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This paper provides an account of the argument/adjunct distinction implementing the 'canonical approach'. I identify five criteria (obligatoriness, latency, co-occurrence restrictions, grammatical relations, and iterability) and seven diagnostic tendencies that can be used to distinguish canonical arguments from canonical adjuncts. I then apply the criteria and tendencies to data from the Nakh-Daghestanian language Hinuq. Hinuq makes extensive use of spatial cases for marking adjunct-like and argument-like NPs. By means of the criteria and tendencies it is possible to distinguish spatial NPs that come close to canonical arguments from those that are canonical adjuncts, and to place the remaining NPs bearing spatial cases within the argument-adjunct continuum.

1. Introduction

At the beginning of the discussion of the argument/adjunct distinction stands a simple observation: some linguistic expressions in a clause are central to the predicate, i.e. they 'complete' the predicate, and their referents are equally central to the situation referred to by the predicate. In contrast, other linguistic expressions are peripheral to the predicate and the participants they denote pertain to the situation as a whole (cf. Dowty 2000). The former type of linguistic expression is often called 'arguments' (or 'complements'), and the latter type 'adjuncts' (or 'modifiers'). From a scanning of the major literature on the argument/adjunct distinction it seems evident that:

- the distinction is not binary and not categorical, but rather gradual in its nature
- the use of tests to identify arguments and adjuncts in particular constructions leads to contradictory results
- it involves morphosyntactic and semantic criteria/diagnostics

In this paper, I propose to implement the 'canonical approach' (cf. Corbett 2005, 2007; Brown, Chumakina and Corbett 2013) in the exploration of the argument/ adjunct distinction. Following Corbett's method, I will identify canonical instances of argumenthood and adjuncthood (e.g. *Peter* in *Peter cries* is a canonical instance of an argument, whereas *despite the noise* in *I slept well despite the noise* is a canonical instance of an adjunct). Taking the canonical instances as the ideal endpoints of a scale, I will try to build up the possible logical space for the argument-adjunct continuum by figuring out the relevant syntactic and semantic criteria and their more or less canonical values. The advantage of the canonical approach is that it allows us, as Corbett (2007) puts it, to "handle gradient phenomena in a principled way". This means that we do not have to specify how many particular points the argument-adjunct continuum has (e.g. three, as in Matthews (1981: 140), four, as in Mosel (2007), six, as in Somers (1984), or even more, as in Arka (this volume)) but only define the endpoints by means of a set of converging criteria. In order to test my approach I will apply it to data from the Nakh-Daghestanian language Hinuq. In this language we find a number of constructions containing NPs marked with spatial cases serving various functions that are somewhere between arguments and adjuncts.

The paper is structured in the following way: I start with a discussion of criteria for argumenthood and diagnostic tendencies in the behavior of arguments in Section 2. Section 3 illustrates how the approach can be applied to NPs bearing spatial case markers in Hinuq, and Section 4 concludes the paper.

2. A Canonical Typology of Arguments and Adjuncts

In the spirit of canonical typology (cf. Corbett 2005, 2007, Nikolaeva 2013 among others) I have identified five criteria that can be used to distinguish canonical arguments from canonical adjuncts:

- obligatoriness
- latency
- co-occurrence restrictions
- grammatical relations
- iterability

By 'criteria' I mean defining properties that concern the nature of what it means to be an argument or adjunct. The list is based on the existing literature on this topic including various tests that have been proposed. I complement the criteria with an additional list of diagnostic tendencies (Section 2.2). The tendencies are not necessary or sufficient properties of arguments or adjuncts, but formal and functional diagnostics that can be taken as helpful tests when approaching a new language or construction. Criteria and tendencies concern the grammatical domains of morphology, syntax and semantics, but morphology is only of secondary importance for the argument/adjunct distinction. In contrast, syntax and semantic are equally significant (Helbig and Schenkel 1983: 60–66), and we must carefully distinguish between syntactic and semantic arguments. That such a distinction is necessary becomes immediately obvious when we look at the first criterion, obligatoriness (see below). Syntactic arguments are those arguments that are obligatorily required by the syntax. The syntactic argument structure as well as the morphosyntactic properties of a predicate are language-specific or even construction-specific. In contrast, I assume that the semantic argument structure of verbs is universal in the sense that verbs that refer to the same situations or events have the same semantic arguments. For instance, the German verb *lesen* can be used in reference to reading events in the same way as the English verb *read*, Russian *čitat'*, Italian *leggere*, or Hinuq *t'ot'era*. Consequently, these verbs have the same semantic argument structure. However, the Hinuq verb is polysemous and has two other meanings, 'count' and 'be engaged in studies'. With the latter meaning the verb is used with only one semantic argument, an agent and an optional adjunct specifying the location.

2.1 Criteria for canonical arguments and adjuncts

First Criterion: Obligatoriness

Obligatoriness is probably the most central issue of the argument/adjunct debate. Arguments are in some sense required by the predicate, while adjuncts are not. The distinction between semantic and syntactic obligatoriness (Somers 1984, Comrie 1993, van Valin 2001, Kroeger 2004) is an immediate consequence of the distinction between semantic and syntactic arguments. The

relevance of this point can be illustrated by the passive derivation in English: passive agents are semantic arguments, but syntactic adjuncts expressed by an optional PP.

Semantic obligatoriness

(C1a) obligatoriness > optionality

Canonical arguments are semantically required to complete the meaning of the predicate, whereas adjuncts are semantically not required (cf. Koenig et al. 2003: 72). Another way to put it is to say that arguments are necessarily entailed by the predicate whereas adjuncts are only optionally entailed (Rákosi 2006: 100–101). Croft (2001: 272) illustrates the same point with the sentence *Randy chased the dog in the park* by writing that "In some sense, the dog is a more "necessary" part of the event than the location is."

Syntactic obligatoriness

(C1b) obligatoriness > optionality

Canonical arguments are required by the syntax whereas adjuncts are optional (Matthews 1981: 125, Przepiórkowski 1999: 258, Dowty 2000, Croft 2001: 272–273, van Valin 2001: 93). According to this criterion manner adverbs are arguments of certain predicates because they obligatorily co-occur with them, e.g. *behave well/badly, treat fairly/harshly, look good* (cf. Helbig and Schenkel 1983: 46, Dowty 2000, Rákosi 2006: 100–101).

The criteria (C1a) and (C1b) deserve a few comments. (C1a) says that arguments are semantically obligatory. To have a certain number of semantic arguments that fulfill certain semantic roles (and possibly more detailed criteria) is therefore a stable property of verbs that comes with their semantics. Thus, semantically arguments can never be omitted. However, it is also a fact that some verbs such as English *eat, write* or *plough* can be used in clauses with one or two arguments, although their semantic structure is stable and contains two semantic arguments. In such a case we can make use of the syntactic side of the argument/adjunct distinction and say that arguments can be syntactically omitted. In contrast, syntactically obligatory arguments are required to be overt in order to form a syntactically correct clause. In this way we can distinguish between verbs that can but do not have to combine with, for instance, object NPs, and those verbs that obligatorily demand object NPs (e.g. *inhabit*).

Second Criterion: Latency

(C2) requiring a definite interpretation when left unexpressed > allowing for an indefinite interpretation when left unexpressed

Latency is a purely semantic criterion (cf. Matthews 1981: 125–126, Croft 2001: 273, Rákosi 2006). It is tightly related to the obligatoriness criterion and says that canonical arguments that are left unexpressed require a definite interpretation, i.e. there must be an accessible referent in the discourse context. Croft (2001: 276) calls this 'definite null instantiation' and notes that pro-drop or null anaphora are examples in point. He also argues that certain participants that can be syntactically unexpressed (e.g. the direct object of *win* or *lose*, or directional PPs with verbs such

as *arrive*, etc.) are semantic arguments precisely because they call for a definite interpretation whenever the object or the directional PP is not overtly expressed. In contrast, temporal, spatial or other circumstances that are not expressed in a clause can be freely identified by the hearer without any restrictions. According to this criterion a non-expressed agent in a passive construction would not count as a semantic argument because it does not require a definite interpretation (Croft 2001: 279). This shows that agents in passive constructions behave less canonically with regard to argumenthood than agents in active constructions.

Third Criterion: Co-occurrence restrictions

(C3) co-occurrence restrictions > unrestricted

Canonical arguments are restricted in their co-occurrence to particular predicates; they cannot be used with any predicate. Adjuncts, in contrast, are free to occur with almost any predicates (cf. Matthews 1981: 124–125, 127; Radford 1988: 192, Comrie 1993, Croft 2001: 272, Koenig et al. 2003: 72–75; Kroeger 2004: 11, Rákosi 2006: 109–113). It is important to note that this criterion takes predicates and not NPs as the starting point for distinguishing arguments from adjuncts. For instance, the verb *live* requires its non-subject argument to be of a certain type, namely a location that is eligible to serve as a living place. Such a restriction is absent from the verb *run*, i.e. running events do not necessarily occur in locations of a certain type (e.g. a gym), but can occur in places that are actually not very suitable for running.

The criterion has a morphosyntactic as well as a semantic side. On the morphosyntactic side particular predicates require arguments to be marked, for instance, with particular cases (see (T1) below). On the semantic side it means that arguments are dependent on the meaning of the predicate: i.e. they receive a semantic role assigned by the predicate. For example, the verb *pour* requires the direct object to refer to a liquid, whereas the direct object of *take out* cannot refer to a liquid. Arguments fulfill participant roles that are required only by a restricted set of verbs. In contrast, the participant roles of adjuncts fit most or even all verbs.

Fourth Criterion: Grammatical relations

(C4) being a term > being a non-term

This criterion is purely syntactic because it is exclusively based on the notion of grammatical relations. It is therefore not applicable to those languages that have been claimed to lack grammatical relations. Canonical arguments are terms, i.e. subject, direct object, indirect object, whereas adjuncts are always non-terms, i.e. oblique (van Valin 2001: 92, Kroeger 2005: 59). There are also arguments that are obliques, but they are less canonical than those that are terms. Dummy subjects of weather expressions in some languages, e.g. in the English sentence *It is raining*, are syntactic arguments according to this criterion though they are not semantic arguments.

We said that the basic difference between arguments and adjuncts is that arguments are somehow compulsory to complete the meaning of a predicate while adjuncts provide extra information. From this follows that the number of arguments of a verb is limited, whereas the number of adjuncts is basically free (Przepiórkowski 1999: 255). This leads us to the next criterion, iterability.

Fifth Criterion: Iterability

(C5) non-iterable > iterable

The iterability criterion is based on the supposition that adjuncts can be added quite freely to any clause, whereas arguments cannot (Vater 1978: 25–26). From this follows that two or more adjuncts of the same type (e.g. temporal, spatial or manner) can combine with the same predicate, e.g. *We will meet today at nine o'clock in the evening*. Such a behavior is impossible for arguments (cf. Kroeger 2004: 11, Rákosi 2006: 101–104). By this criterion instrumental NPs are canonical arguments and not adjuncts because they normally cannot be iterated (cf. Przepiórkowski 1999: 267–268, Rákosi 2006: 106–107).

There are many more conditions and tests out there that have been employed in order to differentiate between arguments and adjuncts. Some of them are treated below under the heading of 'tendencies'. Other tests seem to be quite language-specific or work only with some argument types and not with others (cf. the comprehensive lists of tests in Vater 1987 and Helbig 1992). One rather famous series of tests that I do not take into consideration are the *do so*-tests. The *do so*-tests aim at showing that arguments and adjuncts differ in their structural configurations (i.e. arguments are assumed to be sisters of heads, while adjuncts are realized higher in the tree) and therefore can or cannot replaced by *do so* or *do it* or *do the same thing* (Somers 1984, Radford 1988: 234–235, Helbig 1992: 80, Culicover and Jackendoff 2005: 128–129). I remain agnostic about configurational differences between arguments and adjuncts and thus do not take configurations as a distinguishing criterion. Furthermore, it is not clear how language specific *do so*-tests are, and some authors have shown that these tests in fact fail to prove that arguments and adjuncts differ in their configurations (cf. Przepiórkowski 1999: 290–310 for a comprehensive overview on the literature and many counterexamples).

Another test proposed in the literature on the argument/adjunct distinction that I also do not consider is to compare verbs for which the determination of the argument structure is difficult to those verbs with a similar meaning for which is it easier to determine the argument structure (Somers 1984). Similarly, Comrie (1993) has proposed to take the behavior of established arguments as a device with which new arguments might be detected (e.g. of predicates for which the argument structure is unclear). If the new elements behave like the established arguments then they can also be considered arguments. Such a test, though it may be a helpful heuristic in practice, does not say anything specific about the properties of arguments. In other words, it cannot help us to construct a conceptual space within which we can anchor canonical arguments and canonical adjuncts.

2.2 Diagnostic tendencies

In addition to the definitional criteria I present a list of useful diagnostic tendencies concerning morphosyntactic properties that are neither necessary nor sufficient to distinguish arguments from adjuncts, but rather helpful starting points when approaching a new language.

(T1) morphological encoding: fixed or uniform > variable
(T2) case marking: grammatical cases > semantic or spatial cases
(T3) marking by cases > marking by adpositions

(T4) indexing on the verb: indexing > no indexing
(T5) accessibility to valency-changing processes: accessible > not accessible
(T6) position: restricted > unrestricted
(T7) closeness to the verb: close > less close

Canonical arguments have a fixed morphological encoding that is not subject to variation (e.g. a specific case marker or adposition or position in the clause) whereas the marking of adjuncts is more variable (Rákosi 2006: 104–105). For those languages that distinguish between grammatical and semantic (including spatial) cases, canonical arguments are typically marked by the former and adjuncts by the latter (cf. the analysis of Warlpiri in Andrews 2007: 161–164). Similarly, in a canonical situation arguments are marked by cases whereas adjuncts are marked by adpositions (Przepiórkowski 1999: 255).

Since indexing on verbs is usually restricted, i.e. not all participants are marked on verbs, but predominantly only subjects and objects, we can say that in head-marking languages arguments rather than adjuncts will be indexed on the verb.

(T5) is a consequence of the fact that canonical arguments are terms and canonical adjuncts are non-terms. Typically, terms can undergo valency-changing processes, and adjuncts cannot. For example, passivization possibilities in English may be an indicator of argument status (Somers 1984: 515).

In some languages arguments are placed closer to the verb than adjuncts (Culicover and Jackendoff 2005: 130)[1] or are generally more restricted than adjuncts with respect to their possible positions in the clause (Helbig 1992: 83–84, Dowty 2000). In languages with more freedom of word order there may be a tendency for positioning adjuncts at clausal boundaries. However, even in languages with more rigid word order such restrictions may be overridden if the arguments are heavy or part of focus constructions.

3. The Argument/Adjunct Distinction in Hinuq

Hinuq is one of the smallest Nakh-Daghestanian languages belonging to the Tsezic subbranch of this family. The language is head-marking and has a rich case inventory that can be divided into grammatical and spatial cases. The grammatical cases are absolutive (no marking), ergative (*-i*), first and second genitive (*-s, -zo*), dative (*-z*) and instrumental (*-d*). The 36 spatial cases code spatial location and direction as well as a number of grammatical meanings.

The verb inventory consists of: (i) one-place predicates which are simple intransitive verbs such as *-aː-* 'cry', or *-uhe-* 'die'; (ii) two-place predicates, and (iii) three-place predicates. The two-place predicates are:

- ordinary transitive predicates (e.g. *-ac'-* 'eat', *cax-* 'write', *-uː-* make) [case frame: ergative, absolutive]
- affective predicates (e.g. *-ike-* 'see', *toq-* 'hear', *-eq'i-* 'know', *-aši-* 'find', *-eti-* 'want') [case frame: dative, absolutive]

[1]There can be a difference between subjects and objects with respect to the position of the verb. This means that at least in some languages, e.g. those which are strictly verb final, objects are closer to the verb than subjects. In this case this tendency only helps to identify object arguments but may fail to distinguish between subject arguments and adjuncts.

- extended intransitives (e.g. *huli:*- ‘long for’, *-eze-* ‘look at’, *boži -iq-* ‘believe in’, *-eze-* (*-iči-*) ‘wait for’, *-egwe-* ‘lose in’) [case frame: absolutive, spatial case]

The three-place predicates are ordinary ditransitive predicates (e.g. *neƛ-*, *toƛ-* ‘give’, *-iker-* ‘show’, *-ik’-* ‘beat’, *caƛi-* ‘throw at’) [case frame: ergative, absolutive, dative] and extended transitive predicates (e.g. *-ece-* ‘tie’, *-ati-* ‘touch’, *ese-* ‘tell’, *-ixi-* ‘spread’) [case frame: ergative, absolutive, spatial case]. All verbal predicates have at least one argument marked with the absolutive case.

At first glance, the division of the Hinuq verb inventory into valency classes seems to be at odds with my position stated at the beginning of the paper, namely that the argument/adjunct distinction is not categorical but rather gradual. How is it possible to divide the Hinuq verbs into groups according to the number of arguments that they have if there is no clear-cut distinction between arguments and adjuncts? However, this is only an apparent contradiction since the classification is based on canonical instances of the valency classes. For every class there are at least a few canonical members taking one, two or three arguments respectively. It might well be the case that in practice many or even most of the Hinuq verbs behave non-canonically with respect to the argument/adjunct distinction, but this does not prevent us from establishing the valency classes. In the reminder of this paper I will discuss predicates that behave rather non-canonically and whose class membership is therefore difficult to establish.

3.1 The functional range of spatial cases

As already mentioned, Hinuq has a rather larger number of spatial cases, which is typical for the Nakh-Daghestanian languages. These cases express spatial meanings, but they are also widely used outside the spatial domain (cf. Cysouw and Forker 2009, Forker 2010). In the following I will look in more detail at two spatial cases, the AT-essive and the SPR-essive, thus named because they respectively denote the location of a figure at/near/by and on/over a ground. I will discuss six distinct functions of these cases with regard to the argument/adjunct distinction.

(i) Spatial and temporal functions, manner

Both cases express spatial relationships. The spatial meaning of the AT-essive is rather unspecific and hard to grasp. It expresses general location and direction (‘at, on, to, in, by’) (1a). Often but not always contact between the located object and the location plays a role. The SPR-essive expresses the location of a figure on or above the ground (1b). In its spatial function it can co-occur with the postposition *ƛ’ere* ‘on’.

(1a)

hayłuy	čeq-za-qo	inaħzek’u-be	r-utto
3sg.F.ERG	forest-OBL.PL-AT	mushroom-PL	NHPL-gather.PRS

‘She gathered mushrooms in the woods.’

(1b)

hayłu-zo	q’imu-ƛ’o	b-ič-a	goł	mesed-li-š	ƛ’oq’on
3sg.F.OBL-GEN2	head-SPR	III-be-INF	be	gold-OBL-GEN1	hat(III)

‘On her head there will be a golden crown.’

Both cases also denote the location of an event in time. The SPR-essive is normally used when talking about the clock and specific time points of situations (2a). The AT-essive only occurs in a few fixed temporal expressions (2b).

(2a) hibayłu=tow ɣwed-ƛ'o nesaː y-aq'-o hibaw
that.OBL=EMPH day.OBL-SPR in.the.evening II-come-PRS that

bercinawni y-egwennu ked
beautiful II-young girl(II)
'On that day in the evening the young beautiful girl comes.'

(2b) hibay mecxer qaħłi-qo hayłu-y b-oƛekko
there money dawn-AT 3sg.N.OBL-ERG III-put.out.PRS
'There in the morning it (i.e. the mouse) puts the money out.'

Finally, the SPR-essive also expresses manner:

(3) xexłi-ƛ'o nox hadi-r, qešu r-iƛ'i-yo=ƛen
speed-SPR come here-LAT wall(V) V-fall-PRS=QUOT
'Come here fast, the wall falls down.'

(ii) Extended intransitive verbs

Both spatial cases are regularly used with certain extended intransitive verbs. The AT-essive occurs with *enekezi -iq-* 'listen', *-uƛ'-* 'fear', *-iłi-* 'be similar' (4a), and the SPR-essive with *boži -iq-* 'believe', *šakłezi -iq-* 'doubt', etc. (4b). Which case can be used is a lexical property of the predicate in question. Only a few verbs allow for more than one case to be used, e.g. the verb *-eze-* 'look at' co-occurs with NPs bearing the AT-essive, the AT-lative or with those bearing the SPR-essive.

(4a) y-aq'e-n hayło-zo baru-qo y-iłi-š
II-come-UWPST 3sg.M.OBL-GEN2 wife-AT II-be.similar-PTCP

šayťan-za-s aqili
devil-OBL.PL-GEN1 wife(II)
'A devil woman came, similar to his wife.'

(4b) Maħama Madina-ƛ'o šakłezi Ø-iq-iš
Mahama(I) Madina-SPR doubt I-happen-PST
'Mahama doubted Madina.'

(iii) Extended transitive verbs

Only the AT-essive is used with non-derived extended transitive verbs. It marks addressees (5a) and temporal recipients (5b).

(5a) šayťan-za-y hayɬo-qo moχ̣a-ɬ eχ̣i-n
devil-OBL.PL-ERG 3sg.M.OBL-AT sleep.OBL-CONT say-UWPST
'The devils told it to him during the sleep.'

(5b) uži-y ked-qo toχ̣-o k'oɦlo, haw k'ošili:-ž goɬ
boy-ERG girl-AT give-COND ball 3sg.F play-PURP be
'If the boy gives the ball to the girl, she will play.'

(iv) Constructions with the copula

Both cases are found in copula constructions with specific functions. The AT-essive expresses temporary possessors (6a), and the SPR-essive bearer of names (6b).

(6a) di-qo tupi goɬ
1sg.OBL-AT gun be
'I have a gun.' (Lit. 'at /with me')

(6b) di-χ̣'o ce goɬ Madina
1sg.OBL-SPR name be Madina
'My name is Madina.'

(v) Non-canonical agents

The AT-essive is the only case in Hinuq that can be used to express non-canonical agents, namely causees, potential agents, involuntary agents, and natural forces (cf. Forker 2013).

(7) ked-qo zok'i r-uhe-s
girl-AT cup(V) V-die-PST
'The girl accidentally broke the cup' or 'Because of the girl the cup broke.'

(vi) Some more constructions

There are some more constructions that require the SPR-essive. These include the expression of prices (8a), purposes or goals (8b) and some other constructions (8c).

(8a) hałо xan-i hałо-qo-s b-ux-o haw besuro es-o goła
this.OBL khan-ERG he.OBL-AT-ABL III-buy-PRS that fish(III) say-ICVB be.PTCP

baha-mo-ƛ'o
price-OBL-SPR
'The khan bought the fish from him for the price that (he) said.'

(8b) Musa-y q'or boc'-ƛ'o gor-iš
Musa-ERG trap wolf.OBL-SPR put-PST
'Musa laid a trap for the wolf.'

(8c) hibayłu bołi-žo surat-mo-ƛ'o dew-de aldoɣo zoq'we-s de
that.OBL deer-GEN2 image-OBL-SPR 2sg.OBL-ALOC in.front be-PST 1sg
'I was in front of you in the form of that deer.'

3.2 Testing criteria and tendencies for Hinuq

Some of the NPs in question express what are typically classified as adjuncts, e.g. (1a, b), (2a, b), and (3). Others seem closer to arguments, e.g. (4b), (5a, b), and (7). All NPs bearing the AT-essive or the SPR-essive have two common properties. First, they do not trigger verbal agreement. Second, they mostly occur without postpositions. Only the spatial usage allows for the insertion of postpositions. Whether a postposition can be used and which one to choose depends on the context.

In this section I will apply the criteria and tendencies to the noun phrases bearing the AT-essive suffix *-qo* or the SPR-essive suffix *-ƛ'o* and thus establish an argument-adjunct continuum for Hinuq in which these noun phrases can be positioned. Initially, however, I will mention two small caveats. First, Hinuq tends to drop all arguments that are retrievable from the context, which makes the implementation of criterion 'semantic obligatoriness' slightly complicated. Second, the fourth criterion 'grammatical relations' is not really applicable to Hinuq and will be consequently left out because it can be argued that the language has no grammatical relations such as subject, object and oblique in the traditional sense (Forker 2011). This is in line with what is known about other Nakh-Daghestanian languages, which are usually characterized as 'role-dominated' (cf. Haspelmath 1993: 294–299, Kibrik 1997, 2003, Ganenkov et al. 2008).

The noun phrases expressing spatial (1a, b) and temporal circumstances (2a, b) or manner (3) are not semantically or syntactically required to complete the meaning of the predicate with which they can co-occur. If they are left out then they do not require a definite interpretation. They are not the subject of co-occurrence restrictions since one clause can contain more than one NP specifying location, time or manner, which means that they are iterable. Hence they come closest to canonical adjuncts. At the other end of the continuum are NPs denoting non-canonical agents (7) and temporary possessors (6a). These NPs are semantically and syntactically obligatory. They cannot be left out since otherwise the meaning of the construction would be lost. For instance, if in (7) the NP *ked-qo* 'girl-AT' was left unexpressed, the sentences would merely have the interpretation 'The cup broke' without any implication of an implicit non-canonical agent. Similarly, if in (6a) *diqo* 'I.AT' would be lacking, the example could only be translated with 'There is a gun.' Therefore, the latency requirement does not apply to these types

of NPs. This means that within the approach advanced in this paper these two types of NPs are even more canonical than NPs expressing agents or experiencers. Agents or experiencers are frequently left unexpressed and then get a definite interpretation based on contextually available referents. Most of the NPs marked with the AT-essive and the SPR-essive are not iterable and fulfill participant roles required only by a restricted set of verbs. For example, NPs expressing addressees, purposes, prices, or recipients occur only once per predicate and co-occur only with certain verbs, e.g. verbs of speech, verbs denoting transfer, etc.

Table 1 provides an overview on how the NPs in examples (1)–(8) pattern with respect to the defining criteria of the argument/adjunct distinction. There are a number of cells in this table that cannot be reliably filled based on the data that I have gathered so far. The question mark in this table means that the relevant information is lacking or needs to be checked again. # means that the criterion cannot be applied.

	Obligatoriness		Latency	Co-occurrence restrictions	Iterability
	semantic	syntactic			
Spatial / temporal / manner (1a, b), (2a, b), (3)	no	no	no	no	yes
Purpose (8b), image (8c)	no	no	no	yes?	no
Price (8a)	yes?	no	no	yes	?
Name (6b)	yes	no?	yes	yes	no
Doubt (4b)	yes	no	yes	yes	no
Addressee / recipient (5a, b)	yes	no	yes	yes	no
Temporary possessor (6a)	yes	yes	#	yes	no
Non-canonical agent (7)	yes	yes	#/yes	yes	no

Table 1: The behavior of NPs with AT-essive and SPR-essive case suffixes

The overall impression is that the NPs positioned towards the top of the table behave like canonical adjuncts, and those towards the bottom like canonical arguments. This impression is strengthened when also taking into account the diagnostic tendencies (Section 2.2). The morphological encoding is in many cases fixed, e.g. non-canonical agents and temporary possessors can only be marked with the AT-essive, the second argument of the verb *boži -iq-* must be marked with the SPR-essive. In other cases, however, there is a certain variation. For instance, temporary recipients can also be marked with the AT-lative and addressees are also expressed with the AT-lative and, occasionally, with the SPR-lative. None of the NPs in the examples (1)–(8) can be subject to valency-changing processes, although the non-canonical agents are partially the result of applying valency-changing derivations to basic predicates. NPs bearing AT-essive or SPR-essive case do not have a fixed position in the clause and need not to be close to the verb or far away from the verb. I compared ergative-marked agents, absolutive-marked patients, AT-essive-marked NPs and SPR-essive-marked NPs with respect to their distance to the verb by counting 100 NPs respectively. The minimum distance is 0, meaning that no other arguments or adjuncts intervened. The maximum distance attested in my texts is 4, i.e. four argument or adjuncts appear between the verb and the respective NP. The results are: agent: 0.51, SPR-essive: 0.46, AT-essive: 0.42 and patient: 0.21. This means that patients are usually the closest elements, and agents occur usually not very close to the verb. NPs marked with AT-essive and SPR-essive are in between, but closer to agents. In natural texts the latter type of NPs mostly

expresses adjuncts of the kind illustrated in (1)–(3) which tend to be positioned at clausal boundaries (1b), (2a), (3) or after the agent but before the patient (1a).

When looking again at the example of the involuntary agent construction in (7) one might be tempted to think that it looks very similar to free datives in other languages (e.g. German *Der Teller ist mir runtergefallen*. 'I accidentally dropped the plate.').[2] In this case we could say that there is no special involuntary agent construction, but the NP in the AT-essive simply enriches the meaning of the clause by adding an adjunct to a clause containing an otherwise intransitive predicate. However, one of the aims of this paper is to show that involuntary agents do behave differently from spatial, temporal or manner adjuncts marked with spatial cases (see Table 1) and precisely because they are less adjunct like. I consider the involuntary agent construction to be a special construction type in its own right that belongs to a larger family of non-canonical agent constructions. Other constructions belonging to this family are potential constructions, natural force constructions, and causative constructions. In most of the cases these constructions are marked by means of verbal derivation. All non-canonical agents in the constructions are marked with the AT-essive case and share a number of other properties. Transitive verbs occurring in some of these constructions must be detransitivized by means of the suffix *-ɬ*. In some cases it is possible to have various readings for one and the same clause (9). If the non-canonical agent in (9) would be omitted then a definite interpretation is required just as with canonical agents. Canonical agents are also subject to more serious co-occurrence restrictions than free datives since in most of the cases the verbs must contain the appropriate derivational suffix.

(9) di-qo boχ̌i-š xu r-ac'e-ɬ-iš
1sg.OBL-AT pig-GEN1 meat(V) V-eat-POT-PST
'I accidentally ate pork.' or 'I could eat pork.'

4. Conclusion

In this paper I have applied the methods of canonical typology to investigate the argument/adjunct distinction in general, and more specifically with regard to the function of certain NPs in the Nakh-Daghestanian language Hinuq. I have identified five criteria (obligatoriness, latency, co-occurrence restrictions, grammatical relations, iterability) and a number of morphosyntactic tendencies that are relevant for argument- vs. adjuncthood, though this list might be modified and extended in the future.

Canonical typology can be characterized as a top-down approach since we start with defining canonical instances of constructions or terms independently of whether they have been cross-linguistically attested or not. If we interpret Table 1 in the spirit of canonical typology we can figure out which NPs behave more as canonical arguments than other NPs. However, we can also take the table as starting point for a multivariate analysis following Bickel (2010). In that case we can ask which of the NPs are more similar to each other and whether there are correlations between pairs of criteria that can be analyzed as statistically implicational universals. For instance, temporary possessors and non-canonical agents behave similarly, and with respect to the criteria in Table 1 almost identically. The NPs denoting purposes and images are also relatively similar to NPs expressing prices. We can also ask which combinations of criteria occur most frequently as property bundles of constructions. Of course, a statistical

[2]I thank one reviewer for pointing this out to me.

analysis similar to the one that Bickel provides for the typology of clause-linkage patterns requires a larger data set than that given in Table 1. These additional questions go far beyond the canonical approach because the existence of canonical instances of whatever construction is independent of their frequency. Nevertheless, it seems to be a fruitful topic for future research.

Abbreviations

I-V gender and number prefixes, ABL ablative, ALOC animate location, AT location 'at, by', COND conditional, CONT location with contact, EMPH emphatic, ERG ergative, F feminine, GEN1 first Genitive, GEN2 second genitive, ICVB imperfective converb, INF infinitive, M masculine, NHPL non-human plural, OBL oblique stem marker, PL plural, POT potential, PRS present, PST past, PTCP participle, PURP purposive, QUOT quotative, SG singular, SPR location 'on', UWPST past unwitnessed

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