

CROSS-LINGUISTIC VARIATION IN SENTENTIAL NEGATION



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A LITTLE ABOUT ME

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NEGATION IS CORE TO HUMAN LANGUAGE

- (1) “negation is a *sine qua non* [an essential condition] of every human language but is absent from otherwise complex systems of animal communication [...and] is what makes us human, imbuing us with the capacity to deny, to contradict, to misrepresent, to lie and to convey irony” (Horn, 2010: 1)

NEGATION IS CORE TO HUMAN LANGUAGE

- (2) In propositional logic, negation is an operator that reverses the truth value of a proposition p to $\neg p$ (Miestamo, 2005: 3)

PRELIMINARIES

TYPES OF NEGATION

We can identify three kinds of negation:

i. **sentential negation** – applies to full clauses or complete propositions

(3) [He didn't win]

ii. **constituent negation** – applies to a particular part of the clause

(4) He won [**not** so long ago]

iii. **lexical negation** – applies at the word level

(5) **un**happy, **im**possible

CROSS-LINGUISTIC EXAMPLES

(6) **ENGLISH** (constructed examples)

a. The dog has eaten the bone.

b. The dog hasn't eaten the bone.

(7) **FINNISH** (Uralic, Finnic) (Miestamo, 2005: 3)

a. nuku -n

sleep-1SG

'I am sleeping.'

b. e-n nuku

NEG-1SG sleep

'I am not sleeping.'

CROSS-LINGUISTIC EXAMPLES

- (8) **NOOTKA** (Wakashan, Pacific Northwest of USA, Canada) (Rose, 1981: 103 in Mithun, 1999: 189; gloss slightly adapted)

wik-[?]iš ta-[?]ił

NEG-IND drift-in.house

‘She’s not sick.’

CROSS-LINGUISTIC EXAMPLES

(9) **WARLPIRI** (Pama–Nyungan, Ngarrkic) (Hale, 1968;
gloss slightly adapted)

lawa **kula**-ka-na pula-mi (natyu)

negative NEG-AUX-1SG shout-NONPAST (I)

'I am not shouting.'

'It is negative (i.e., not so) that I am shouting.'

CROSS-LINGUISTIC EXAMPLES

(10) **CAIRENE EGYPTIAN ARABIC** (Afro-Asiatic, Semitic)
(Soltan, 2014)

maa-saafir-t-i-š

NEG-travel-1SG-FV-NEG

'I did not travel.'

FIRST OBSERVATIONS

The examples just seen are evidence of two things:

1. totally unrelated languages (in this case, English and Finnish) can exhibit similar ways of expressing sentential negation. As we have seen, both of these languages involves a negativised auxiliary followed by a bare form lexical verb;
2. there is great variety in the way languages can express sentential negation:

Nootka: negative predicate + lexical verb

Warlpiri: negative predicate + negative auxiliary + lexical verb

Cairene Egyptian Arabic: affixation, in this case, a circumfix

NEGATIVE CONCORD

- A common phenomenon across languages is that of Negative Concord (NC)
- Also referred to as double negation or multiple negation (Anderwald, 2005)
- It is when two negative morphemes co-occur in a single clause, not cancelling each other out, but creating an overall negative reading.
- Modern English, like other modern Western Germanic languages, does not permit NC (except in a number of non-standard dialects).
- This was not always the case, however, as Old English required NC:

(11) **OLD ENGLISH** (Masayuki, 2005: 40)

Ne worhte he þeah **nane** wundra openlice
not wrought he though no miracles openly
'He did not openly make any miracles.'
[Lit.: '*He did not openly make no miracles.']

NEGATIVE CONCORD

- An example of a modern language with NC is Russian, which requires the negator “не” [nie] to co-occur with negativised wh-words (or k-words in the case of Russian, following Brown, 1999) in a clause.

(12) ja **nikuda** **ne** po-jd-u zavtra
I to.nowhere not FUT-go-1SG tomorrow
'I won't go anywhere tomorrow.'

(13) Ivan **nigde** **ni** s **kem** *(**ne**) tancu-et
Ivan nowhere no with who NEG dance.PRES-3SG
'Ivan doesn't dance anywhere with anyone.'
[Lit.: '*Ivan doesn't dance nowhere with no one.']

EXPLAINING NC (with a bit of theory...sorry)

- NC can be explained from the perspective of Agree (Zeijlstra, 2004; 2008; Biberauer & Zeijlstra, 2012a; 2012b):
 - > a negative constituent carries an uninterpretable feature [uNEG]
 - > the clausal negator bears an interpretable feature [iNEG]
- In the case of Russian, the *ne* (i.e., the clausal negator) carries [iNeg] and the negative k-word carries [uNeg], which must be checked by the [iNEG] feature of the clausal negator to permit the derivation to converge.
- This explains why sentences with negative k-words are ungrammatical when the clausal negator *ne* is omitted.

NEGATIVE POLARITY ITEMS

- Modern Standard English does not tolerate NC and instead makes use of Negative Polarity Items (NPIs) in sentences with SN. NPIs in English include *anyone, anywhere, anything*, etc.

(14) John doesn't like anyone.

- In non-standard dialects of English, NC is permitted, whereas, in the strict sense, NC in Standard English creates a double negative with a positive interpretation:

(15) (*)John doesn't like nobody.

EXPLAINING NPIs (again with a bit of theory)

- In English, the Neg head is non-overt and contains a [uNeg] feature.
- This position requires overt content in at PF
- This must be satisfied either by the negator *not* / *n't* or a n-pronoun (e.g. *no one*, *nothing*, etc.), both of which carry an [iNeg] feature being merged into [Spec,NegP].
- Since both *not* and n-pronouns carry [iNeg] in English, only one is required in a clause
- This explains why Standard English selects NPIs when the clausal negator is present, and why an n-pronoun is required in patterns where there is a no negator, but a negative reading is intended.

NEGATION IN MODERN STANDARD ENGLISH (AND RUSSIAN)

NegP

- It is a common assumption that English sentential negation is expressed with its own functional projection (NegP) that sits between TP and vP and that the negator *not* is in the specifier position of NegP (Poole, 2011).
- Evidence for this can be found in sententially-negative sentences with a series of auxiliaries. In each case, the negator consistently follows the first auxiliary:
 - (16) a. Billy will **not** be attending school tomorrow.
 - b. Billy has **not** been attending school recently.
 - c. Billy would **not** have attended school unless he was forced.
 - d. Billy might **not** have been wanting to attend school.

NegP

- There is debate whether *not* sits in the specifier of NegP or as its head.
- Brown (1999), in an analysis of Russian, proposes the negator “не” [nje] to be in the head position of NegP, with the specifier position being reserved for a non-overt negative operator (Neg-Op), claiming this is needed to “block antecedent-government of the WH-[copy] in [an] embedded clause” when there is a raised wh-word:

(17) **RUSSIAN** (Indo-European, Slavic) (Brown, 1999: 25)

*Gde_i ty [_{NegP} **Neg-Op** [_{Neg} **ne**]] skazal, čto Ivan ukral den'gi ⟨gde⟩_i
where_i you NEG said that Ivan stole money where_i

‘*Where didn’t you say that Ivan stole the money?’

NegP

- In Russian, as in English, (18) would be grammatical if the sentence did not contain NegP, thus allowing the raising of the interrogative to [Spec,CP]:

(18) **RUSSIAN** (Indo-European, Slavic) (Brown, 1999: 25)

Gde_i ty skazal, čto Ivan ukral den'gi <gde>

where_i you said that Ivan stole money ~~where_i~~

'Where did you say that Ivan stole the money?'

A TYPOLOGY OF NEGATION

TYPES

- Dahl (1979) identifies a three-way typology of sentential negation:
 - i. morphologically;
 - ii. by means of an auxiliary;
 - iii. by the addition of an adverb-like negative particle.
- In addition to these three main types, Dahl (1979) and Payne (1985) list some rarer means of denoting SN:
 - iv. reduplication (Niger-Congo languages, e.g. Eleme)
 - v. tone change (Niger-Congo languages, e.g. Eleme, Engenni, Mano)
 - vi. negation without an overt negative marker, whereby the marking of tense is omitted (Dravidian languages, India)

FREQUENCY OF TYPES

- According to Dryer's 2013 sample of 1157 languages:
 - > the most common means of SN expression is adverb-like particles, found in 502 languages (or 43% of the sample).
 - > next, is morphological negation, found in 395 languages (accounting for 34%) of the sample.
 - > negative auxiliaries occurred in only 47 languages (or 4%), indicating this type of negation is much less common cross-linguistically.

FREQUENCY OF TYPES

- > there are 71 cases in the sample where the status of the negative word is unclear – either a negative auxiliary or a particle
- > there are 21 languages which exhibit variation between a negative word and affix
- > and 119 languages that demonstrate double negation

SIDE STEP...a bit of morphology!

- There are four types of affixes that can attach to a **base**:
 - i. prefix (**un**impressed, **mis**inform)
 - ii. suffix (attain**able**, talk**ed**)
 - iii. infix (fan**bloody**tastic, cup**s**ful)
 - iv. circumfix (**em**bolden**en**, a-hun**ting**)
- Many languages make greater use of infixation and circumfixation than English

MORPHOLOGICAL NEGATION

- Many languages expressed SN with affixation or stem modification.
- These include Turkish, Japanese, Czech, Lezgian, Chukchi and Korean.

(19) **KOREAN** (Koreanic) (Kim, 2000: 1)

John-un ppang-ul **an**-mek-ess-ta

John-TOP bread-ACC NEG-eat-PST-DECL

‘John didn’t eat the bread.’

(20) **CHUKCHI** (Chukotko-Kamchatkan) (Kämpfe & Volodin 1995: 69)

a-nto-**ka** itə-rkən

NEG-go.out-NEG be-DUR

‘(S)he does not go out.’

NEGATION WITH AN AUXILIARY

- Languages of this type employ either a special negative auxiliary or by means of an auxiliary with a NEG affix.
- A prototypical example is Finnish; some lesser-known languages include Evenki and Tongan and Forest Enets:

(21) **FINNISH** (Uralic, Finnic) (Miestamo, 2005: 3)

a. nuku-n

sleep-1SG

‘I am sleeping.’

b. e-n nuku

NEG-1SG sleep

‘I am not sleeping.’

NEGATION WITH AN AUXILIARY

(22) **EVENKI** (Tungusic) (Payne, 1985: 213)

bi dukuwūn-ma **ə-cə-w** duku-ra

I letter-ACC NEG-PAST-1SG write-PART

'I didn't write a letter'

(23) **FOREST ENETS** (Uralic, Samoyedic) (Siegl 2015: 47)

mud' Dudinka-xan **ńi-đ?** d'iri-?

1SG Dudinka-LOC.SG NEG-1SG live-CNG

'I do not live in Dudinka.'

NEGATION WITH AN ADVERB-LIKE PARTICLE

- Some languages and language groupings, including English, French, Nordic and Indonesian, express SN by means of a particle which exhibits adverb-like behaviour in its positioning around the verb (Kim, 2000).

(24) **SWEDISH** (Indo-European, North Germanic) (Holmberg and Platzack, 1988)
Jan köpte **inte** boken.

Jan bought not books
'Jan didn't buy books.'

(25) **INDONESIAN** (Austronesian, Sundic) (Sneddon, 1996: 195)

mereka **tidak** menolong kami

they NEG help US.EXCL

'They didn't help us.'

NEGATION WITH A NEGATIVE CLITIC

- Kim (2000: 163) distinguishes the adverb-like particle from a clitic-like element as found in Italian and Spanish.

(26) **ITALIAN** (Indo European, Romance) (Zanuttini, 1991)

Gianni **non** legge articoli di sintassi.

Gianni NEG reads articles of syntax.

‘Gianni doesn’t read syntax articles.’

- In languages of this type, e.g. Italian or Spanish, the negator precedes the verb whether it is an auxiliary or a main verb, and this happens whether the verb is finite or non-finite, or in embedded or constituent negation.

LANGUAGES WITH TONAL NEGATION

(30) **MANO** (Eastern Mande, Niger-Congo) (Becker-Donner 1965: 44)

a. \bar{n} yídò
1SG.DECL know
'I know.'

b. \hat{n} yídò.
1SG.NEG know
'I don't know.'

LANGUAGES WITH MORE THAN ONE TYPE OF NEGATION

- Returning to Dryer's (2013) sample, 21 languages exhibit an alternation between a negative particle and an affix. One such example is Rama (spoken in Nicaragua) which uses both a preverbal negative particle and a negative suffix.

(27) **RAMA** (Chibchan) (Grinevald, 1988: 183, 185)

- a. nkiikna-lut uut **aa** kain-i
man-PL dory NEG make-TNS
'The men don't make a dory.'
- b. i-sik-**taama**
3-arrive-NEG
'He did not arrive.'

LANGUAGES WITH MORE THAN ONE TYPE OF NEGATION

- Mandarin also exhibits a difference in negator choice depending on time reference:

(28) **MANDARIN** (Sino-Tibetan, Sinitic) (Ernst, 1995)

- | | | | |
|----|---|----|---|
| a. | Wǒ bù chī mùmguā
I NEG eat papaya
'I don't eat papaya.' | b. | Wǒ chī le mùmguā
I eat PERF papaya
'I ate papaya' |
| c. | *Wǒ bù chī le mùmguā
I NEG eat perf papaya
'*I not ate papaya.' | d. | Wǒ méiyǒu chī mùmguā
I NEG-AUX eat papaya
'I didn't eat papaya.' |

LANGUAGES WITH MORE THAN ONE NEGATOR

- According to samples taken by Dryer (2013), Van Alsenoy (2014) and Vossen (2016), SN is most commonly expressed with only one negator (occurring 83%, 86%, 83% respectively in the samples).
- However, there remains a number of languages that use more than one negator to express SN (usually two, but there are cases of languages exhibiting triple and quadruple negators – see van der Auwera & Krasnoukhova, 2020), although this may not always be obligatorily.

LANGUAGES WITH MORE THAN ONE NEGATOR

(29) **FRENCH** (Indo-European, Romance)

Les enfants **ne** mangent **pas** les pommes.

the children NEG eat NEG the apples.

‘(The) children don’t eat (the) apples.’

- In colloquial French, however, the first NEG is omitted.
- The question centres around which of the two negators actually results in SN.
- To answer this, we need to turn to the so-called Jespersen Cycle (sometimes called the Negative Cycle).

LANGUAGES WITH MORE THAN ONE NEGATOR

- The *ne* negator was passed down from Latin.
- The *pas* negator originated in Old French as a minimiser, literally meaning 'step' used for pragmatic effects.
- Over time, this minimising effect become less transparent but remained as part of the construction and in Standard French even became obligatory and causing a double negation.

LANGUAGES WITH MORE THAN ONE NEGATOR

- Jespersen (1917) provides an illustration of this diachronic process (cited from Larrivée (2011))

(31) Stage 1: **EARLY FRENCH**

Jeo **ne** dis

I NEG say.PRES.1SG

'I don't say.'

(32) Stage 2: **MIDDLE FRENCH** (and in **MODERN STANDARD FRENCH**)

Je **ne** dis **pas**

I NEG say.PRES.1SG NEG

(33) Stage 3: **CONTEMPORARY INFORMAL FRENCH**

Je dis **pas**

I say.PRES.1SG NEG

LANGUAGES WITH MORE THAN ONE NEGATOR

(34) **CAIRENE EGYPTIAN ARABIC** (Afro-Asiatic, Semitic) (Soltan, 2014)

maa-saafir-t-i-š

NEG-travel-1SG-FV-NEG

'I did not travel.'

- Is this a circumfix?
- Evidence for the fact -š is not part of a circumfixal negator comes from sentences containing the NPI *ʕumr* ('ever') which in the presence of -š renders the sentence ungrammatical when the NPI is in pre-Neg position but not post-:

(35) a. *ʕumr*-ii **maa** saafir-t(*š) Masr

ever-my NEG-travelled-1SG-(*NEG) Egypt

b. **maa** saafir-t*(š) Masr *ʕumr*-ii

NEG-travelled-1SG-*(NEG) Egypt ever-my

Both: 'I have never travelled to Egypt.'

LANGUAGES WITH MORE THAN ONE NEGATOR

(36) **NAVAJO** (Na-Dené, Athabaskan) (Young & Morgan, 1987:57)

Naabeehó dóó Dziłgháá'í danlínígíí **doo** hózhó da'ahidiits'a' **da**.

Navajo and White.Mtn.Apache PL-3-be NEG well PL-recip-3-understand NEG

'The Navajos and the White Mountain Apaches cannot understand each other very well.'

- Young and Morgan (1992) term this negation construction a circumclitic.

WORD ORDER TYPOLOGY OF NEGATORS

- Dahl (1979) notes that negators tend to be positioned as close to the finite verb as possible.
- And Jespersen (1917) first observed that there is tendency for negators to precede the verb (or indeed any word that is negativised).
- This led Horn (1989, revised 2001) to propose the Neg-First Principle, which is supported by data from typological surveys (e.g. Dahl, 1979 and Dryer, 2013) particularly with particle-type negators and that with such type of negation canonical constituent order has little relevance.

WORD ORDER TYPOLOGY OF NEGATORS

- (37) **OKLAHOMA CHEROKEE** (Iroquoian) (Montgomery-Anderson, 2008: 297)

context-dependent free constituent order

thla yi-aki-anvhtha

NEG IRR-1B-know

'I don't know.'

- (38) **MAUNG** (Australian, Iwaidjan) (Capell and Hinch 1970: 67)

SVO

marig ni-udba-ji

NEG 1SG>3-put-IRR.NPST

'I do not [/cannot] put it.'

WORD ORDER TYPOLOGY OF NEGATORS

(39) **MAORI** (Austronesia, Polynesian) (Bauer 1993: 140)

VSO

kaahore tatou e haere ana aapoopoo

NEG 1PL.INCL TNS.CONT go TNS.CONT tomorrow

‘We are not going tomorrow.’

WORD ORDER TYPOLOGY OF NEGATORS

- It is important remember that the Neg-First Principle is only a *tendency*, and the Chadic language of Musgu provides such evidence:

(40) **MUSGU** (Afro-Asiatic, Chadic) (Meyer-Bahlburg 1972: 186)

à sədà cécébè **pày**

3SG.M know jackal NEG

‘He didn't see the jackal.’

WORD ORDER TYPOLOGY OF NEGATORS

- With morphological negation, although Dryer's sample contains a higher number of languages with suffixal negators, the margin between suffixes and prefixes is narrow: 162 prefixes to 202 suffixes.

SYMMETRY AND ASYMMETRY IN NEGATION PATTERNS

- Miestamo (2005, 2017) addresses (a)symmetry in SN.
- In symmetric negatives, a negative sentence will show no structural variation with that of an affirmative sentence
- In an asymmetric negative, structural changes do occur.
- Miestamo (2017: 9) provides the following examples from Swedish (symmetric negative) and Finnish (asymmetric negative):

SYMMETRY AND ASYMMETRY IN NEGATION PATTERNS

(41) **SWEDISH** (Indo-European, Germanic)

a. hund-ar-na skäll-er ute

dog-PL-DEF bark-PRES outside

‘The dogs are barking outside.’

b. hund-ar-na skäll-er **inte** ute

dog-PL-DEF bark-PRES NEG outside

‘The dogs are not barking outside.’

(42) **FINNISH** (Uralic, Finnic)

a. koira-t haukku-vat ulkona

dog-PL bark-3PL outside

‘The dogs are barking outside.’

b. koira-t **ei**-vät hauku ulkona

dog-PL NEG-3PL bark.CNG outside

‘The dogs are not barking outside.’

SYMMETRY AND ASYMMETRY IN NEGATION PATTERNS

- As can be observed from the Swedish example, no structural changes have occurred despite the addition of the negator *inte*.
- However, in the Finnish example, we can see number and person marking has shifted from the lexical verb *hauku* to the auxiliary *ei* rendering the lexical verb non-finite (here in the connegative form).
- In fact, the asymmetry present in Finnish is exactly what happens in English:

(43) a. Ben likes pizza. b. Ben doesn't like pizza.

- The 3SG -s inflection on the lexical verb has shifted to the auxiliary in the negative sentence leaving the lexical verb non-finite.

PARAMETRIC VARIATION: TOWARDS A HIERARCHY OF NEGATION

PARAMETRIC VARIATION

- As we have seen, languages like Russian exhibit negative concord.
- I now develop this to say that such a language actually exhibits strict-NC as opposed to non-strict NC.
- In strict-NC languages, ‘double negation’ is obligatory in all constituent order configurations, i.e. whether the negative constituent precedes or follows the clausal negator (Zeijlstra, 2022).
- However, there is a second type of language where constituent order determines whether a clausal negator is required or not. One such oft-cited language is Italian.
- In Italian, negative constituents can appear without a clausal negator if they follow the verbal chain, whereas if they appear in subject position, the clausal negator is obligatory.

PARAMETRIC VARIATION

(44) **ITALIAN** (Indo-European, Romance) (Roberts, 2019: 555-556)

a. Gianni **non** telefona a **nessuno**.

Gianni NEG telephone.3SG.PRES to nobody

‘Gianni doesn’t telephone anybody.’

[_{TP} Gianni [_{NegP} non[iNEG] telefona [_{VP} a nessuno[uNEG]]]]

b. **Nessuno** è venuto.

Nobody be.3SG.PRES come.PPT

‘Nobody has come’

PARAMETRIC VARIATION

- Roberts (2019: 566) explains that in such languages, “Op \neg licenses n-words [negative words] in subject position...”. Preverbal n-words cannot co-occur with an overt head of NegP, whereas postverbal n-words require the presence of the head of NegP.
- So far, we have met three types of languages:
 - > strict-NC languages like Russian
 - > non-strict-NC languages like Italian
 - > languages without NC such as Standard English

PARAMETRIC VARIATION

- A further type is exhibits behaviour between strict-NC and non-strict-NC.
- A good example of this is Catalan, where NC is obligatory with **post**verbal n-words, but with **pre**verbal n-words, there is competition between two types:
 - > either the clausal negator can be inserted (like in has to in Russian)
 - > or it can be omitted (like it has to in Italian)

PARAMETRIC VARIATION

- A final type is a language like West Flemish, which requires a certain syntactic configuration to establish NC, but allows for double negative readings without this syntactic configuration.
- The syntactic configuration needed to avoid a double negative reading is Spec-Head configuration of the negator and the n-word.

PARAMETRIC VARIATION

(45) **WEST FLEMISH** (Indo-European, W. Germanic) (Brown, 1999: 38-39)

a. da Valère **vanniemand nie** ketent (en)-was
that Valère of.no.one NEG content en-was
'...that Valère was not pleased with anyone'

> *NC reading due to Spec-Head configuration of n-word and clausal negator*

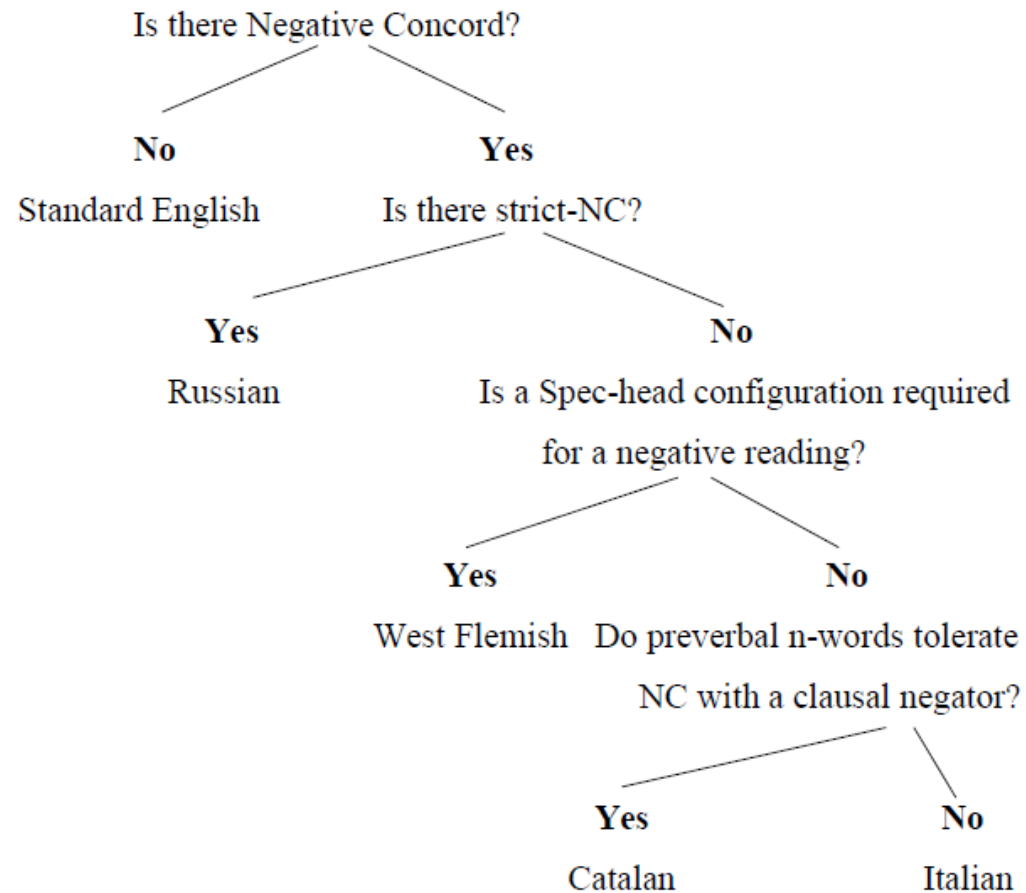
b. da Valère **nie** ketent **vanniemand** (en)-was
that Valère NEG content of.no.one en-was
'...that Valère was not pleased with no one'

> *double negative reading because of non-Spec-Head configuration of n-word and clausal negator.*

PARAMETRIC VARIATION

- Based on this evidence presented on NC, I propose the following parameter hierarchy:

(46)



SUMMARY

- Great variety in ways of expressing sentential negation cross-linguistically
- A contrast between negative concord ('double negatives') as in Russian, and negative polarity items, as in English.
- Some languages exhibit a middle-ground, e.g. Italian and West Flemish
- There is a special projection for the negative element in the syntax – NegP
- They are various types of negation patterns:
 - morphological;
 - by means of an auxiliary;
 - by the addition of an adverb-like negative particle.
- As well as less-common ones:
 - reduplication
 - tone change
 - negation without an overt negative marker, whereby the marking of tense is omitted

SUMMARY

- Adverb-like particles are the most common way of expressing SN, closely followed by morphological negation.
- Some languages allow for more than one way of expressing SN, but there are often constraints
- There is a tendency for the Neg element to be preverbal (Neg-First Principle)
- Languages demonstrate both symmetrical and asymmetrical patterns of negative versus declarative
- Parameter hierarchies can help type languages negation patterns

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