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**Towards a canon for negation**  
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1. INTRODUCTION

The study of negation under the language documentation rubric (e.g. Woodbury 2003) involves the analysis of data from a stratified corpus of discourse. The data in such corpora are most representative of actual language use and provide the firmest empirical foundation on which to base a linguistic analysis (and subsequent hypotheses for theoretical consideration). However, there are both clear benefits and limitations of such an approach when investigating the concept of linguistic negation. The central problem lies in how the field linguist decides what phenomena fall within the domain of ‘negation’ and how to rationalize the attribution of the label NEGATIVE where the strictly logical opposition between  $p$  and  $\sim p$  (where  $p$  is a proposition) is an oversimplification of the gradient properties of this linguistic category. In this paper I discuss how negation diagnostics, elicitation and discourse data relate to the canon of negation, and demonstrate that central (canonical) and peripheral views (non-canonical) of this linguistic phenomenon help to eradicate the hard boundaries usually associated with negation.

2. STRUCTURAL PROPERTIES OF NEGATIVES

Unlike language-particular grammatical categories such as past tense or feminine gender, which are determined in relation to other distinctions encoded in a particular language (e.g. non-past and masculine gender), NEGATION is a superordinate category present in every language. A negative construction is minimally defined by the presence of a negative morpheme or morphemes, but is commonly indicated by a combination of morphemes.<sup>1</sup> Linguists identify negative constructions in relation to affirmative ones, yet affirmation is never overtly marked to contrast negation, with all instances of ‘affirmation marking’ identified in the typological literature with data best characterised as having some sort of emphatic function.<sup>2</sup> These contrasts demonstrate that negation is structurally unlike other grammatical categories in the consistency of its markedness. Such consistency allows for negatives to be characterised in terms of the type of asymmetries that exist between them and affirmative counterparts.

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<sup>1</sup> There are exceptional cases where a negative construction is indicated by the absence of morphology but these cases are rare and can be motivated by independent historical changes within individual languages.

<sup>2</sup> The use of the term ‘emphatic’ in grammatical descriptions is frequently vague, and used in relation to material outside of its discourse context. It is therefore often difficult to determine what aspect of a construction is being emphasised.

In the most common instances of SYMMETRIC NEGATION (Miestamo 2005) there is an analogous relationship between the presence of the category of negation and some structural index, usually a negative particle, affix or auxiliary. Typological studies into negation featuring quantitative data on the form of negative morphemes consistently report that invariant particles are the most common form of negator in verbal clauses (Dahl 1979, Dryer 1989, Miestamo 2005), followed by affixes and negative auxiliaries. Negatives characterised by symmetry with a ‘counterpart’ affirmative construction are only differentiated from affirmatives by the presence of discrete negative morphology.<sup>3</sup> For instance, the following examples from Ket are symmetric in the sense that the only formal difference between is the presence of the negative particle *bənʹ* (Miestamo 2005: 52).<sup>4</sup>

- (1) Ket (Yeniseian, Russia)  
*at bu (t)-ʹuveruyavet*  
 1SG 3SG 1SG-love  
 ‘I love her.’  
 (Werner 1997: 181)
- (2) Ket (Yeniseian, Russia)  
*at bu bənʹ (t)-ʹuveruyavet*  
 1SG 3SG NEG 1SG-love  
 ‘I don’t love her.’  
 (Werner 1997: 181)

In contrast, the examples from Korean in (3) and (4) illustrate ASYMMETRIC NEGATION (Miestamo 2005: 80).

- (3) Korean (Korean; North Korean, South Korea)  
*yong-un mayil TV-lul po-n-ta*  
 Yong-TOP every.day TV-OBJ see-PRES-DECL.PLAIN  
 ‘Yong watches TV every day.’  
 (Chang 1996: 77)

Clearly, the structural differences between (3) and (4) are much more complex than simply the addition of the negative prefix *an-*. Other, less quantifiable differences are also evident. Ignoring the presence/absence of *mayil* ‘everyday’, there are differences in the inflection of both the lexical verb *po* ‘see’ and the

<sup>3</sup> Of course, all negatives are asymmetric in some sense since otherwise they would be identical to affirmatives.

<sup>4</sup> The abbreviations used in this paper are: 1 = first-person, 3 = third-person, ABS = absolutive, ALMOST = almost negator, ART = article, AUX = auxiliary, DAT = dative, DECL = declarative, ERG = ergative, GEN = genitive, IMPF = imperfective, INS = insistence, MABL = modal ablative, NEG = negative, NOM = nominative, OBJ = object, PLAIN = plain (level of politeness), POL = polite(ness), POSS = possessive, PREP = preposition, PRES = present tense, PROHIB = prohibitive, PST = past tense, SG = singular, SUBJ = subject, SUSP = suspensive, TOP = topic.

nominal phrase expressing the animate participant. There are also contrasts in terms of the grammatical marking of politeness and in the presence/absence of the auxiliary *ha*.<sup>5</sup>

- (4) Korean (Korean; North Korean, South Korea)  
*yong-i TV-lul po-ci an-ha-yo*  
 Yong-SUBJ TV-OBJ see-SUSP NEG-AUX-POL  
 ‘Yong doesn’t watch TV.’  
 (Chang 1996: 101)

Miestamo (2005) has demonstrated that in the negation of declarative verbal main clauses (i.e. ‘standard negation’ or SN), symmetric negation is the most common type of negation pattern cross-linguistically. Of the 179 languages in his sample, 72 (40%) always exhibited symmetric SN, 31 (17%) always exhibited asymmetric SN, and 76 (42%) exhibited SN of both the symmetric type and the asymmetric type. According to these figures, symmetry is found in 83% of languages and asymmetry is found in 60% of languages.<sup>6</sup> These figures must be contextualised within his methodology: his approach is one in which an affirmative construction is taken as the starting point and then ‘negated’ to arrive at the construction for direct comparison. It implicitly requires the use of elicitation as a data collection method in order to facilitate the identification of negative morphemes.

Given that negative constructions have a different distribution to affirmative ones in discourse (Givón 1978) and that they may encode significantly different semantic distinctions to those affirmative constructions they correspond to (Contini-Morava 1989), this seems to be a methodologically undesirable approach to determining the non-structural properties of the category. Despite this issue, Miestamo (2005) is correct in relating the structural properties of negatives in relation to ‘counterpart’ affirmatives because this is the only way the morphology or suprasegmental features associated with negative constructions can be identified as being ‘negative’ in nature.

One way to combat the methodological prejudices of eliciting negatives is to approach the study of negation by looking first at negatives in discourse - rather than ‘deriving’ them from affirmatives. Such a methodology is in line with the principles underlying current approaches to language documentation and description. However, given the complex CONTRIBUTIVE nature of indices of negation (either morphological or suprasegmental) to the general meaning ‘negative’ and the interaction between negation and other grammatical categories (as demonstrated by (3) and (4) above), the elicitation of affirmative counterparts seems to be the only reasonable starting point from which to draw any conclusions about the structural properties of negatives. The approach taken here also advocates viewing negative strategies in a constructional sense, in which it is

<sup>5</sup> Asymmetric negation can be classified into several subtypes, see Miestamo (2005) for details.

<sup>6</sup> It remains to be seen if similar figures would be applicable to examples beyond the domain of standard negation.

the NEGATIVE STRATEGIES a language uses, rather than the individual negative morphemes, that contribute to negative meaning.

### 3. NEGATION AS A FUZZY CATEGORY

In both philosophical and typological studies of negation, propositional logic is typically applied to characterise the negative properties of a clause. This technique relies on the assignation of TRUTH VALUES to propositions and is based around the familiar-looking truth table in Figure 1, where  $p$  is a proposition,  $\sim$  indicates negation, and T and F indicate the truth values *true* and *false* respectively.

**Figure 1**  
Truth table

$p$	$\sim p$
T	F
F	T

Assigning truth values to predicates has been shown to be useful in determining the negative counterparts to declarative main clauses (Miestamo 2005: 42), but is a tool restricted to propositions, i.e. abstract expressions that are asserted as being true. When investigating the use of negatives in constructions that do not have propositional content, problems arise. For instance, when attempting to define the relationship between comparable affirmative and negative imperatives, it is no longer possible to employ this tool since imperatives cannot be assigned a truth value (e.g. it is not possible to claim that ‘Don’t eat’ is either true or false). In some languages such as English and Fongbe, one way of identifying the ‘negator’ in the imperative is through similarity with the strategy used to express prohibitions and negative declarative main clauses, i.e. the support item *do* and the negative clitic *n’t* in English, and the negative particle *mà* in Fongbe, as in (5) and (6).

- (5) Fongbe (Kwa, Niger-Congo; Benin)

*Mà qù ò*  
NEG eat INS  
‘Don’t eat!’ (with insistence)  
(Lefebvre and Brousseau 2002: 120)

- (6) Fongbe (Kwa, Niger-Congo; Benin)

*Kòkú mà wá*  
Koku NEG come  
‘Koku has not arrived.’  
(Lefebvre and Brousseau 2002: 120)

However, in languages where this isn't the case the linguist is left to identify negation as a category on some other principled ground. For instance in Lezgian, negative imperatives are indicated by a PROHIBITIVE suffix *-mir* on the lexical verb (7), while in declaratives like (8) the negative verbal suffix has the form *-č*.

- (7) Lezgian (Nakh-Daghestanian; Azerbaijan, Russia)  
*Ja bala wuna am pačah.di-z gu-mir*  
 PT child you.ERG it.ABS king-DAT give-PROHIB  
 'Child, don't give it to the king.'  
 (Haspelmath 1993: 149)

- (8) Lezgian (Nakh-Daghestanian; Azerbaijan, Russia)  
*Kerekul.di-n siw ač̣eax-zawa-č-ir*  
 magpie-GEN mouth stop-IMPF-NEG-PST  
 'The magpie's mouth did not stop.'  
 (Haspelmath 1993: 445-6)

As a consequence of variation of this kind, there is a danger that those involved in language documentation and description will determine negatives in terms of their translation equivalents in the lingua franca of fieldwork, or through introspection of their native language(s).

Problems associated with such a methodology are fairly common. For instance, in some languages, notably those from the Oceanic family, it is apparent that the translation equivalents of English Negative Imperatives do not have the properties of a prototypical negative in that they contain a verb with a similar meaning to *refrain* (9) or *avoid* (10) in English.

- (9) Teop (Oceanic, Austronesian; Solomon Islands)  
*Goe te-a ani a iana te-naa*  
 refrain PREP-ART eat ART fish PREP-1SG  
 'Don't eat my fish.' (lit. Refrain from eating my fish.)  
 (Mosel and Spriggs 1999: 56)

- (10) Teop (Oceanic, Austronesian; Solomon Islands)  
*Goe te-a babara ni o moroko te-ve*  
 avoid PREP-ART surprised APPL ART talk PREP-3SG  
 'Don't be surprised by this talk.' (lit. Avoid being surprised by this talk.)  
 (Mosel and Spriggs 1999: 56)

The reverse situation appears to hold in Kayardild where an explicitly negative construction purportedly carries entailments that are not carried by the English translation, as in (11).

- (11) Kayardild (Tangik, Australian; Australia)  
*bulkurdudu ngjin-jina baa-nangarra kurthurr-ina*  
 crocodile.NOM 1SG.POSS-MABL bite-ALMOST shin-MABL  
 ‘A crocodile almost bit me on the leg.’  
 (Evans 1995: 261)

According to Evans (1995: 261), the ALMOST NEGATOR in Kayardild is used with actions that almost happened at some point in the past. These are usually undesirable but may also be a desirable course of action that the subject is known not have carried out. In terms of negation, the essential semantic property of such constructions is that the event expressed was expected to happen, but didn’t.

Data of this kind raise the question of on what grounds negation can be formally defined; of the examples in (6)-(12), which if any should be characterised as exhibiting negation? Even at an intuitive level some of these examples are more controversially described as negatives than the others. In traditional approaches to the topic, it is crucial to characterise constructions as being explicitly negative or non-negative. However, it may be the case that the hard boundaries that logic dictates for human language may be unrealistic given the inferential nature of language use, resulting in type of fuzzy grammar identified in theoretical models of language in the last century (Aarts, Denison, Keizer and Popova 2004).

The data in this section demonstrate that the properties of negation are determined by an abstract set of discourse principles that cannot be adequately captured by a singular categorical definition or the strictly logical opposition between  $p$  and  $\sim p$ . Linguistic definitions of negation are frequently too vague to be usable by the fieldworker or so restricted as to be applicable to only a subset of constructions. Consequently, there is a danger that the naïve linguist may inadvertently ignore peripheral instances of negation or describe constructions as ‘negative’ that are best described in some other way.

#### 4. NEGATION DIAGNOSTICS

Formal attempts to capture what it means to be a negative construction have concerned the formation of NEGATION DIAGNOSTICS. Perhaps the best well known diagnostics for any modern language are those devised by Klima (1964) for English. Similar principles have also been applied to Dutch (Kraak 1966; Seuren 1967), Iraqi Arabic (Bakir 1970), German (Stickel 1970), French (Attal 1971) and Spanish (Ibañez 1972). More recently de Haan (1997: 34-41) discusses negation diagnostics in relation to Yavapai (Yuman), Slave (Athapaskan) and Yoruba (Niger-Congo).

The diagnostics identified in these papers cannot easily be remodelled for under-described languages for a number of structural, semantic and methodological reasons. Thus there are a number of problems with these diagnostics in terms of their applicability cross-linguistically. Due to the confines of space, discussion here is necessarily brief. Perhaps the most striking issue in

relation to defining negation is that all of the major tests require reference to negation itself and therefore are somewhat circular. For instance, three of the most important tests identified by Klima for clausal negation in English rely on the identification of negative tags, negative conjunctions and negative constituents. This invites the question of whether it is possible to define negation as a superordinate category without reliance on reference its subtypes. In addition not all languages have the types of structures identified in the tests. In this sense the tests are language specific and it is not always clear how they should be revised or remodelled for languages that don't have such features.

## 5. A CANONICAL APPROACH TO NEGATION

The issues identified so far demonstrate that when dealing with negation in either documentation or theory, the linguist is confronted by a paradox between the semantico-pragmatic independence of negation from counterpart affirmatives and the structural asymmetries that define the formal marking of the category. To combat these problems, I advocate a canonical approach to negation (cf. Corbett 2006) in order to calibrate cross-linguistic variation within a theoretical space of possibilities. Establishing a canon for negation aims to provide a 'starting point' for the analysis of negation and guidelines to the documenter/describer/theorist based on typologically informed observations. As Corbett (2006: 9) stresses in proposing a canon for agreement, it is important to point out that those instances that are closest to the canon, that is, those that represent the clearest and best examples of negation, may not be the most frequent. In fact, while some of the canonical aspects outlined here are typologically the most frequent properties of negatives, others are typologically restricted. Canonical instances of negation are easier to identify than non-canonical instances of negation. Therefore, when a 'negative' strategy is characterised by a number of non-canonical traits, it is likely that it has the potential to be controversially perceived as an instance of negation. Far from being an undesirable outcome, this is a welcome aspect of the canonical approach as it allows for the fuzzy boundaries characteristic of language use, but also for rigorous observation of recurrent patterns across the various properties of the canon.

Canonical properties alone do not seem to be sufficient criteria for claiming that something is an instance of negation, and therefore a very broad definition of negation is needed as a starting point from which to apply the constraints on the canon. For this reason, a general working definition of negation is formulated in (12). Note that this definition is put forward with the proviso that it may need revision following fine-tuning of the constraints on the canon listed below.

- (12) *Negation is a superordinate grammatical category that models a direct contrast between a state of affairs in some unrealised world (the concept(s) expressed by a counterpart affirmative) in relation to the real world or a different unrealised world, projected as a perception or belief of the speaker.*

For the purposes of this definition:

- (i) A direct contrast refers minimally to contrasts with single logical oppositions (i.e. where truth values are applicable), but also necessarily includes contrasts where multiple alternatives are potentially possible. The semantic feature on which a contrast is based can be referred to as the NEGATION PIVOT.
- (ii) Counterpart affirmatives are not necessarily structural counterparts, but rather exhibit a meaning contrast that is defined by virtue of the negation pivot. In this definition, negatives are not seen as derived directly from affirmatives.

### *5.1 Constraints on the general definition of negation*

Identified below are 21 canonical aspects. Each can be characterised as belonging to one of four broad categories: constraints are characterised as primarily applying to structure, applicability, scope or pragmatic factors. In the constraints below, the arrow symbol (>) signifies the relationship ‘more canonical than’.

It is worth pointing out that while one may want to try to confine canonical aspects of negation to structural ones, this is of course nonsensical given the importance of scope to the use of negatives and also the discourse asymmetries between the uses of affirmatives and uses of negatives. These canonical aspects of negation are not proposed as an exhaustive list of constraints, but rather the first step towards identifying the range of variation identified across languages.

#### **Structure constraints**

- C-1: *structurally symmetric* > *structurally asymmetric*
- C-2: *free negator* > *dependent negator*
- C-3: *segmentable negator* > *non-segmentable negator*
- C-4: *few negative morphs per strategy* > *multiple negative morphs per strategy*
- C-5: *negative marker close to the negated item* > *negative marker distant from negated item*
- C-6: *negative marker before negated item* > *negative marker after the negated item*

#### **Applicability constraints**

- C-7: *obligatory* > *optional*
- C-8: *general* > *restricted*
- C-9: *productive* > *non productive*
- C-10: *multiple negative functions* > *restricted negative functions*

#### **Scope constraints**

- C-11: *scope structurally unambiguous* > *scope structurally ambiguous*
- C-12: *suprasegmental features not contributive* > *suprasegmental features contributive*
- C-13: *negators logically cancellable* > *negators non-cancellable*
- C-14: *scope internal to clause* > *scope external to clause*
- C-15: *negated propositional content* > *negated subpart of proposition*
- C-16: *focus on non-occurrence* > *focus other parameter*

**Pragmatic constraints**

C-17: *direct* > *indirect* > *implicit*

C-18: *factual/assertive* > *epistemic*

C-19: *informative* > *contrastive*

C-20: *given referent, new predicate* > *given predicate, new referent*

C-21: *presuppositions do not affect form of negator* > *presuppositions affect form of negator*

*5.2 Application of the constraints*

Constraints C-1 to C6 are structural in the sense that they refer directly to the form or position of negative morphemes/strategies. Combined, they point to canonical negation being symmetric (C-1), marked by a single invariant negative particle (C-2, C-3, C-4) that is close to and occurs before the element within the scope of negation (C-5, C-6).

Applicability constraints concern the pervasiveness of a particular morpheme/strategy throughout a language's negative system. In canonical negation a morpheme/strategy is obligatory (C-7), general (C-8), productive (C-9) and can be used for multiple negative functions, e.g. for negative imperatives *and* negative verbal declaratives, etc. (C-10).

Constraints pertaining to scope concern the ability to identify which elements within a construction fall under the semantic effects of negation and which don't. Scope is structurally unambiguous in canonical negation (C-11) and suprasegmental features do not contribute to the meaning of negation (C-12). Where more than one negator is present, they are logically cancellable (C-13). The scope of negation is internal to the clause in which the negative strategy applies (C-14) and it negates propositional content, rather than a subpart of the proposition (C-15). The semantic focus of the negative morpheme is on non-occurrence or non-existence of a state of affairs, rather than on some other parameter (C-16).

Pragmatic aspects of canonical negation concern the use of negatives in discourse. Again, it should be clear that these constraints set up a theoretical space of possibilities and do not make claims about how common the canonical aspects of negation are in relation to non-canonical ones. In this way, canonical negatives concern the direct, rather than implicit (C-17) and are asserted or involve the factual presentation of information (C-18). They are neutrally informative rather than contrastive (C-19) and have a given referent with a new predicate (C-20). Finally, in canonical negation, presuppositions do not affect the selection of a particular negator, while in less canonical instances they do (C-21).

**6. CONCLUSION**

In this paper, 21 constraints on canonical negation have been presented together with a general definition of negation from which to start calibrating negative constructions cross-linguistically. It has been shown that the traditional hard boundaries used so far in linguistic theory to characterise negation are inadequate

and problematic for the documenter/describer, yet can be modified within the framework of the canon to provide a sophisticated tool for theory building and data collection. The (sometimes) complex structural relationship between negative and affirmative means that negative (and not affirmative) constructions should be taken as the starting point for any discussion of negation, and that discourse data will often need to be supplemented with elicited data in order to fully understand the structural and semantic asymmetries between negative and affirmative constructions. It is proposed that a canonical approach to negation can help to demonstrate the relationship between central and peripheral instances of the category, with a view to understanding this complex phenomenon with more clarity.

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