2/3.S/A-cut-3SG.A.3.O-3SG.O
 ʔeŋe-lʔ-in *piʔə-n*
 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 Direct Object slot. S-Incorporation and Adjunct-incorporation are left for further studies³.

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

² It was 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.

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, Author et al. [2018] discuss a subtype of it and provide some evidence that it is not fully idiosyncratic, although requires a separate analysis.

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 less prominent syntactic (sub)constituent. As discussed in Polinskaja & Nedjalkov [1987: 265], this construction presents a means to manipulate the pragmatic prominence of affectedness assertion 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).

NICs with similar syntactic and semantic/pragmatic functions were labelled in previous studies of NI as promotion, raising, stranding and ascension (e.g. see Mithun [1984], Baker [1988], Rosen [1989], Spencer [1995] among others, see Section 4.1) depending on the peculiarities of analyses in different frameworks. In this paper, I adopt Polinskaja & Nedjalkov [1987]'s 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 NIC of the core P-like participant, I use the term «**promotion**».

The goals of this paper are threefold. The first one is to provide a nuanced **description of restrictions** on various subtypes of profiling a participant as a DO achieved by incorporation of 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], Kurebito [1996; 2012; 2016], Dunn [1999] and 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 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 dominant in previous studies «lexicalist» and «syntactocentric» 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] and 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] and 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. Although I have not found exceptions to my analysis in the data from other varieties of Chukchi reported in previous studies, I do not claim that this analysis can readily account for the full range of NI data of other Chukchi dialects and other languages. 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 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

Many⁴ of my consultants⁵ who helped me in collecting the data of Amguema Chukchi were born in tundra and had little or no competence in Russian language before they were taken to the boarding school.

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 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 the sentences from spontaneous texts. The texts were analyzed by the members of Chukchi language research group (see <https://chuklang.ru/about>)

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

⁵ Most of my consultants are bilingual (Russian and Chukchi) people in the age between 40 and 70, only two of who are male. During four fieldtrips to Chukotka (2016-2021, joint duration is about 4 months), I had an opportunity to work with at least twenty Chukchi people (listed on <https://chuklang.ru/speakers>). However, the most data on Chukchi noun incorporation I discuss here was provided by 12 speakers (mentioned in Acknowledgements).

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. I used the glosses developed in Chukchi description field project and which can be found on https://chuklang.ru/static/chukchi_glosses_20171020.pdf. The translation of the lexical stems is in general given according to Weinstein's [2009] splendid dictionary. Amguema variety can be regarded as a «central» group of Chukchi varieties (see [Pupynina 2013]) which is closer to the Eastern group of varieties (see [Pupynina 2009: 114]).

Chukchi is a language with both head and dependent marking of core arguments (see Nichols 1986). The case system is strictly ergative: the S and P participants are marked with nominative case⁶ and A participant is marked with instrumental case irrespective of participant's animacy and clausal TAM (2). The case-marking and indexing in ditransitive construction is organized following indirect object pattern (see Haspelmath 2013). Chukchi exhibits a «free» pragmatic-based word order and extensive pro-drop (see Dunn [1999]).

- (2) *ətləy-e* *ekk-in* *wəłə-Ø*
 father-INS son-GEN knife-NOM.SG

 Ø-pəne-ni-n

 2/3.S/A-sharpen-3SG.A.3.O-3SG.O

 'The father sharpened son's knife'.

1.2. Introducing force-dynamic approach to argument structure

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

- The event structure is not hierarchical but is a flat ordered causal chain;

⁶ There are some reasons to label Chukchi case which marks A-participant as instrumental and not ergative: it is not only morphologically identical to case which marks an Instrument, but also the internal syntax of NPs marked with this case is (at least partially) 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 S/P argument (and whose NPs exhibit a special internal syntax) as nominative (and not absolutive) following Muravyova et al. [2001].

- It is a whole event which is analyzed, not only the verbal lexical entry;
 - Hence, no distinction between «arguments» and «adjuncts» exists a-priori;
- There are no intermediate linguistic levels between the event structure and syntactic argument structure (no «semantic», «thematic» or «proto-» roles exist; their hierarchies do not exist, too);
- 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 the introduction to frame semantics);
- A single event can be construed by different frames (see Croft [2012: 13-19] for the notion of construal);
- Different segments of the event's frame are profiled by different parts of construction's syntactic component;
- Events involving the actual transmission of force (e.g. *breaking* event) are more prototypical than force-dynamically neutral events (e.g., *seeing* event). The latter are often construed according to the former.

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 force-dynamic approach by the limits of verbal profile and order of participants in the causal chain.

B. Croft formulates the following principles of argument coding with respect to verbal profile and the order of subevents; see (i) adapted from Croft [2012: 2007]. Consider (3) and the representation of participant's force-dynamic interaction in Figure 1.

- (i) The rules of participants' realization
 - a. The verbal profile is delimited by Subject (Initiator) and Object (Endpoint), if any;
 - b. 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 Subject and Object in the causal chain: SBJ → INCORP → OBJ.
- (3) *Sue broke the coconut for Greg with a hammer.*

Figure 1.



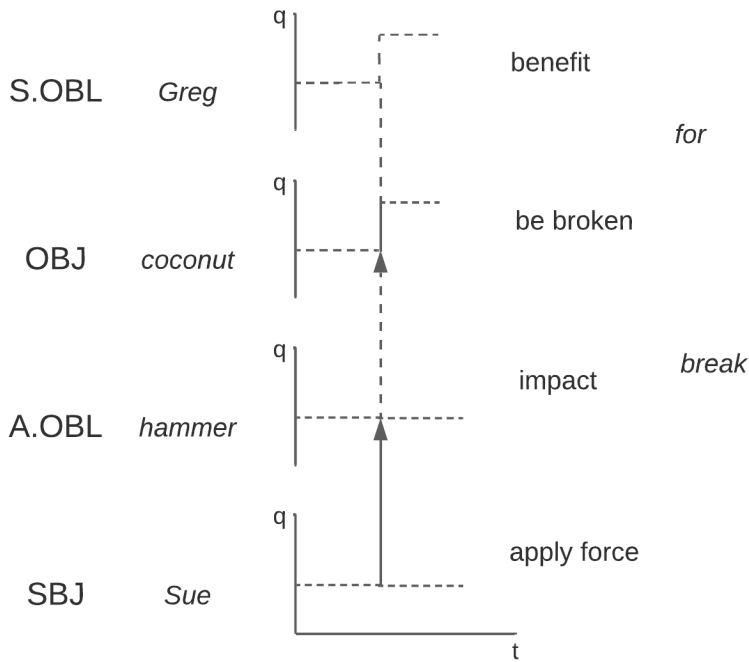
Croft [2012] introduces a three-dimensional event representation which integrates force-dynamic structure with temporal dimension and qualitative dimension. The latter is needed to indicate the presence/absence of change of state. In this model, each participant has its own subevent. The order of force-dynamic interactions of different participant's 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 written 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 [2012] ones.

Firstly, B. Croft distinguishes the causal and non-causal interactions between participants: the former ones are marked with arrows while the latter are marked with non-arrowed lines. In this study, I rather make a distinction between interactions which involve force transmission (*hitting* events which involve direct contact between two participants) and force-dynamically neutral events (such as Benefit subevent of *Greg* in (3)). Secondly, Croft [2012: 215] includes all participants between Subject and Object into the verbal profile (e.g. *with 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 [2012], I mark with bold 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 causal chain seem to rarely impact the NI phenomena, I often omit them from the force-dynamic representations.

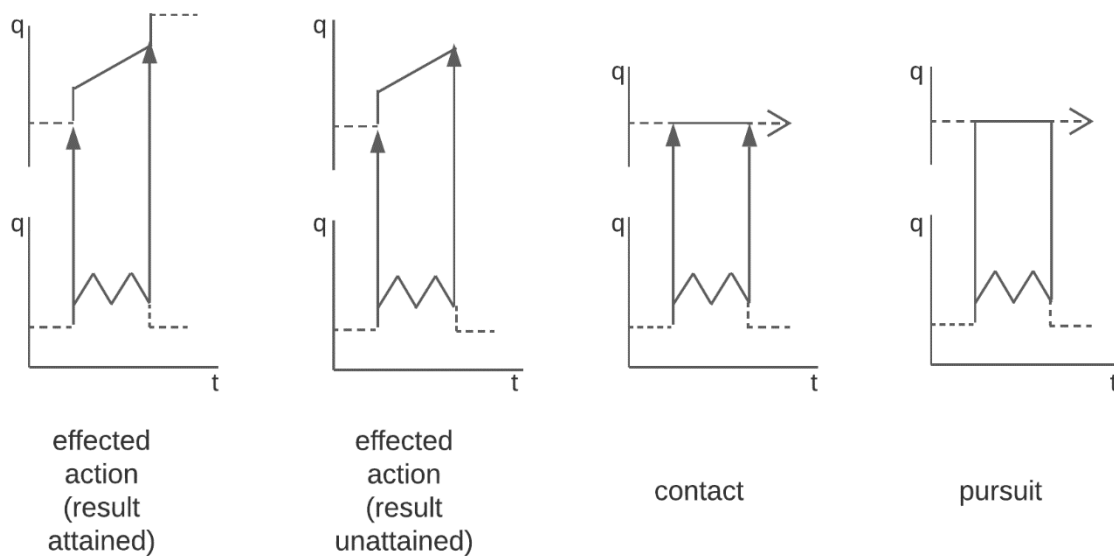
Let me provide the representation of (3) in Figure 2. Note that the arrows indicate the application of force while plain lines indicate the force-dynamically neutral interaction. Note that bold lines represent the interaction profiled by the verb. Here two participants (*coconut* and *Greg*) undergo a change of state which is represented by vertical lines. The new state they acquire is represented by a horizontal line. Note that the horizontal lines of these participants differ before the event and after it (the new state is higher on q dimension): that's because *Greg*'s and *coconut*'s states have changed.

Figure 2. The force-dynamic structure for (3).



While Croft's [2012] theory has many interesting implications, only some of them are important for my study. One of these important facets is difference between events involving change of states and/or force-dynamic impact and other events (see Figure 3): this is important for the possibility of NI (see Section 2.2).

Figure 3. Affectedness types of events from Croft [2012: 318]



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

2.1. Basic properties of Amguema Chukchi NI

NI in Chukchi (as incorporation of other dependents in other heads, see Skorik [1948]) is strictly preverbal. The INs are devoid from all nominal inflection (case and number) and their semantics also number-neutral⁷ (and dependent on context), see (4).

- (4) *Ø-ʔattʔə-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 [1984]’s Types I-III NI and lacking Type IV («classifying» incorporation), incorporated participants become inactive for the syntax external to the verbal stem⁸. 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 semantic A participant from instrumental to nominative.

- (5) a. *epeqej-ne* *Ø-əpan-ne-n* *ənnēen*
 grandmother-AN.INS 2/3.S/A-cook-3SG.A.3.O-3SG.O fish.NOM.SG
 b. *epeqej-Ø* *Ø-ənn-əpat-γʔ-e*
 grandmother-NOM.SG 2/3.S/A-fish-cook-TH-2/3SG.S
 ‘The grandmother cooked some fish’.

The «invisibility» of INs to external syntax is also true 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

Interpretation ‘Grandmother cooked some fish for someone (e.g. her grandchild)’.

⁷ Polinsky [1990] presents some evidence that the plurality of IN can be specified by verbal plurality/pluractionality derivation having the scope over an IN. Author [2021: 89-91] presents similar cases for Amguema variety and also discusses some nominal derivational affixes which can signal out IN’s plurality. However, IN number in Chukchi begs for separate study.

⁸ 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.

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. Hence, INs cannot be modified⁹ by free-standing adjectives (7a), demonstratives, numerals, relative clauses, and 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 2.2) as NICs with incorporated P participant and its «Possessor» profiled as a DO (8b). However, in the latter case the profiled participant is syntactically a verbal argument, not a constituent within a hypothetical IN’s NP¹⁰.

- (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

Intended: ‘Someone fed a big dog’.

Interpretation: ‘Someone big fed dogs’.

- b. **ətləy-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) a. *ekke-te* *ətləy-in* *ʔəttʔə-qey-ti*
 son-AN.INS father-GEN dog-DIM-NOM.PL
 Ø-rə-qametwa-w-ne-na-t
 2/3.S/A-TR-eat-CS-3SG.A.3.O-3.O-PL

- b. *ekke-te* *ətləyən*
 son-AN.INS father-NOM.SG
 Ø-ʔəttʔə-n-qametwa-w-ne-n
 2/3.S/A-dog-TR-eat-CS-3SG.A.3.O-3SG.O

‘Son fed father’s dogs/dogs for the father’.

⁹ Here I use terms «to 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»).

¹⁰ See Muro [2009] for additional arguments against treatment of constructions with promotion as a kind of modifier stranding as they are accounted in Rosen [1989]).

While INs cannot be specified by free-standing modifiers, Amguema Chukchi morphosyntax provides a possibility to express some of these modifiers as stems incorporated into the IN stem. «Cyclic» incorporation is possible only for those modifiers that can also be incorporated into the nominal heads of nominative NPs (adjectival (9), relational nominal and some verbal modifiers). Modifiers which cannot be expressed as a stem incorporated into nominal head of nominative NPs cannot be incorporated into INs. These are: animate Possessors (10), demonstratives, quantifiers, and numerals¹¹.

(9) *Ø-awəłqə-wala-mna-yʔ-e*

2/3.S/A-dull-knife-sharpen-TH-2/3SG.S

‘He sharpened a dull knife’.

(10) **Ø-ətləyə-ʔəttə-n-qametwa-k-wʔ-e*

2/3.S/A-father-dog-TR-eat-CS-TH-2/3SG.S

Intended: ‘He fed father’s dogs’.

Polinskaja & Nedjalkov [1987] provide some evidence that Chukchi INs are less referential and less information-structurally salient as compared to nominative NPs and even demoted oblique NPs. Their observations and conclusions seem to be compatible with 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 it with morphosyntactic properties commonly associated with verbal profile, see Croft [2012: 207]; Langacker [2008: 367]). I argue that they represent a case of deprofiled parts of causal chain (a type absent from Croft [2012]): not only are they absent from verbal profile (as many Oblique NPs are) but there is also no non-verbal element to profile them in similar vein as 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

¹¹ The relation between INs which complex due to incorporation, incorporation into free-standing nominal heads and syntax of NPs in Chukchi is subject for a separate study. For details of NP structure and incorporation in this domain, see Kozlov [2018] and Author et al. [2018].

the *father* in (8b)). As I noted in Section 1.2, deprofiled participants' subevent segments are represented by dotted line in my version of Croft [2012]'s representation of event structure.

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

In this section I propose the restrictions which are posed 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. Hence, these restrictions:

- Do not make use of semantic primitives like «semantic roles» (neither micro- nor macro- ones);
 - Note that in some following sections I sometimes use labels similar to semantic roles for the brevity of presentation, not as components of my analysis:
- Do not make use of syntactic primitives like «arguments» and «adjunct» or other «syntactic roles»;
- Do not make use of any kind of role hierarchies;
- Are not based on the gradable and often not directly testable concepts of productivity.

In (ii)-(v) the restrictions on the formation of NICs in Amguema Chukchi are stated. Note that only (v) which is in bold is fully devoted to the constructions studied in this paper; previous restrictions are at least also partially responsible for other NICs in Amguema Chukchi. Hence, only (v) is thoroughly discussed. Restrictions (ii)-(iv) are given for the sake of consistency and to show that force-dynamic approach is able to account not only for DO-Profiling P-Incorporation but to other NICs.

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

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

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

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

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

Restriction (ii) is equivalent to a common requirement for IN to represent an S_P (or «unaccusative») participant OR P participant (for lexicalist-like analyses) or to be an internal argument of V head (for

syntacticocentric-like analyses, see Section 4.1). Roughly, it excludes Agent-like and Beneficiary-like participants from a list of potential INs. This requirement is true for Chukchi, see (11)¹².

- (11) *Ø-yakaŋ-qor-pela-ne-n* *atlayə-n*
 2/3.S/A-team-reindeer-leave-3SG.A.3.O-3SG.O father-NOM.SG

Interpretation: ‘He left a team reindeer for the father’.

Impossible interpretation: ‘#He left the father for a team reindeer’.

Impossible interpretation: ‘#A team reindeer left the father’.

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

Restriction (iii) is provided to explain the behavior of some «two-Theme» verbs in Amguema Chukchi and is a little bit redundant for DO-Profiling P-Incorporation Constructions. Some events in which apparently two participants undergo a directed change (like some change-of-location-and-state events) incorporate the second participant in the force-dynamic chain (13) («Locatum» corresponding to the Oblique) and not the third participant («Location», DO), see Author [2021: 75-82]. It is only possible to incorporate a «Location» in the absence of the Locatum (14).¹³.

- (12) *ʔaasek-a* *ŋərkir-e*
 young.man-INS old.clothes.bag-INS
Ø-te-jəŋe-ŋə-ni-n *orwo~or*
 2/3.S/A-MAKE-load-MAKE-3SG.A.3.O-3SG.O sledge~RDP.NOM.SG

‘The father loaded the sledge with the bags for old clothes’.

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 requires separate discussion because there are pieces of evidence that these NICs, although being licit, differ drastically in productivity from the incorporation of S/P participants, consider Author et al. [2018] and Author [2021].

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

- (13) 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~RDP.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’.

- (14) *Ø-orwə-ta-jəŋa-ŋə-ɣʔ-e*
 2/3.S/A-sledge-MAKE-load-MAKE-TH-2/3SG.S

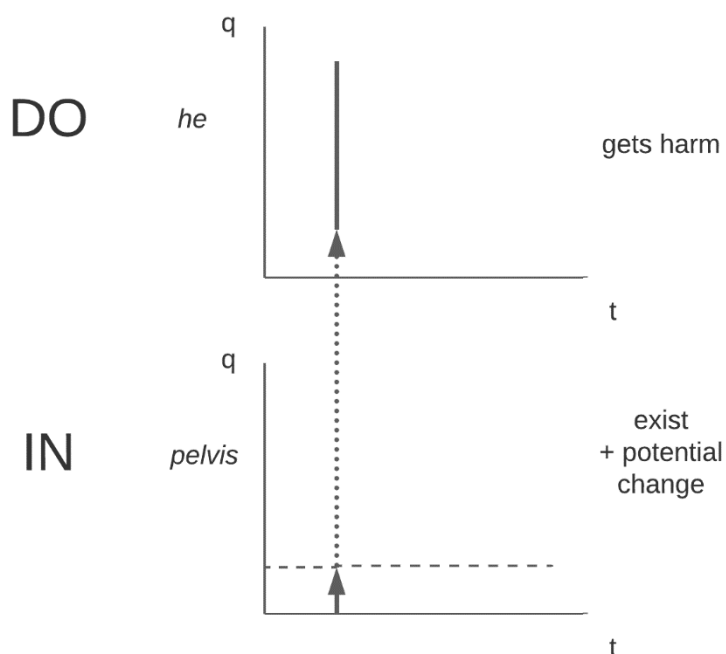
‘The father loaded the sledge’.

Finally, I discuss restriction (v) which encompasses minor restrictions on NIC subtypes discussed in Section 3. If one takes Croft [2012]-like view of event structure as an ordered sequence of interactions between participants, one can come up with an idea that participants which are commonly discussed as «affected Possessors» (15), «Recipients» (16), «Beneficiaries/Maleficiaries» (see below) and «Goals/Sources» of caused motion (see below) all follow the IN in the causal chain (see Figure 4).

- (15) *tə-ŋojŋə-kəpʔə-ɣʔa-n*
 1SG.S/A-pelvis-strike-TH-3SG.O

‘I kicked him in the ass («Hooligan» text, sentence 7)’.

Figure 4. Force-dynamic structure of (15)



- (16) *ətlʔa-ta* *Ø-ritqə-jəl-ni-n* *ŋeekək-Ø*
 mother-INS 2/3.S/A-porridge-give-3SG.A.3.O-3SG.O daughter-NOM.SG
 ‘Mother gave a «green porridge»¹⁴ to the daughter’.

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 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, situation becomes more complex for other types of possession.

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

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

In this section, I discuss P-Incorporation Constructions which profile another participant as a DO. The constructions are organized on the basis of types of nominal elements that occupy their slots¹⁵.

3.1. 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 (17).

- (17) *yətya-k* *ʔajŋa-ma* *tərkə-lʔ-e*
 late.autumn-LOC snort.during.the.rutting.season-SIM testicle-ATTR-INS
ya-jeyje-nto-lən
 PF-small.intestine-take.out_{INC}-PF.3SG

‘In the fall, during the rut, a stud buck reindeer pulled his intestines out...’ («Incident» text, sentence 2).

Such constructions are formed productively in Amguema Chukchi (1a), repeated as (18a). For some events which imply the affectedness of the Whole participant, the non-incorporating paraphrase is even considered odd by some consultants (18b)¹⁶.

- (18) a. *nute-wiriŋə-lʔ-e* *Ø-piʔə-swi-ni-n*
 land-protect-ATTR-INS 2/3.S/A-throat-cut-3SG.A.3.O-3SG.O
ʔeqe-lʔə-n
 bad-ATTR-NOM.SG
 b. *ʔnute-wiriŋə-lʔ-e* *Ø-swi-ni-n*
 land-protect-ATTR-INS2/3.S/A-cut-3SG.A.3.O-3SG.O
ʔeqe-lʔ-in *piʔə-n*
 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 (v). 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.

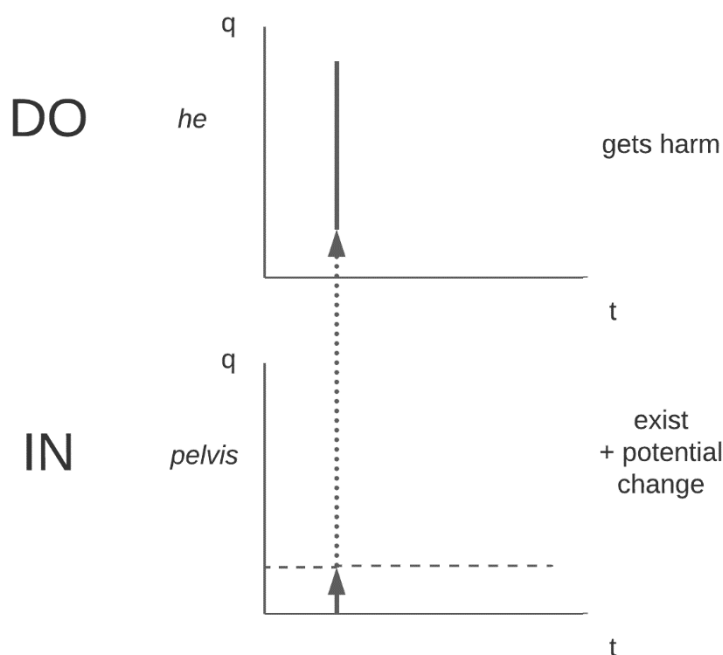
¹⁵ As I discuss in Section 5, identifying different lower-level constructions makes sense even for languages with such productive NI as Chukchi.

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.

The event does not need to be high on affectedness scale to be coded by the Body-Part NIC. Consider (15), repeated as (19), 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 Figure 4 repeated here as 5).

- (19) *tə-ŋojŋə-kəptə-γʔa-n*
 1SG.S/A-pelvis-strike-TH-3SG.O
 ‘I kicked him in the ass («Hooligan» text, sentence 7)’.

Figure 5. Force-dynamic structure for (21)



Constructions analogous to Chukchi (19) 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; see Tavares [2005: 263]; Meira [1999: 265-267]). What is peculiar for Chukchi is that such 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, which is illustrated in (21)-(22).

- (21) *Ø-kayəɾɣajpə-n-təmŋ-ew-ne-n* *saj-kok-Ø*

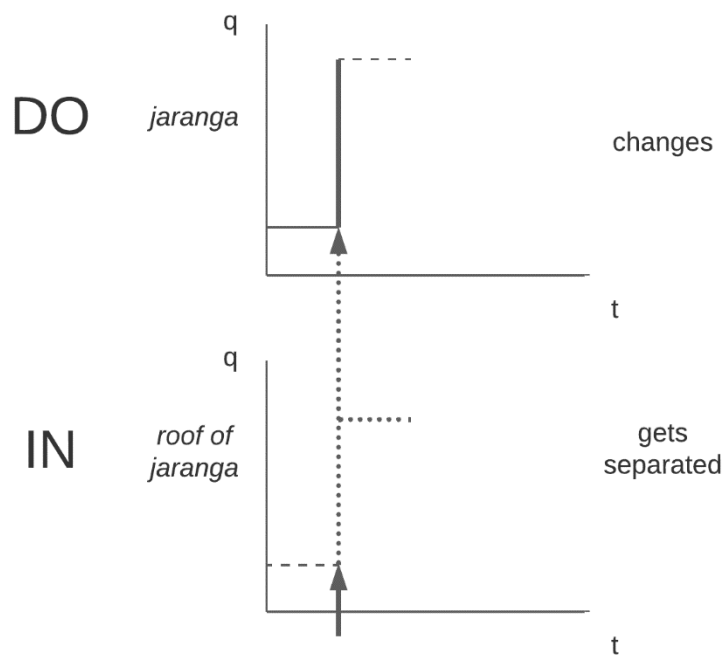
2/3.S/A-cover-TR-get.lost-CS-3SG.A.3.O-3SG.O tea-pot-NOM.SG

‘She lost the tea pot’s cover’.

- (22) *qətaɣ-a ɣe-retəm-rəsimirʔew-tin 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 Body-Part NIC, this construction satisfies the NI requirement in (v). The Whole is introduced in the force-dynamic chain only as following its Part, shown in Figure (6) which represents the roof’s separation and damage happening to the jaranga (traditional nomadic Chukchi house).

Figure 6. The force-dynamic structure of (22)



The degree of DO’s affectedness is variable in this construction. What is important is for the profiled DO to be a part of the event’s causal chain and not a mere specification of IN’s reference (compare translations of (23) and (24)).

- (23) *Ø-tʔu-ni-n jara-ken ŋətyəʔ-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’.

- (24) *Ø-ŋəɬyət-lʔo-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 IN’s movement is coded as DO. A profiled DO’s subevent directly follows an IN’s subevent in a causal chain (see (25)). But in this construction an IN and a 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 (25) and (26)).

- (25) *ətlʔa-ta* *masəkwə-n* *Ø-mumkəl-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’.

- (26) *ətlə* *Ø-mumkəl-nə-tip-et-ɣʔ-i* *masəkwə-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 (27) the shirt is changed in an observable property, in (27)-(28) the Goal and Source (respectively) are much less affected and thus cannot be profiled.

- (27) a. *ətlə* *Ø-kojŋə-trel-ʔ-e*
 mother.NOM.SG 2/3.S/A-cup-put.down-TH-2/3SG.S
stolə-tkənə-k
 table_R-TOP-LOC
- b. *#ətlʔa-ta* *Ø-kojŋə-trel-ne-n*
 mother-INS 2/3.S/A-cup-put.down-3SG.A.3.O-3SG.O
stol-Ø
 table_R-NOM.SG

Intended: ‘Mother put the cup on the table’.

Interpretation: ‘#Mother put the cup for a table’.

- (28) a. *ətla-Ø* *Ø-awerʔə-ŋəto-ɣʔ-e* *sanla-jpə*
 mother-NOM.SG 2/3.S/A-clothes-take.out_{INC-TH-2/3SG.S} box-ABL
- b. *#ətɬʔa-ta* *Ø-awerʔə-ŋəto-ne-n* *seŋət-Ø*
 mother-INS 2/3.S/A-clothes-take.out_{INC-TH-2/3SG.S} box-NOM.SG

Intended: ‘Mother took the clothes out of the box’.

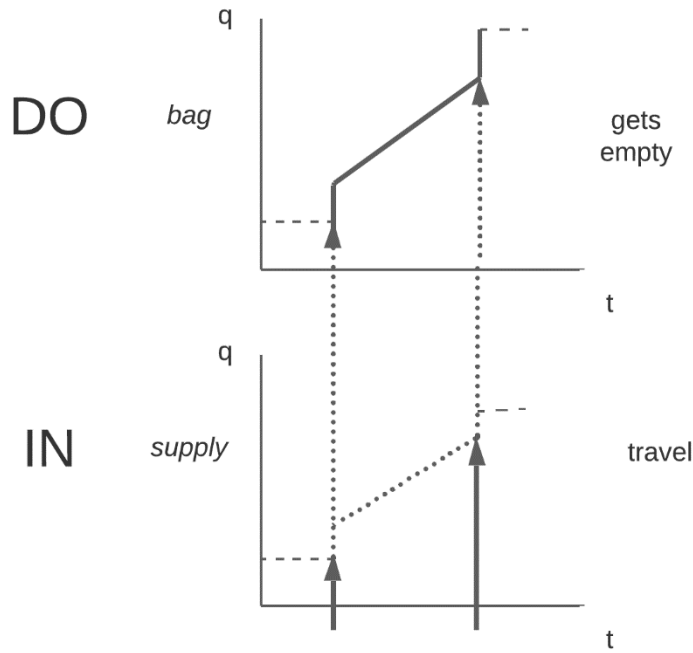
Interpretation: ‘#Mother took the clothes out for a box’.

Although the exact degree of DO’s affectedness which is needed for construction’s usage to be felicitous is not yet determined, the data suggest that the more evident is DO’s change, the more appropriate the construction is. The sentences (29) and (30) show that the same verb stem *jəto/ŋəto* ‘to take out’ as in (28) can be employed in NIC (30). However, the events are slightly different, as translation suggests. While taking out the clothes from the box does not change the box’s form in any way, taking out the supplies from the bag does have such an effect on the bag. The representation for the event in (30) is given Figure 6.

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

Figure 6. Force-dynamic structure for (30)



3.4. P-Incorporating Beneficiary/Maleficiary-Profiling NIC

In constructions like (31c) profiled animate DO undergoes the positive (so-called Engager-Beneficiary, according to classification in Song [2010]) or negative change in her (participant's) 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 (31) and (32). In (31), the possessive relations between DO and IN are created and in (32), the possessive relations are terminated.

- (31) a. *ətlʔa-ta* *rilqə~ril* *Ø-jəl-ni-n*
 mother-INS porridge~RDP.NOM.SG 2/3.S/A-give-3SG.A.3.O-3SG.O
enaralʔ-etə
 neighbor-DAT
- b. *ətla* *Ø-rilqə-jəl-yʔ-i* *enaralʔ-etə*
 mother.NOM.SG 2/3.S/A-give-TH-2/3SG.S neighbor-DAT
- c. *ətlʔa-ta* *Ø-rilqə-jəl-ni-n* *ŋeekək-Ø*
 mother-INS 2/3.S/A-porridge-give-3SG.A.3.O-3SG.O daughter-NOM.SG

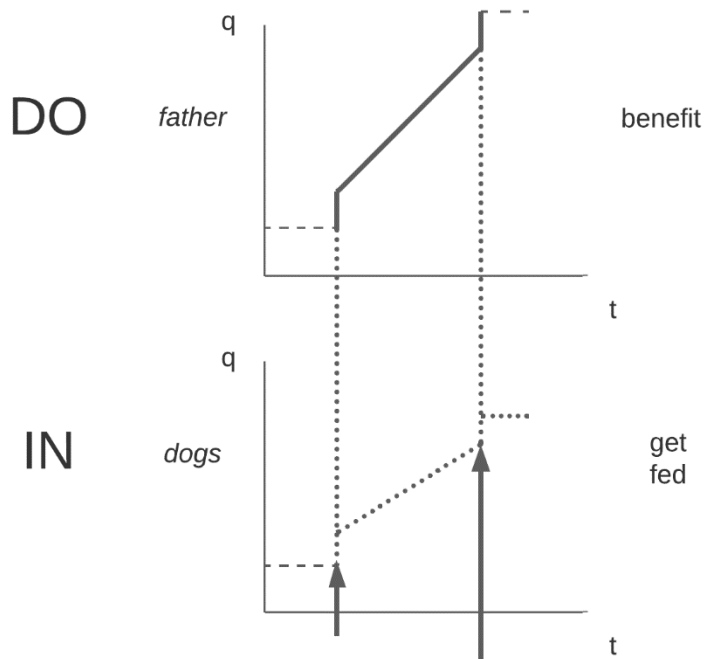
‘Mother gave some ‘green porridge’ to the daughter’.

- (32) a. *tʔuʔ-ŋinɟej-e tumy-in mane-t*
 thief-boy-INS friend-GEN money-NOM.PL
Ø-tʔuʔ-en-ni-ne-t
 2/3.S/A-thief-VB-3SG.A.3.O-3SG.O-PL
- b. *tʔuʔ-ŋinɟej-e Ø-mane-tʔoʔ-an-ne-na-t tumyə-t*
 thief-boy-INS 2/3.S/A-money-thief-VB-3SG.A.3.O-3SG.O-PL friend-NOM.PL
- ‘A thief-boy stole the money from his friends’.

The change in IN’s subevent (either the change of location (31) and/or possession (32) and/or state (33)) should directly cause the change in DO’s state of well-being, i.e. the DO should either directly benefit or be harmed. Example (33) illustrates that the IN changes its state (*the dogs* become less hungry) so that the possessive relationship between the IN and the DO is facilitated (*father* can use the dogs more effectively), see Figure 7.

- (33) *ekkete ətəyə-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
- ‘Son fed the dogs for his father’.

Figure 7. Force-dynamic structure for (36)



Some change-of-location events do not facilitate (or make weaker) the possessive relations between an IN and a DO and so cannot be coded by Beneficiary-Maleficiary-Profiling NIC. In (34), the cloths undergo the change-of-location, however the girl cannot manipulate them more effectively. This event can be contrasted with the ‘opposite’ event of taking the cloths from the drying stick (35). In this event, it becomes easier for the girl to manipulate the cloths (because she does not need to take them off herself).

- (34) a. *Ø-awerʔə-jme-yʔ-e* *pʔa-jme-jotʔə-tkənə-k*
 2/3.S/A-clothes-hang-TH-2/3SG.S dry-hang-CONT-TOP-LOC
ŋaakka-ytə
 daughter-DAT

‘(Mother) hung up clothes on the drying stick for the daughter’.

- b. **ŋeekək* *Ø-awerʔə-jme-ne-n*
 daughter.NOM.SG 2/3.S/A-clothes-hang-3SG.A.3.O-3SG.O
pʔa-jme-jotʔə-tkənə-k
 dry-hang-CONT-TOP-LOC

Intended: ‘(Mother) hung up clothes on the drying stick for the daughter’.

- (35) *Ø-ewirɔə-nwiriw-ni-n* *ɲeekək-Ø*
 2/3.S/A-clothes-take.off-3SG.A.3.O-3SG.O daughter-NOM.SG
pɔa-jme-jolɔə-tkən-epə
 dry-hang-CONT-TOP-ABL
 ‘She took the clothes from the drying stick for the daughter’.

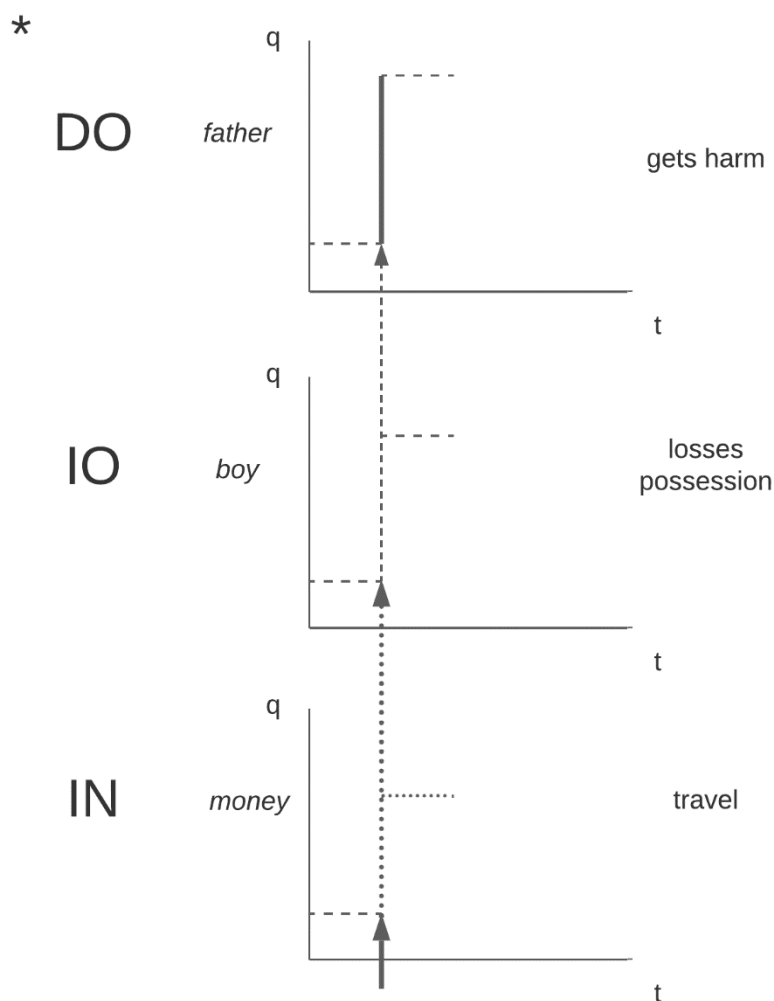
There are several indications that the DO slot in this construction is constrained by (v). Firstly, «taking from» events can contain two participants: a participant who directly loses the object taken and the participant who loses the possession of this object only by virtue of another participant losing the object. Example (36) can be understood as either the money belonged to the boy or he was just a temporal possessor of the money. Both cases can in principle be encoded by Maleficiary-Profiling NIC because the boy is the participant most directly experiencing the loss of the money. In (47), 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 Figure 8).

- (36) *ɔaasek-a* *Ø-man-enuwna-ne-n* *ɲinqej-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 can belong to someone else)’.

Interpretation B: ‘The young man took away the boy’s money’.

- (37) a. *ɔaasek-a* *Ø-enuwna-ne-na-t*
 young.man-INS 2/3.S/A-take.away-3SG.A.3.O-3SG.O-PL
ɲenqaj-epə *ətɔəy-in* *mane-t*
 boy-ABL father-GEN money-NOM.PL
 b. **ɔaasek-a* *ətɔəyən*
 young.man-INS father-NOM.SG
Ø-man-enuwna-ne-n *ɲenqaj-ɣəpə*
 2/3.S/A-money-take.away-3SG.A.3.O-3SG.O boy-ABL
 ‘The guy took away father’s money from the boy’.

Figure 8. The force-dynamic structure of *(37b)



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 immediateness of affectedness ((v), see Section 2.2) comes into play. The participant who is first to experience the positive/negative effect of 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. The *father* also cannot stay as a genitive modifier (because INs cannot be modified by genitives, see Section 2.1). Hence, NI is ungrammatical in this context.

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 referents¹⁷. Consider (38).

- (38) *telenjep maraw-ma unilʔ-e ʁ-akka-nmə-ləna-t*
 long.ago war-SIM Chaplino.Yupik-INS PF-son-kill-PF.3SG-PL
ʔattʔajot-lʔa-t
 before-ATTR-NOM.PL

‘Long ago during wars Eskimos used to kill our ancestors’ sons’.

In (38) the subevent happening to 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 the IN’s affectedness.

The NIC in question poses restrictions on the type of relations between IN’s and DO’s subevents. This NIC can encode only the following event types. If both IN and DO are human, the event should either strengthen or weaken the empathy/possession link between the IN and the DO.

In case of (38) the empathy/possession link between ancestors and their sons is destroyed due to the murder of the latter. On the other hand, the NI construction can encode an event which establishes an empathy/possession link between two human participants as it is the case in (39).

- (39) *tə-ŋewəsqet-lʔu-ʁʔe-n Vanʔa*
 1SG.S/A-girl-see-TH-3SG.O Vanja

‘I found Vanja his future girlfriend’.

The event expressed by this construction cannot terminate or establish an empathy/possession link but can merely have an impact on this link. Consider (40). Here a woman is affected because of the empathy link between her and her son.

- (40) *toptər-a ŋewʔen-jərʔə-n Ø-ekke-n-melew-en-ni-n*
 doctor_R-INS woman-content-NOM.SG 2/3.S/A-son-TR-recover-VB-3SG.A.3.O-3SG.O

¹⁷ 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]).

‘Doctor healed the woman’s son’.

One can hypothesize that the construction is sensitive to the degree of IN’s affectedness. However, I argue that the impact on the empathy/possession link is more important for this construction. To begin with, some events low on transitivity (see Malchukov 2005) or affectedness scale (see Beaver 2011) cannot be expressed by this NIC, see (41).

(41) **Tasʹa-na* *Ø-ηawətləwe-jayna-ne-n* *epeqej*

Tasja-AN.INS 2/3.S/A-granddaughter-go.to.meet-3SG.A.3.O-3SG.O Granny(nickname)

Intended: ‘Tasja 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 subevent chain upon the empathy relations between IN and DO should be considered. Consider (39) above which does not encode an effected action. In terms of affectedness and semantic transitivity, (39) is similar to (41) and less semantically transitive as compared to (42) which denotes a contact/impact situation with a possible attained result (see summary of affectedness types in Croft [2012]).

(42) **termesʔə-ηinqej-e* *enaratʔə-n* *Ø-akka-talajwə-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’.

As I mention above, the event properties important for this NI construction are the ones which impact the empathy/possession link between an IN and a DO. Hence, events which destroy (38) or establish (39) such links can be coded by NI irrespectively of general degree of transitivity.

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 (40). This is not unsurprising because the change-of-state event in question impacts the empathy/possession link between an IN and DO (without the healing the link could have been terminated). However, a change-of-state event in (43) cannot be coded by an NI construction. I argue that this is due to the fact that washing event leaves the empathy/possession link intact.

(43) **ηewəsqet-e* *enaratʔə-n* *Ø-nenen-ilyəwew-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 to construe (see Croft [2012: 13-19] for the notion of construal) the DO's segment as harm/benefit change subtype. Hence, these restrictions depend on the degree of empathy between the two participants as well as on the event type. As (38)-(43) show, the stronger is the impact on the empathy link and the stronger is the empathy link itself, the more felicitous is the construction. Compare (40) to (43) for the role of event structure and (44) & (45) (less felicitous and unfelicitous respectively) to (39), (40) for the role of empathy relations.

- (44) *ʔatlay-e ekək Ø-ine-nə-ɣajiw-etə-lʔə-lʔu-ni-n*
father-INS son 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'

- (45) **ine-n-melew-etə-lʔ-e ŋinqeɟ-Ø*
ANTI-TR-recover-VB-ATTR-INS boy-NOM.SG
Ø-ine-nə-ɣajiw-etə-lʔə-nə-melew-en-ni-n
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 NI construction with both IN and DO referring to humans provides us some insights. Firstly, this construction also follows the order IN-DO in the causal chain (see (v) in Section 2.2). Secondly, the possibility to use this NI construction is constrained by the nature of empathy/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 NI construction with affected inanimate spatial participant occupying the DO slot, while Section 3.4 was devoted to Beneficiary/Maleficiary-Profiling NIC in which animate participant which, if it receives benefit or harm from an event, can take the privileged DO slot. Both constructions respect the IN-DO order of causal chains (see (v)) and additionally impose some more subtle restrictions on the possible event structures they code. However, an open question remains: if 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 form or state of the box and thus does not meet the requirement of the Space-Profiling NIC ((46b), see Section 3.3). The requirements of Beneficiary/Maleficiary-Profiling NIC, on the contrary, are fully met: it is harder for the boy to interact with toys now and so the boy can be profiled (47a).

- (46) a. *ətɬʔa-ta* *Ø-uwisw-ineŋe-numkew-ni-n*
 mother-INS 2/3.S/A-play-TOOL-hide-3SG.A.3.O-3SG.O
ŋinqeŋ-Ø *seŋle-saku*
 boy-NOM.SG box-IN

‘The mom hid toys from the boy in the box’.

- b. **ətɬʔa-ta* *ŋenqaj-ɣəpə* *seŋət-Ø*
 mother-INS boy-ABL box-NOM.SG
Ø-uwisw-ineŋe-numkew-ni-n
 2/3.S/A-play-TOOL-hide-3SG.A.3.O-3SG.O

Intended: Idem.

In (47), 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 (47a).

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

‘Mother hanged the clothes on the drying stick for the daughter’.

- b. **ŋeekək* *Ø-awerʔə-jme-ne-n*
 daughter.NOM.SG 2/3.S/A-clothes-hang-3SG.A.3.O-3SG.O
pʔa-jme-jotɣə-tkənə-k
 dry-hang-CONT-TOP-LOC

Intended: Idem.

However, there are some complex events that meet requirements of both constructions and consequently seem to violate the global requirement for the DO’s subevent to immediately follow the

IN's subevent (see (v)). Consider (48)-(49). The translation is given according to the consultants who commented on the semantic difference.

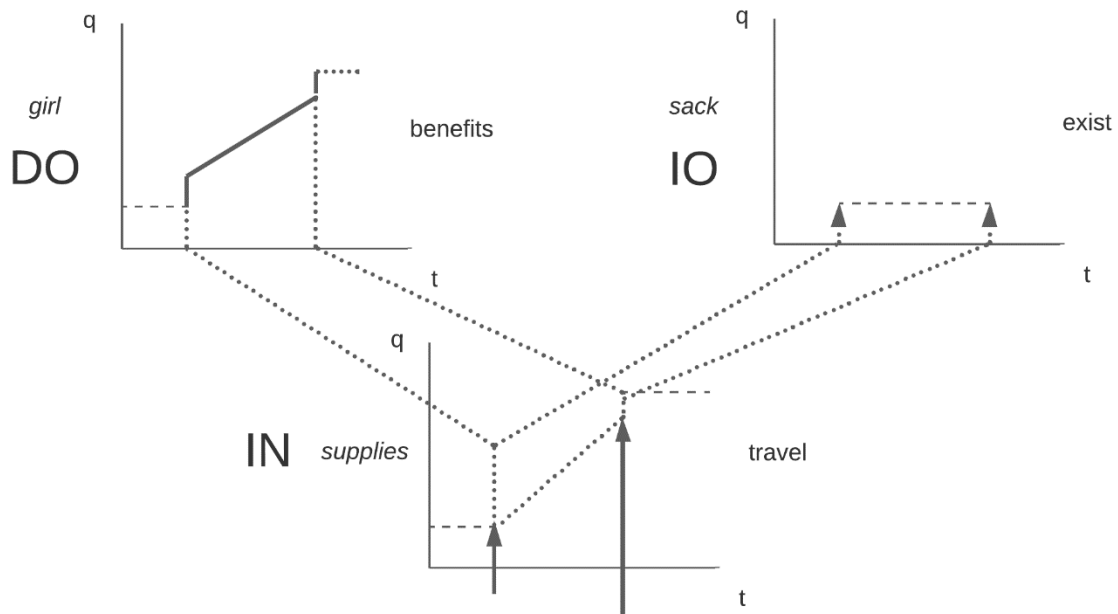
- (48) *al'ek-na* *Ø-taqʔa-təjo-ne-n* *ɲewəsqet-Ø*
 Oleg-AN.INS 2/3.S/A-supply-put.in_{INC}-3SG.A.3.O-3SG.O girl-NOM.SG
tejusyə-səku
 sack-IN
 'Oleg put the supplies in the sack for the girl'.

- (49) *al'ek-na* *Ø-taqʔa-təjo-ne-n* *ɲawəsqat-etə*
 Oleg-AN.INS 2/3.S/A-supply-put.in_{INC}-3SG.A.3.O-3SG.O girl-DAT
tejusyə-n
 sack-NOM.SG
 'Oleg prepared the sack full of supplies for the girl'.

At first glance, these two sentences contradict the 'immediateness of affectedness' requirement or argue in favor of generally undesirable branching (see Croft [2012: 221-248]) causal chains. However, the translation difference between the two examples indicates that the event construals in (48) and (49) are different. The translation implies that the branching causal chain in Figure 9 is a suitable representation only for (48) but not for (49). The translation of (48) indicates that the subevent of *supplies* directly precedes both the *girl* and the *sack* (the girl gains possession simultaneously with the supplies' transfer). For (49), the representation in Figure 10 is more appropriate: the girl benefits from the fact that the sack is full of supplies but not from the mere fact of supply's movement to the sack.

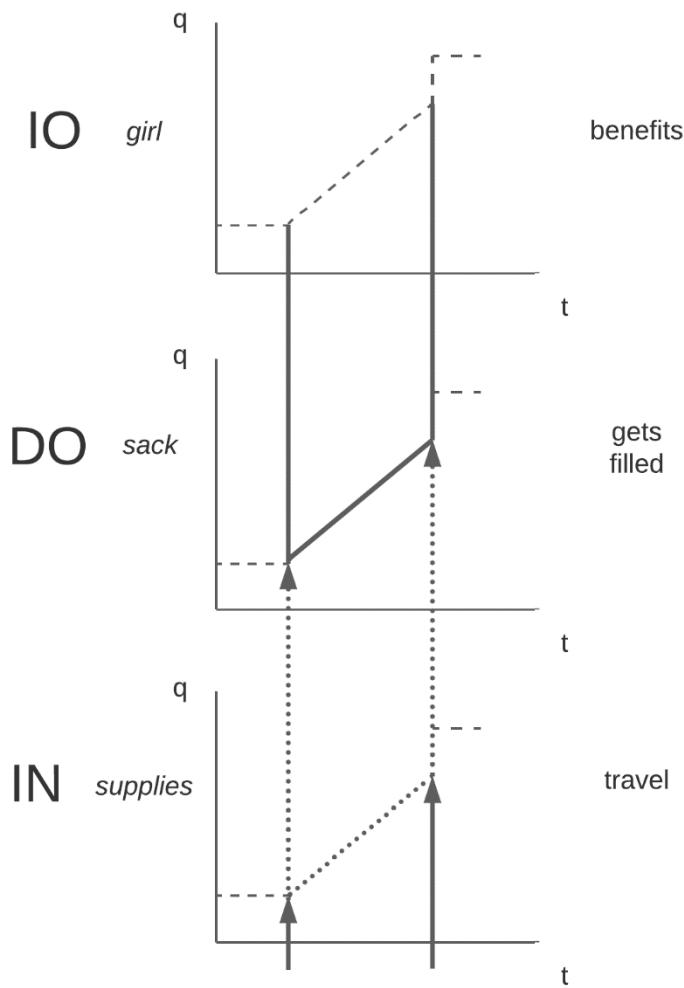
Hence, the difference between two construals can be summarized as following: If the event is construed as only a transfer-of-possession and no change of the spatial participant is specified, then the event can be represented as a branching causal chain with animate participant undergoing a benefit change and the spatial participant undergoing no change. Consequently, it is only an animate participant which is profiled (see Figure 9 for example (48)).

Figure 9. The force-dynamic structure for (48). The *girl* benefits directly from the supplies' translational motion (left part) and no *sack*'s change is specified (horizontal representation in the right part).



If, on the other hand, the spatial participant undergoes the directed change and the animate participant benefits from this change but not from the mere motion of the IN, then the spatial participant directly follows an IN in the causal chain and only afterwards the animate participant's benefit-like subevent is introduced (see Figure 10 for example (49)). Hence, the spatial participant directly follows the IN's subevent and is profiled as a DO.

Figure 10. The force-dynamic structure for (49)



To «test» an analysis presented above, one needs to assess events which can be construed in only such a way that an animate participant benefits (or gets harm) only from the change of the spatial participant and cannot be positively or negatively affected by the mere translational motion of an IN.

Consider the same verb *jo/tajo* ‘to put in’ coding another event (50). Here the interpretation like (48, Figure 9) is not possible: while the girl can manipulate the supplies that go in the sack even without the sack, the nature of the green porridge¹⁸ makes it impossible for the daughter to manipulate it without the bowl it is poured into. Hence, the only possible construal for the event of pouring the porridge (note again that it is the same verb as in (48)-(49) above!) is Goal-Profiling NIC with daughter

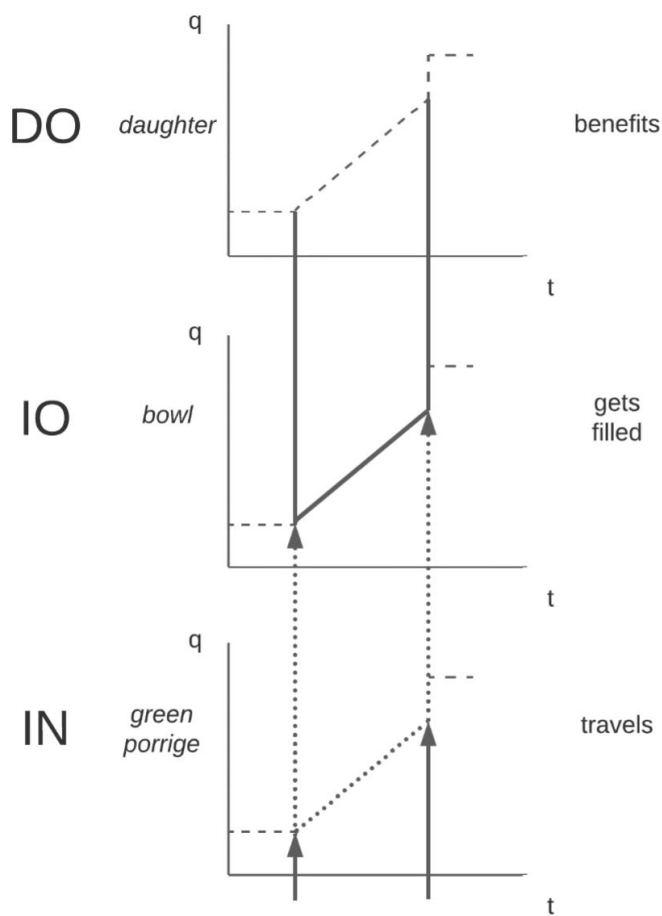
18 Traditionally, it is the mixture of herbs and berries with semi-digested deer stomach contents. Contemporary, the same word is also used for different types of kasha(porridge)-like dishes with similar consistency.

coded as the Dative Oblique subsequent to the bowl's subevent, not the porridge's subevent. The causal chain for (50a) is presented in Figure 11.

- (50) a. *epeqej-ne* *Ø-relqə-təjo-ne-n*
 grandmother-AN.INS 2/3.S/A-green.porridge-put.in_{INC}-3SG.A.3.O-3SG.O
uqqem-Ø *ηaakka-ytə*
 bowl-NOM.SG daughter-DAT
- b. **epeqej-ne* *ηeekək*
 grandmother-AN.INS daughter.NOM.SG
Ø-relqə-təjo-ne-n *uqqem-səku*
 2/3.S/A-green.porridge-put.in_{INC}-3SG.A.3.O-3SG.O bowl-IN

‘The grandmother poured green porridge in the bowl for the daughter’.

Figure 11. The force-dynamic structure of (50a)



Let me again summarize the difference between the usages of the same verb *jo/tajo* ‘to put in’ examples (48)-(50). When the discrete object is put in the container for someone, there are two possible construals. The «Beneficiary» can follow the container’s subevent (49), (50a): in this case, only the container can be profiled because it is the container’s subevent which directly follows the IN’s (the «Locatum») subevent. In this construal, the Theme-Incorporating Goal-Profiling NIC can be employed. The second construal employs the branching causal chain: the event is construed as a kind of transfer-of-possession event and the engagement between the «Beneficiary» and the «Locatum/Theme» becomes easier irrespectively of the container (48). Because the «Beneficiary» meets the «engagement» requirement (see Section 3.4) and nothing intervenes between the «Beneficiary» and the moving «Theme» in the causal chain, the «Beneficiary» can be profiled as a DO.

When the non-discrete mass object is put in the container, the construal possibilities are different. It is not the subevent of the «Theme» movement which facilitates its engagement with the «Beneficiary», the subevent of the container being filled which facilitates such engagement: non-

discrete mass objects cannot be manipulated without a container. This means that the Beneficiary always follows the container in the causal chain and hence only the container can be profiled (50). Hence, only the Theme-Incorporating Goal-Profiling NIC can be used.

Consider another event that permits two construals and which can be coded by both Beneficiary/Maleficiary-Profiling and Goal/Source-Profiling NICs. The event presented in (51) can be regarded as either the transfer-of-possession event (the boy can now more easily manipulate the books irrespectively of the box) (51b) or as the event with the affected Location (not only the books become ordered but the box itself is put in order) and with the Beneficiary which benefits from the change of Location (51a).

- (51) a. *ətlʔa-ta* *keli-n-umek-ew-ni-n*
 mother-INS 2/3.S/A-book-TR-group_N-CS-3SG.A.3.O-3SG.O
 seŋəʔ-∅ *ŋenqaj-etə*
 box-NOM.SG boy-DAT
- b. *ətlʔa-ta* *keli-n-umek-ew-ni-n*
 mother-INS 2/3.S/A-book-TR-group_N-CS-3SG.A.3.O-3SG.O
 ŋinqeʔ-∅ *sanla-səko-ɣtə*
 boy-NOM.SG box-IN-DAT

‘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 subevent. The picture becomes more complicated because of events which can be construed as either transfer-of-possession events (Beneficiary/Maleficiary-Profiling NIC) or affected Goal/Source events (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. Before turning to the most recent and/or prominent such analyses, let me first describe two most widespread families of NI analyses.

4.1. Lexicalist and syntactico-centric analyses

The majority of proposed analyses of NICs which formulate their hypotheses in a more or less strict framework can be classified as either «syntactiocentric» (terms and analysis taken from Haugen [2014]) or «lexicalist», a distinction which can be traced back to the Kroeber [1909, 1911] – Sapir [1911] exchange on NICs in North American languages (where Kroeber played a role of a «proto-

syntacticocentric analyst» and Sapir argued for a «proto-lexicalist» analysis)¹⁹. Roughly speaking, 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. Linguists arguing for the lexicalist analyses, on the other hand, consider NI to represent a subtype of general word-formation process of compounding which as 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.

Of course, the distinction is rather rough. Some studies, like Mithun [1984] and Mithun & Corbett [1999] reject the syntacticocentric analyses but do not develop an analysis which can be called «lexicalist». Some scholars use the frameworks in which some features traditionally ascribed to the lexicon are a part of syntactic machinery (see Haugen & Harley [2013]). Some scholars assume that both lexically- and syntactically-derived NI can coexist in a single language (e.g. different treatment of adjunct NI (lexical) and internal argument NI (syntactic) by Baker [1996; 2009]). Finally, some scholars argue for cognitive, constructionist or other analyses of NI which are not readily classifiable as lexicalist or syntacticocentric (see Tuggy 1981; Velaquez-Castillo 1996 and Olthof 2020 for each type respectively).

Let me briefly highlight various arguments proponents of two families of analyses provide in favor of their position in Table 1.

Table 1. Lexicalist and Syntacticocentric approaches to NI summarized and exemplified.

	Lexicalist	Syntacticocentric
Productivity & Compositionality	Affinity with other word-formation processes. Presence of non-compositional non-productive processes. Relation between NIC and non-incorporating paraphrases neglected.	Focus on fully productive compositional processes. «Lexical» restrictions, non-compositionality – mere tendencies and/or effects of external influence. NICs and non-incorporating paraphrases are derived by different processes happening to the same structure.
Referentiality	INs are non-referential. Reference to the IN is a result of peculiar referentiality systems.	The (im)possibility of INs to be referential is explained by the amount of nominal structure

¹⁹ Similar division of NI analyses were recently made by Haugen [2008] and Johns [2017] as well as by some other theorists.

IN's complexity	Stranding and doubling is due to possibility of headless NPs in the languages in question.	Stranding and doubling is an evidence that IN projects complex syntactic structures. Morphological complexity of INs is formed by syntax (some approaches).
Tendency for an IN to represent S _p /P	IN is the (most) P-like participant in the lexical structure. Other participants can also be incorporated.	NI is triggered only in a certain syntactic configuration (e.g. internal argument).
Examples	Mithun 1984; Mithun & Corbett 1999; Rosen 1989; Spencer 1995; Anderson 2000.	Baker 1988; 1996; Baker et al. 2005; Muro 2009; Barrie 2011; Barrie & Mathieu 2016.

Now it is possible to focus on the analyses of various types which somehow discuss the promotion under NI.

Let me first briefly summarize analyses developed by Mark C. Baker (see Baker [1988; 1996]; Baker et al. [2005]) below:

- This syntactic structure treats the profiled DO as a stranded Possessor of the NP of which the IN was originally the Head:
 - Hence, the part of a DO NP becomes the DO itself as a by-product of N's head movement to V;

Recently Barrie [2011; 2009] and Barrie & Mathieu [2016] developed slightly similar syntacticocentric analysis for promotion in Northern Iroquoian which is summarized below.

- It is not N head but XP which moves;
- The difference between alienable and inalienable possession can be drawn (due to Alexiadou 2003);
 - This difference is captured by the difference in NP/DP structure;
- The possibility of promotion of a structural Indirect Object as a part of IN's syntactic structure is postulated;

Despite the differences, both 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 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;

Some lexicalist analyses are offered to explain similar data. Michelson [1991]’s brief response to Baker [1988] argues that only the participants which are directly involved in the event and affected by it can be promoted to DO in Northern Iroquoian language and this operation probably proceeds in a verb’s lexical entry.

Rosen [1989]’s approach to DO-promoting P-Incorporating Constructions is far from ideal. Rosen [1989: 301-302] considers promoted participants to represent just another type of modifier stranding (probably a genitive one). However, she fails to account for the fact that in all constructions she discusses this participant is marked as the verbal syntactic argument but not as nominal modifier. Additionally, her analysis violates Mithun’s [1984] hierarchy²⁰.

Spencer’s [1995] approach to Chukchi NICs is lexicalist and is based on Rosen’s [1989] paper, although substantially modifies her analysis borrowing some ideas from Michelson [1991].

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

However, some events in which the promoted participant undoubtedly denotes an IN’s Possessor pose problems for Spencer’s [1995] analysis because such participants would be invisible for predicate-argument structure. On the basis of the fact that at least some semantic Possessors can be coded not as genitive NP modifiers but as locative verbal adjuncts, Spencer [1995: 483] claims that Possessors are not necessarily parts of an NP and hence can be available for predicate-argument structure and therefore can be promoted in the lexicon, not in syntax.

To sum up, the main analytical difference of lexicalist approaches to DO-Profiling P-Incorporation from syntactocentric ones are:

²⁰ Note also the recent criticism of Rosen [1989]-like idea of possessor modifier stranding in Olthof [2020: 112-114].

- Promoted DO is argued to be subcategorized by the verbal lexeme; usually it is the affectedness requirement which is discussed;
- The promoted participant is argued to be accessible for lexical-structural rules and not to be merely an NP-internal modifier.

Additionally, there is at least one analysis which incorporates «lexicalist» affectedness requirement into the syntacticocentric analysis, see Muro [2009]’s theory of excorporation²¹. 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 commonalities between two quite different cognitive/constructionist analyses: Tuggy [1981] for Tetelcingo Nahuatl and Velazquez-Castillo [1996] for Paraguayan Guarani.

- Although having similar or identical morphosyntax, several minor sub-constructions composing NI (macro)construction can be identified;
- Constructions and restrictions on their formation can operate in prototype-like fashion (Velazquez-Castillo 1996: 149-161);
 Effected action performed upon Human Body-Part can be regarded as a prototype (Velazquez-Castillo 1996: 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 participants slots occupied by human referents), all of them obey the force-dynamic principle (v) stated in Section 2.2 and repeated here as (vi).

(vi) *The profiled participant is the most immediately affected by IN’s subevent and directly follows the IN in the causal chain.*

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.

In this Section I discuss the advantages of force-dynamic approach to NI I presented to syntacticocentric and lexicalist analyses. Spencer [1995] is discussed in more detail because it is focused on Chukchi (although on another variety).

Let me first start with the syntacticocentric analysis in its version which derives the promotion to DO via promotion of IN's syntactic possessor (see Baker 1988, Baker et al. 2005, Barrie 2009 to a lesser extent). There is some quite straightforward evidence that such analyses fail to capture Chukchi data such as (52) where the DO here can be only interpreted as a receiver of a book, not its owner. This indicates the profiled DO is a part of event's causal chain, not a mere IN's syntactic possessor.

- (52) *#al'ōša-na* *Ø-keli-ren-ni-n* *Ivan-Ø*
 Aljosha-AN.INS 2/3.S/A-book-bring-3SG.A.3.O-3SG.O Ivan-NOM.SG

Intended: 'Aljosha brought Ivan's book (here)'.

Interpretation: 'Alesha brought the book to Ivan'.

Note that the verb *ret-* 'bring' seems to be monotransitive in Chukchi (even if it is three-place verb, the third argument would be a spatial one, not a Recipient/Beneficiary): it is natural to say (53) without any implication that there is someone who will receive the book (Aljosha can bring book here, read it and take it back with himself). Hence, it cannot be said that Ivan is the verb's argument and thus somehow outranks the syntactic possessor on a syntactic hierarchy (neither would it be easy for the proponents of lexicalist analyses to argue that an implied Recipient is present in the verb's lexical entry).

- (53) *al'ōša-na* *keli~kel* *Ø-ren-ni-n*
 Aljosha-AN.INS book~RDP.NOM.SG 2/3.S/A-bring-3SG.A.3.O-3SG.O

'Aljosha brought the book (here)'.

Examples like (52) provide strong evidence²² against «Possessor Raising-like» analysis. Moreover, I argue that no syntacticocentric analysis of restrictions on DO-Promoting P-Incorporation Construction in Amguema Chukchi (except ones modelling event structure fully in syntax) can proceed without

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

implementation of event structure because of the role immediateness of affectedness and its order plays in this Amguema Chukchi NI-Construction.

Consider (54)-(55) in the following context explained to my consultants: Ivan and Timur both wear glasses with the similar «force» (so both of them can wear each other's glasses). For some reasons Timur has put on Ivan's glasses and went outside. There the bully-boy broke these glasses. I asked my consultants to retell this short story in Chukchi and then offered them two constructed examples, shown in (54) and (55). My consultants commented that (54) sounds much more natural than (55)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.

- (54) *timur-na ya-jpə-ləna-t tin-ləle-t ivan-nen i*
Timur-AN.INS PF-put.on-PF.3SG ice-eye-NOM.PL Ivan-GEN and_R
e-wilu-kə-ŋinqeje-ə Ø-tin-ləle-n-sime-w-ni-n
CAR-hear-CAR-boy-INS 2/3.S/A-ice-eye-TR-break-CS-3SG.A.3.O-3SG.O
Timur
Timur.NOM.SG

‘Timur put on Ivan’s glasses and a bully-boy broke these glasses (on Timur)’.

- (55) *#timur-na ya-jpə-ləna-t tin-ləle-t ivan-nen i*
Timur-AN.INS PF-put.on-PF.3SG ice-eye-NOM.PL Ivan-GEN and_R
e-wilu-kə-ŋinqeje-ə Ø-tin-ləle-n-sime-w-ni-n ivan
CAR-hear-CAR-boy-INS 2/3.S/A-ice-eye-TR-break-CS-3SG.A.3.O-3SG.O Ivan.NOM.SG

Interpretation: ‘Timur put on Ivan’s glasses and a bully-boy broke some other glasses on Ivan’.

Note that it is difficult to explain the difference between (54) and (55) via some sort of syntactic or semantic hierarchy. Consider (56) which some of my consultants offered instead of (55) to improve the latter.

²³ Some consultants created sentences like (54) directly translating from Russian. However, no one offered (55) as a translation from Russian.

(56)	<i>timur-na</i>	<i>ya-jpə-ləna-t</i>	<i>tin-ləle-t</i>	<i>ivan-nen</i>	<i>i</i>
	Timur-AN.INS	PF-put.on-PF.3SG	ice-eye-NOM.PL	Ivan-GEN	and _R
	<i>e-wilu-kə-ŋinqeje-e</i>	<i>Ivan-nen</i>	<i>tin-ləle-t</i>		
	CAR-hear-CAR-boy-INS	Ivan-GEN	ice-eye-NOM.PL		
	<i>rə-sime-w-ni-ne-t</i>				
	TR-break-CS-3SG.A.3.O-3SG.O-PL				

‘Timur put on Ivan’s glasses and the bully-boy broke Ivan’s glasses’.

The possibility of (56) gives us several insights. Firstly, there is no purely information-structural restrictions for Ivan (the owner of the glasses) to be mentioned in the second clause. Secondly, Timur (the temporal user) should not be syntactically present in the second clause (if no incorporation happens), so it is difficult to attribute NI restrictions to some sort of syntactic blocking rules. In the 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 mere 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.

I have presented several pieces of data showing that the majority of syntactiocentric approaches would have problems explaining out Chukchi data (if these approaches fail to incorporate at least some part of mechanisms of event structure²⁴). However, this does not mean that lexicalist approaches are on the right track either. I will focus on lexicalist analysis of Chukchi by Spencer [1995] to demonstrate the shortcomings of lexicalist approaches in general (because it is the most sophisticated lexicalist approach to NI, to my knowledge).

First of all, Spencer [1995: 483-484] provides some evidence that Possessors in Chukchi can be treated not as a part of an NP but as verbal dependents and hence it is easier to argue that they can be represented in the P(redicate)-A(argument) S(tructure). However, such data is not confirmed for

²⁴ Obviously, syntactiocentric approaches which model event structure in syntax are not subject to this criticism. For example, a possible approach to NI working in spirit of Lundquist & Ramchand [2012] or Ramchand [2019] would probably be able to capture nuances of event structure syntactically.

Amguema Chukchi. Consider (57), where the profiled DO in (57c) can only correspond to the part of complex NP in a relational form (57a) and cannot be marked by the case assigned by the verb (57b), contrary to Spencer [1995: 483-484].

- (57) a. *Ø-rə-təmŋ-ew-ni-n* *saj-koka-ken*
 2/3.S/A-TR-get.lost-CS-3SG.A.3.O-3SG.O tea-pot-REL
kayəryajpə-n
 cover_N-NOM.SG
- b. **Ø-rə-təmŋ-ew-ni-n* *kayəryajpə-n*
 2/3.S/A-TR-get.lost-CS-3SG.A.3.O-3SG.O cover_N-NOM.SG
saj-koka-jpə / saj-koka-k
 tea-pot-ABL / tea-pot-LOC
- c. *Ø-kayəryajpə-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 tea pot’s cover’

Secondly, even if a lot of non-argument participants are included in PAS, even such a rich PAS will fail to predict which of them are potential affectees without a rich enough event-structural component of the PAS (consider again (54)-(55) and discussion of it).

My main objection to previous syntacticocentric analyses (more successfully solved by lexicalist analyses) of NI and promotion were their ignorance of event-structural and affectedness requirements to the profiled DO. However, Muro’s [2009: 86-91] syntacticocentric analysis is promising because it incorporates the advantages of lexicalist analyses (preservation of affectedness requirement to the promoted DO) into syntacticocentric analysis with its own advantages (no problem of including adjuncts and apparent parts of IN’s NP into verb’s lexical structure). Unfortunately, Muro [2009] represents affectedness as a binary feature and does not fully associate it with event structure, so examples (54)-(55) which require the notion of affectedness order would be problematic even for Muro [2009]-style analysis.

Lexicalist as well as syntacticocentric approaches both need to posit some type of rules of syntactic/lexical priority (in form of hierarchies/trees/optimality arrangement). However, the problem

with such priorities is that it operates over artificial concepts (such as semantic and/or syntactic roles) only derived from event structure and not over event structure itself and thus sometimes fail to account for the nuances of event structure. If only syntactic/semantic role and not the causal structure is taken into account, (58) would mean that semantic/syntactic Beneficiary is ranked higher than the (semantic/syntactic) Possessor on the hierarchy of accessibility to DO position. On the same time, (59) would mean the reverse order of Possessor and Beneficiary on this hierarchy²⁵. The difference between two Beneficiaries and two Possessors lies in the event structure (owner of the book is not or not as immediately affected as the Beneficiary, while person whose wound is sewn up is the most immediately affected) and thus should be explained by event structure principles.

- (58) *#al'oša-na* *Ø-keli-ren-ni-n* *Ivan-Ø*
 Aljosha-AN.INS 2/3.S/A-book-bring-3SG.A.3.O-3SG.O Ivan-NOM.SG

Intended: 'Aljosha brought Ivan's book (here)'.

Interpretation: 'Aljosha brought the book to Ivan'.

- (59) a. *ena-n-melew-etə-lʔ-e* *ŋinqej-in* *pekwəryə-n*
 ANTI-TR-recover-VB-ATTR-INS boy-GEN wound-NOM.SG
 Ø-təni-ni-n *ətəy-etə*
 2/3.S/A-sew.up-3SG.A.3.O-3SG.O father-DAT
- b. *ena-n-melew-etə-lʔ-e* *ŋinqej-Ø*
 ANTI-TR-recover-VB-ATTR-INS boy-NOM.SG
 Ø-pekwəryə-təne-ne-n *ətəy-etə*
 2/3.S/A-wound-sew.up-3SG.A.3.O-3SG.O father-DAT

'A doctor sewed up the boy's wound for the boy's father'.

²⁵ One may point out that the Possessors in two events are semantically and probably syntactically different, the possessive relation is alienable and inalienable respectively. Two points should be made. Firstly, force-dynamic approach to argument structure captures the fact that in (b) the Possessor is the most immediately affected even without postulating the distinction between two kinds of possession. Secondly, it is still not clear whether Amguema Chukchi grammar (or Chukchi grammar in general, at least topics discussed in Bogoras [1922]; Skorik [1961: 1977]; Dunn [1999]; Muravyova et al. [2001]) is sensitive to alienability as an independent concept. However, it is worth noting that syntactiocentric analysis of Muro [2009] and Barrie [2009] manage to capture the difference of inalienable (body-part) Possessum incorporation.

Finally, let me briefly consider two cognitive/constructionist approaches to NI and promotion. Because neither Tuggy [1981] nor Velazquez-Castillo [1996] make any global statements and are focused on the analyzes of only the languages they study (which happen to be quite different from Chukchi), I am going to make only one critical statement. Studies in Cognitive Grammar framework may posit valuable and truly in-depth descriptions of particular syntactic structures, although it is somehow hard to evaluate the concepts these studies introduce: Tuggy [1981] and, to a lesser extent, Velazquez-Castillo [1996] suffer from this problem when dealing with affectedness. My study faces similar problems. However, as not degree but immediateness of affectedness happens to be crucial for NIC restrictions, the evaluation of my analysis may be less complicated. Moreover, I argue that the restriction for a DO to be most immediately affected by IN's subevent can receive a functional-diachronic explanation.

5. Restrictions explained; a view from diachrony?

In Section 3 I have shown that DO-profiling in Amguema Chukchi obeys the event-structural restriction of immediateness of DO affectedness (see (v) in Section 2.2). In Section 4 I argued that previous analyses (syntacticocentric as well as lexicalist) fail to account for Amguema Chukchi data without additionally considering event structure to their approach and my force-dynamic analysis formulated in Croft [2012]'s framework is thus not only possible but preferable for Amguema Chukchi data. Two last force-dynamic restrictions I postulate for NICs in Amguema Chukchi is repeated below as (vii)-(viii).

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

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

This list has an important disadvantage: what is the external (cognitive, functional, diachronic, generative) cause for it? To put it differently – why the restrictions are the way they are?

Providing an explanation for all of them goes beyond the scope of this paper. However, I argue that at least (vii) and (viii) ((vii) and (viii) in the original list in Section 2.2) can be explained via the diachrony, functions and origin of sub-constructions which together form the macroconstruction of DO-Profiling NIC in Chukchi.

Unfortunately, there is no historical record of Chukotko-Kamchatkan languages (despite the profound reconstruction by Fortescue [1998]) and NI in Koryakic languages is not described in such details to

provide a reconstruction for each development step (despite the presence of insightful papers of Kurebito [2001; 2004; 2017]). Here I provide a preliminary hypothesis about the diachrony of DO-Profiling NICs on the basis of mostly assumptions and typological evidence.

Firstly, I argue that the origin of DO-Profiling NIC is the construction in which the profiled DO is affected by an action directed to her Body-Part (which was incorporated), see (60).

- (60) *trampə-na* *frantsuženka* *kay-male-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).

Firstly, this construction is obviously present and productive in all Chukotko-Koryakic (see Skorik [1948], Dunn [1999], Kurebito [2017], Kibrik et al [2000] and Nagayama [2003: 50]) and even to a certain degree present in Western Itelmen texts recorded in 1910 by Iochelson (see Mithun [1984: 882-883]. Secondly, as Velazquez-Castillo [1996] argues, this construction can be regarded as cognitively and functionally basic (IN is very low in animacy, DO is high in animacy, IN and DO are strongly connected)²⁶. Finally, there is at least one language where the only P-Incorporating NI construction present is Body-Part_i-Incorporating DO_i-Profiling Construction: Madngele²⁷ (< Eastern Daly, Northern Australia; Zadnvoort [1999: 96-97]).

I argue that after the Body-Part_i-Incorporating DO_i-Profiling Construction was established (probably at the 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 the bodies are often affected (like clothes), the feature of force-dynamic affectedness of Possessor through its Body-Part (60) was extended to force-dynamic affectedness of an Owner/User through a Possessum close to its body (see (54)-(55) above) and finally to affectedness of Beneficiary/Maleficiary through her property (61). Similar development can be postulated for Koryak, too (see Kurebito [2001: 37]).

- (61) *yəm-nan* *tə-jpə-na-t* *tin-ləle-t*
I-INS 1SG.S/A-put.on-3SG.O-PL ice-eye-NOM.PL

timur-nine-t *i* *tə-tin-ləle-n-sime-wə-n*
Timur-AN.GEN-PL and_R 1SG.S/A-ice-eye-TR-break_{ITR}-CS-3SG.O

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 Zadnvoort [1999: 97-98]).

timur-∅

Timur-NOM.PL

‘I put on the Timur’s glasses and (accidentally) broke them’.

An intermediate stage of such proposed pathway was described and analyzed for External Possession Construction in Czech by Fried [2010: 477]. Additionally, Paraguayan Guarani’s Profiling NIC as described by Velazquez-Castilo [1996] seems to be on the halfway of this path: in general, only body-part P’s can be incorporated to promote its Possessor, although rarely some terms belonging to personal sphere (like cloths or houses) can be incorporated and make their possessors profiled as DOs, see Velazquez-Castillo [1996: 160].

It is possible to imagine how this line of construction’s development and extension continued. As restrictions on control of DO over IN gradually became weaker, close and culturally important animals (like dogs, see (8b)) became able to occupy IN’s slot (available for Koryak (Kurebito 2001: 37), too). Later the construction was extended even to interpersonal relations, see (38) (I was not able to find indisputable evidence of this change for Koryak). Note that during this line of development lexical restrictions on DO-profiling construction’s slots become weaker and weaker, although the general force-dynamic restriction for DO to be affected and to immediately follow IN’s subevent remained intact.

Another line of constructional evolution hypothetically proceeded via the weakening of the pragmatic requirement of DO’s affectedness: it was allowed for DO to be inanimate if it still changes its state directly from INs subevent. Most probably the bridging context was exhibited by something like (62) where IN slot was still occupied by the noun denoting a body-part term, — this made the metaphorical transfer (Body-Part > Part-of-Object) easier. There are some languages (Marithiel < Western Daly, Northern Australia, see Green [1989]; Upper Nexaca Totonac < Totonaca, see Beck [2004]) in which most of INs denoting Parts and profiling their Wholes as a DO are expressed by nouns at least cognate to nouns related to Body-Parts. The same construction can be found in Koryak (see Kurebito 2001: 46).

- (62) *svetlana-na* *yriorievna-na* *ajmak-∅*
Svetlana-AN.INS Grigorjevna-AN.INS carcass-NOM.SG

 ∅-yatołqəłə-swe-ne-n
 2/3.S/A-rib-cut-3SG.A.3.O-3SG.O

‘Svetlana Grigorjevna cut ribs from the (reindeer) carcass’.

I argue that afterwards this line of construction’s development 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 (63). During time, the strength of connection between IN and DO could become weaker and weaker (compare (63) and (64)).

- (63) *ətʔa-ta mäsəkwə-n Ø-mumkəl-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’.

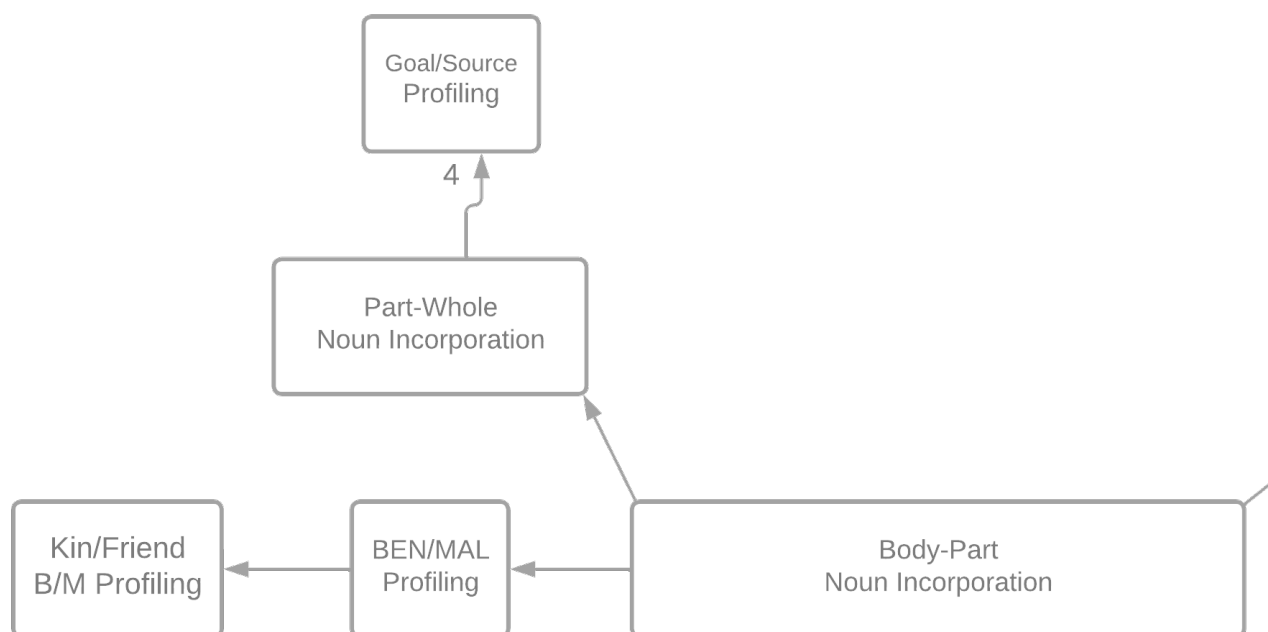
- (64) *ɲewəsqet-e nelyə-n Ø-titi-npen-ni-n*
girl-INS skin-NOM.SG 2/3.S/A-needle-stick.into-3SG.A.3.O-3SG.O
‘The girl stuck a needle in the skin’.

There is some evidence that DO-Promoting NI in modern Western Frisian is nowadays in the middle of this process (see Dijk [1997: 158]. Note also that such constructionalization is not dependent upon the constructionalization of Beneficiary-Profiling (Western Frisian only has Body-Part-Incorporating Human-Profiling NI).

Finally, the construction extended to the point when it became possible for merely affected (which does not necessarily form/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 2015: 159]).

The pathway I propose for the IN’s development can be summarized in Figure 12.

Figure 12. The development of Profiling NIC in Amguema Chukchi



Such pathway explains why the IN cannot follow DO in the causal chain (iv) and no participant can intervene between an IN and a profiled DO (v), namely, DO should be the most immediately affected participant.

If all Profiling NICs arose from Body-Part-Incorporating Animate-Profiling NIC, such restrictions are natural – nothing can intervene between a body-part and its Possessor (v) and Possessor is always of more importance as compared to its body-part.

6. Conclusions

Let me draw some conclusions.

To begin with, I have shown (see Sections 2.2; 3) that there is an alternative to lexicalist and syntactocentric analyses of NI. Namely, an approach which derives NIC's argument structure directly for the event structure provides such an alternative. Moreover, a detailed examination of Amguema Chukchi data reveals some nuances (like the requirement of immediateness of DO's affectedness) which can hardly be analyzed without direct reference to the event structure (see discussion in Section 4).

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 NI constructions stem from the Body-Part-Incorporating Human-Profiling NIC which represents a prototype for pragmatic function of profiling these

constructions serve (see discussion in Polinskaja & Nedjalkov [1987]). While the restrictions on degree of affectedness and strength of link between IN and DO are weakened for the descendant constructions, the general force-dynamic requirement for the DO to be the most directly affected participant by INs subevent remains inherited.

Finally, it is the matter of further studies to shed light on the following questions:

- Can the same approach be implemented to analyze S-Incorporation Constructions?
- Can force-dynamic event-structural approach be transferred to other languages/the typology of NICs?
- Can the proposed diachronic scenario be proven to be true on the comparative-typological grounds?

Abbreviations

1, 2, 3	1st, 2nd, 3rd person	NEG	negation
A	transitive subject	NMLZ	nominalization
ABL	ablative	NOM	nominative
AN	high in animacy	NP	nominal predicate
AP	antipassive	O	direct object
ATTR	attributive	OBL	oblique
CS	change of state	ORI	orientative
CATCH	catch, hunt	PF	perfect
CONT	container	PL	plural
DAT	dative	PRF	perfective
DET	determiner	PRS	present
DIM	diminutive	PRT	particle (evidential)
DISTR	distributive	PST	past
EAT	consume x	PTCL	particle
EMPH	emphatic particle	PTCP	participle
EQU	equative	REL	relational
ERG	ergative	S	intransitive subject
FUT	future	SG	singular
GEN	genitive	SIM	simultaneous

GOOD	good, intensifier	ST	stative
IN	inside an object	SUBJ	subjunctive
INF	infinitive	TR	transitivizer
INS	instrumental	TH	thematic suffix
IPFV	imperfective	TOP	top of an object
ITER	iterative	INTS	intensifier
LOC	locative	INV	inverse
LOC	locative	TRSF	transformative, become x
LOW.A	agent low on person hierarchy	VB	verbalizer
MAT	material		

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