Guidelines for Annotating Negation, Scope and Focus
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1 Negation

1.1   Background

Negation is a phenomenon which may occur anywhere in a sentence, being associated with a rejection or nullification of an element (Potts, 2011). Previous research has indicated that there is a relationship between negativity and negation, particularly in reviews (Potts, 2011). The correlation between negation and negativity may seem obvious, however it is not always the case that negation expresses a negative opinion. Negated statements may carry an implicit positive meaning (Blanco and Moldovan, 2014), especially in a scalar context.

Negation is broadly researched and analyzed in computational linguistics, often in relation to biomedical research. Israel, 2004, studied the interaction between negation and polarity by researching contradiction and contrariety. NegExpander (Aronow et al., 1999) uses a list of keywords to detect negation in biomedical sources. Both NegEx (Chapman et al., 2013) and NegFinder (Mutalik et al., 2001), which have been adapted for use with other languages, take an approach to negation detection in biomedical texts by using regular expressions. A semantic approach to the scope and focus of negation using lambdas (Jackendoff, 1972), as well as thorough studies on the history and syntax of negation in English and other languages have also contributed greatly to the understanding of negation and its scope (Horn, 2001; Huddleston and Pullum, 2002).

Four contrasts have been established for negation, the first two concerning expression, and the last two concerning interpretation of negation (Huddleston and Pullum, 2002; Blanco and Moldovan, 2011; Blanco and Moldovan, 2014).

Table 1 The four contrasts in the behaviour of negation.

Verbal:	Analytic:	Clausal:	Ordinary:
The negation is grammatically related to the verb.	The only function of the keyword is to mark negation.	The negation produces a negative clause.	The negation indicates that something is not the case.
Non-verbal:	**Synthetic:**	**Sub-clausal:**	**Metalinguistic:**
The negation is elsewhere.	The keyword serves some other purpose in the sentence.	The negation produces something else.	The negation reformulates the sentence. It does not dispute its veracity.

These contrasts in negation are important for determining the scope. The contrast between ordinary and metalinguistic negation is particularly important for interpreting the focus of the negation.

When discussing negation, the most important factors for determining its influence on the sentence are the scope and the focus. A keyword, for example *not* or *no*, triggers negation in a sentence, usually projecting a scope and focus. **Scope is said to be the part of the meaning that is negated, while focus is the part of the scope that is most prominently intended to be false** (Blanco and Moldovan, 2014). The scope of negation has been widely researched, with notable corpora such as BioScope (Vincze et al., 2008), and the SFU Negation Corpus (Konstantinova et al., 2012). A max approach is typically applied to capture the entirety of the scope, spanning over the largest syntactic unit possible (Vincze et al., 2008) and including the keyword. When considering scope, if any element can plausibly be considered to fall within its range, it is included. Focus, however, is always a minimal unit contained within the scope. There has been some disagreement with the definition of the focus of negation. Some approaches interpret focus as the element which is intended to be false, or the constituent crucial to the understanding of an instance of negation (Blanco and Moldovan, 2011; Blanco and Moldovan, 2014; Huddleston and Pullum, 2002). Another approach diagnoses the focus of negation by assuming that there is an alternative which would make the sentence true (Anand and Martell, 2012). For example, the sentence *He didn't eat cookies for breakfast* has a number of alternatives which would make the sentence true, such as *he ate them for lunch* or *he ate a banana*, whereas the sentence *he didn't eat anything for breakfast* has no such alternatives. Another approach is to consider a relevant QUD, 'question under discussion', which structures the dialogue (Rooth, 1996). With this model, negation will not automatically entail a positive alternative unless the corresponding QUD excludes negative answers (Anan, Martell, 2012). For the purposes of this research, we will be assuming the approach taken by Blanco and Moldovan, 2014, and **consider the focus of the negation as the element intended to be false**.

The primary intention of this research is to explore the relationship between negation, negativity, and appraisal. Given the strong connection between focus an scope, we will be considering both in our annotations. Information on the theoretical framework behind the annotations and more detailed examples are provided in the following sections.

1.2   General principles of annotation

In the examples provided in this manual, scope will be marked by round brackets, focus will be marked by bolding, and keyword will be marked by a superscript NEG. When annotating for negation, only sentences which contain some form of negation will be considered. The presence of a keyword, examples of which are provided in section three, is the catalyst for annotation. When annotating keywords, it prudent to maintain a min-max strategy. Only the minimal unit which can be identified as the keyword should be annotated. It has been decided that the keyword will not be included in the scope, thus it is important to exclude anything that modifies the negator (this can be the case when it is a pronoun like *nothing*). In the following example, *that Donald Trump will do* is attached to *Nothing* as part of a noun phrase headed by the pronoun. In our annotations, we consider *Nothing* to be the only negator.

(1) Nothing[NEG] (that Donald Trump can **do**[FOCUS] will elevate these fools)[SCOPE].

Ungrammatical or colloquial negation is also quite common in online commentary. It is important to consider such words in addition to standard negation. In the cases of double negatives, since the intended meaning is still negative, it is best to treat them as one negator.

(2) They <u>ain't never</u>[NEG] (done a **thing**[FOCUS])[SCOPE].

1.2.1   Annotating for Scope

Annotations for scope will follow the guidelines outlined in the BioScope (Vincze et al., 2008) and SFU Negation Corpus (Konstantinova et al., 2012). When annotating scope, the maximum range of words affected by the negation will be selected. However, only the words affected by the negation will fall inside the scope. In the following example, the scope will start from the right of the keyword and extend the length of the sentence.

(3) It isn't[NEG] (**difficult**[FOCUS] to understand the concept)[SCOPE].

Words or phrases indicating a transition, such as *in addition to*, *furthermore*, etc. will not be included in the scope of the negation.

Typically, modals will not be included in negation unless they are contractions. Modals appear to affect the interpretation of negation, particularly in expressing the attitude of the speaker in terms of certainty or reliability (Morante and Sporlender, 2012). The sentences below show how such modals can affect negation.

(4) He can't[NEG](eat **red meat**[FOCUS])[SCOPE]. (He 'not' can eat red meat)
(5) One mustn't[NEG] (look directly at **the sun**[FOCUS])[SCOPE]. (One must 'not' look directly at the sun)

The interaction between modals and negations is a challenge unto itself, therefore Including modal influence on negation in these annotations would dilute from its primary goal. Modals will only be included in the annotation if they form a contraction with the keyword. For simplicity, we have decided not to consider them in the scope.

1.2.2   Annotating for Focus

While the scope is the part of the meaning that is negated, the focus is the part of the scope which is most explicitly negated (Blanco, Moldovan, 2011). The general principle is minimal annotation for focus. Annotations for focus should be the minimal unit which is primarily negated within the scope. In some circumstances, the scope and the focus will be the same. This is often the case when the keyword is negating a simple verb, adjective, or noun phrase.

Figure 1 Simple negation with overlapping scope and focus.

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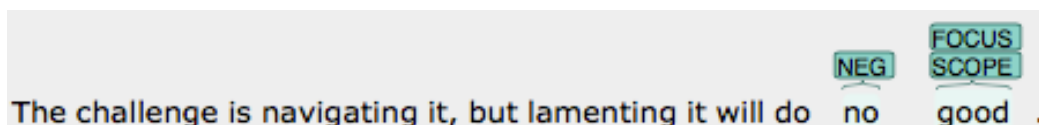
When annotating for focus, one should choose the most logical or probable unit to be the focus of the negation. The most likely focus is the one which yields the most meaningful information. In the sentence below, both 'the bike' and 'through the house' are both options for focus. However, it is more likely that the intended negated item is not the riding of the bike, but where it took place.

(6) I didn't^{NEG} (ride the bike through **the house**^{FOCUS})^{SCOPE}.

Focus can be challenging to annotate, given that it often requires cues such as intonation or stress to interpret. As such, some interannotator disagreement is expected, given the degree of context dependency.

2   Annotation with WebAnno

There are two layers associated with negation annotation in WebAnno, these are **XNEGATION** and **NEGATION**. The **NEGATION** layer provides the labels **NEG**, **FOCUS** and **SCOPE**, and **XSCOPE** for the purpose of labeling individual words and segments. Words can be annotated by highlighting the desired text and choosing a label from the dropdown menu.

Figure 2 Examples of a fully annotated sentence in WebAnno.
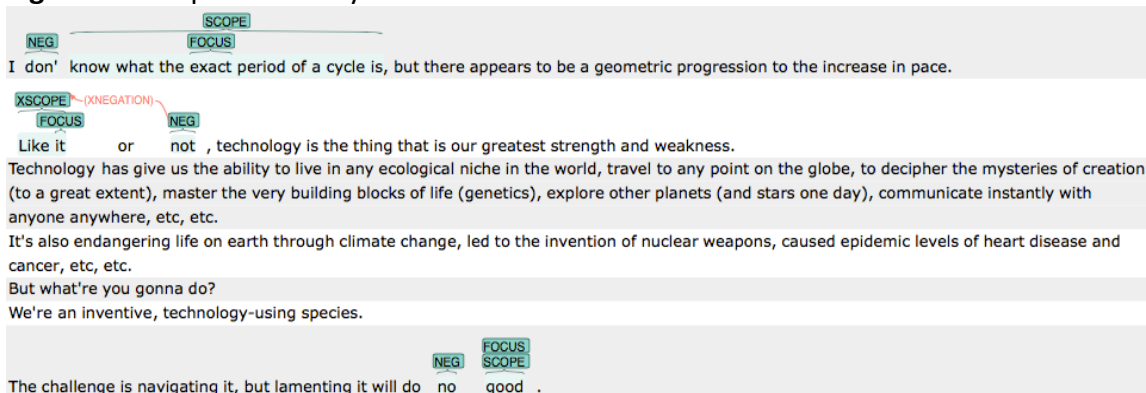
The **XNEGATION** layer draws a negation relation between the **NEG** and the **XSCOPE** in cases of elision or question and response. The **XNEGATION** layer is not necessary for annotation outside of situations which involve omitted information. The X in **XNEGATION** and **XSCOPE** is to indicate that the relationship is that of omission in the current sentence or clause, for more information please refer to section 4.6. To create a relation, click on the label for the keyword, or NEG, and drag the cursor to the **XSCOPE** label.

Figure 3 Example of a relation layer in WebAnno.
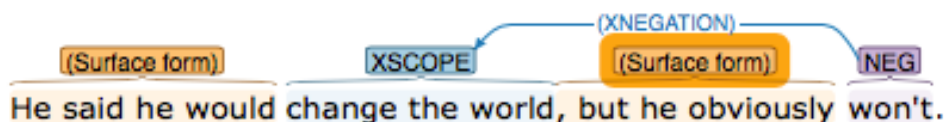
Words that are not modified by negation will be covered under **SURFACE FORM**. It is important to annotate all tokens in the annotation, including punctuation. In the examples following the previous two, assume that all unannotated tokens are captured by **SURFACE FORM**. This is because the WebAnno interface cannot properly interpret annotations upon re-upload unless all words in the document are annotated.

Figure 4 A fully annotated comment, including surface form, keyword, focus, and scope.

(7) We^SURFACE FORM aren't^NEG (happy with **the result**^FOCUS)^SCOPE .^SURFACE FORM

(8) They^SURFACE FORM don't^NEG (appear to have **empathy**^FOCUS)^SCOPE , despite their experience.^SURFACE FORM

For more detailed instructions on how to set up WebAnno and how to use the annotation window, please consult the WebAnno instruction manual.

3 Keywords

Though this is not an exhaustive list, the most typical instances of negative keywords are listed below. Two classes emerge, closed and open class. For closed classes, the list below is exhaustive. Open class keywords are numerous; therefore, one cannot include all examples.

Closed Class (Exhaustive):
   a) **Auxiliary:** haven't, hadn't, don't, didn't, aren't, weren't, ain't, wasn't, isn't, hasn't
   b) **Modals:** wouldn't, won't, mustn't, couldn't, can't, cannot, shouldn't, shan't, shall not, might not, may not
   c) **Conjunctions:** neither ... nor..., not ..., but ..., haven't/didn't/won't/etc., ..., not... let alone ...
   d) **Negation words:** no, not, never, neither, non-, nil, zero
   e) **Negative Pronouns:** No-one, nobody, none
   f) **Prepositions/Determiners:** without, no, except
   g) **Comparatives:** nothing more, nothing less, no more, no less, never more, never less, neither more, neither less, not more, not less

Open Class (Non-exhaustive):
   a) **Adjectives or adverbs:** impossible, impossibly, unlikely, untrue, incorrectly, unable, unfit, improbable, inconceivable, unthinkable, unimaginable, unattainable, unsound, blind, inaccurate, dishonest, unprincipled, unfair, inexcusable, indefensible, unequal, …
   b) **Verbs:** fail, neglect, omit, at a loss, save, bar, exclude, reject, lack, …
   c) **Adjuncts:** unless, about, excluding, omitting, forgetting, removing, ignoring, …

4   Negation and Scope

4.1   Noun Modifiers

It is not always obvious whether or not modifiers should be included in the scope. To avoid ambiguity, the max approach will be taken and any elements directly modifying the noun will be included in the scope. Conjunctors connecting two nouns, such as 'or' or 'and', will also fall inside the scope.

(9) The police concluded that there was no^{NEG} (indication of **foul play**^{FOCUS})^{SCOPE}.

(10)   The country belongs to its people, not^{NEG} (**the government**^{FOCUS} or **the king**^{FOCUS})^{SCOPE}.

4.2   Negative Auxiliaries, Adjectives, and Adverbs

The scope typically begins to the right of the negation and continues to the end of the clause or sentence. Negative adjectives can usually be annotated as one NEG when conjuncted.

(11)   It is untrue^{NEG} (that he **lied**^{FOCUS} to them)^{SCOPE}.

(12)   They haven't^{NEG} (touched their **dessert**^{FOCUS})^{SCOPE}.

(13)   You mustn't^{NEG} (speak to **your parents**^{FOCUS} that way)^{SCOPE}.

(14)   She and the Democratic Party were (blind and ignorant)^{NEG} (of **the rejectionist tide**^{FOCUS} sweeping America)^{SCOPE}.

(15)   You assume, incorrectly^{NEG}, (that America is **a progressive society**^{FOCUS})^{SCOPE}.

Any adjuncts will also be included in the scope.

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(16)   I don't[NEG] (want to think about **that**[FOCUS])[SCOPE].

(17)   I never[NEG] (gave it **much**[FOCUS] weight in assessing Clinton's loss)[SCOPE].

4.2.1   Attributive Adjectives

The scope of attributive adjectives extends to the following NP and any of its adjuncts.

(18)   The impossible[NEG] (**promises**[FOCUS] that he gave)[SCOPE] were all broken.

4.2.2   Predicative Adjectives

Predicative adjectives typically cast scope over the whole sentence.

(19)   (That he would do **such a thing**[FOCUS] is)[SCOPE] unfounded[NEG].

4.3   Verbs

There are some verbs which imply that the following information is negated. Examples of these include verbs like *fail*, or *neglect*. They typically occur with 'to' infinitives and serve to negate the following uninflected verb and its predicate. In these cases, the negating verb will receive the tag NEG. The scope of these verbs begins to the right and spans the rest of the clause, if inside a relative clause, or the sentence.

(20)   The proposal failed[NEG] (to impress **the investors**[FOCUS])[SCOPE].

4.4   Passive Voice

It is useful to first convert the passive into active voice before labeling the scope of the negation. Once the sentence has been paraphrased, annotation follows the most applicable guideline.

(21)   (The hospital system)[SCOPE] hasn't[NEG] (been updated **since the previous director retired**[FOCUS])[SCOPE].

   The sentence above can be rewritten as below, which will enable the annotator to correctly identify the scope.

(22)   They haven't[NEG] (updated the hospital system **since the previous director retired**[FOCUS])[SCOPE].

4.5   Prepositions and Determiners

Negative prepositions have scope over the object of the preposition, which is usually the following noun phrase.

(23)   Without[NEG] (**the sword of truth**[FOCUS])[SCOPE], we cannot[NEG] (defeat **the Gorgomorph**[FOCUS])[SCOPE]

Negative determines, such as 'no', will extend the scope for the length of the sentence or clause.

> (24)   No^NEG (man can do all that paperwork in **an hour**^FOCUS)^SCOPE.

In some cases of the use of 'neither', particularly in subject position, acts as a determiner instead of a complex keyword. In such situations, it has scope over the entire sentence instead of just its complement.

> (25)   Neither^NEG (of them has **the qualifications**^FOCUS or **the personal character**^FOCUS to aspire to the presidency)^SCOPE.
> (26)   Neither^NEG (my wife nor/or daughter look up to **Hillary**^FOCUS)^SCOPE

4.6   Elliptic Sentences and Question/Answer:

Sentences involving omitted information can be a challenge since the scope of the negation is not present within the sentence. To annotate for such structures, it is useful to complete the sentence with the implied content, or to refer back to previous sentences or clauses. When annotating these structures, the keyword in the elliptic structure will be the only token annotated. Once the implied scope of the elliptic negation has been determined, it will receive the scope annotation.

It is important to understand that the keyword in the elliptic sentence is not specifically negating the information in the previous structure. The information in the previous structure simply serves to clarify the implied scope of the elliptic sentence. If the elliptic sentence had been completed, as in (28), there would be no need to refer back to make up for the loss of information. Question and response structures, as well as sarcasm, are treated in a similar fashion.

> (27)   **Original:** I know you need to mow the lawn at 8 am, but I would prefer you didn't.
>   **Expanded:** I know you need to mow the lawn at 8 am, but I would prefer you didn't [mow the lawn at 8 am].
>   **Annotation:** I know you need to (mow the lawn at **8 am**^FOCUS)^XSCOPE, but I would prefer you didn't^NEG.

> (28)   **Question:** Can you write your name in Arabic? A: No.
>   **Answer:** No, I can't write my name in Arabic.
>   **Annotation:** Can you (write) your (name in **Arabic**^FOCUS)^XSCOPE? No^NEG.

> (29)   That's (a **terrific**^FOCUS idea)^XSCOPE! Not^NEG.

Since the keyword in the elliptic sentence is a regular keyword, it will receive the NEG annotation. When referring back to previous structures to clarify the implied scope, since this is only a dummy scope for the elision, and not the true scope of the negation, it will receive the

label XSCOPE instead of SCOPE. A relation layer using XNEGATION is drawn between the NEG and the XSCOPE to signify their relationship.

4.7   Complex Negators

These usually have only one scope over the syntactic unit it coordinates. The keyword and its coordinator both receive the tag NEG.

(30)   The platypus is neither^{NEG} (**a bird**^{FOCU})^{SCOPE} nor^{NEG} (**a fish**^{FOCUS})^{SCOPE}.

(31)   He can't^{NEG} (even ride **a bike**^{FOCUS})^{SCOPE}, let alone^{NEG} (drive **a car**^{FOCUS})^{SCOPE}.

4.8   Alternative Grammars

Non-standard, or colloquial, negation will be considered one unit and receive the label NEG.

(32)   They (ain't never)^{NEG} (done **a thing**^{FOCUS})^{SCOPE}.

5   **Special Cases**

5.1   Negative Pronouns as Objects:

When *nothing, nobody,* or *no-one* is an object, it acts as a simple negator without scope or focus. In this situation, it will be labeled simply as NEG and no scope or focus will be indicated. In the case of negative pronouns such as *nobody* or *no-one*, it is often the case that the negation and its scope have fused to create a single unit. Such pronouns may be paraphrased as 'not anybody', or 'no person'. They will receive the label NEG, but there is no need to label scope.

(33)   How could they do nothing^{NEG}?

(34)   There's nothing^{NEG} that I can't^{NEG} (**do**^{FOCUS})^{SCOPE}.

(35)   I knew nobody^{NEG}.

5.2   Negative Pronouns as Subjects:

There are some instances where *nothing*, nobody, and no-one will project a scope, usually when in subject position. To avoid ambiguity, it is best to apply a max approach. When *nothing* is a subject, or can be said to project scope, the scope will span the entire sentence.

(36)   Nothing^{NEG} (that **Donald Trump**^{FOCUS} can do will elevate these fools)^{SCOPE}.

(37)   No-one^{NEG} (came to **the event**^{FOCUS})^{SCOPE}.

However, in some cases it is clear that the negative pronoun has some influence over the sentence. As before, in order to avoid ambiguity and confusion, the scope of such negators will span the entire sentence to both the left and right.

(38)   (I met)^{SCOPE} nobody^{NEG} (**interesting**^{FOCUS} at the meeting)^{SCOPE}.

(39)   (I think)^{SCOPE} nobody^{NEG} (in **the world**^{FOCUS} can fix this problem)^{SCOPE}.

5.3   Negation Introduced by Pseudocleft:

Cases where negation is introduced by a pseudocleft, a *what, where, when* clause, such as the example below, provide a challenge to annotation. To ascertain the scope of the negation, it is useful to paraphrase the pseudocleft into a simple active sentence. The scope of this sentence will then follow ordinary conventions of scope annotation.

> (40)   **Original:** What I did not like was her speech.
> **Expanded:** I did not[NEG] (like **her speech**[FOCUS])[SCOPE].
> **Annotation:** What I did not[NEG] (like)[SCOPE] was (**her speech**[FOCUS])[SCOPE].

5.4   Raising Verbs

Raising verbs, such as 'seem' and 'appear', generally follow two patterns. The first pattern makes use of a dummy subject, 'it'. In this pattern, the scope of the negation will begin with the verb and span the rest of the clause or sentence. It will not include the subject.

> (41)   It doesn't[NEG] (seem like it will **rain**[FOCUS])[SCOPE].

The second pattern does not use a dummy subject such as 'it', therefore the scope must also extend to the subject.

> (42)   (The fire)[SCOPE] doesn't[NEG] (appear **close**[FOCUS,] to going out)[SCOPE].

6   Negation and Focus

The focus of negation, included within the scope, is the most prominently negated element. Typically, some positive inference can be made from the focus. In the example below, if the focus of the negation is 'with a fork', it can be inferred that perhaps the utensil used is a spoon, rather than a fork. If the selected focus is 'ramen', then it possible that while one may not eat ramen with a fork, one may eat pasta.

> (43)   You don't[NEG] (eat ramen with a fork)[SCOPE].
> You don't[NEG] (eat **ramen**[FOCUS] with a fork)[SCOPE]
> You don't[NEG] (eat ramen with **a fork**[FOCUS])[SCOPE]

The minimal approach is applied to focus, meaning that the focus commonly corresponds to a single phrase, argument, verb, or adjunct. Prepositions will not generally be included in the focus, but the object of that preposition will.

The focus of negation can be either explicitly or implicitly marked. Explicit foci generally are the easiest to determine, given their tendency to be highlighted in some way within the sentence.

Determination of the appropriate focus is dependent on contextual cues and intonation; therefore, it can be difficult to determine in text. The focus does not always need to be the core argument, as the presence of adjuncts may shift the focus. The following guidelines will help

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the annotator decide what is the most likely focus of a negation. However, when multiple candidates are available, one must use their best judgement in selecting the most likely.

7   Explicit Focus

7.1   Displacement

Focus displacement is marked by the movement of some element to a marked position in the sentence, usually fronted. In this case, the focus will be the marked units.

(44)   (As for **that man**^{FOCUS})^{SCOPE}, he could never^{NEG} (tell time with analog clocks)^{SCOPE}.

(45)   (To **this day**^{FOCUS})^{SCOPE}, no-one^{NEG} (has succeeded)^{SCOPE}.

7.2   Contrasting

Structures which negate a truth by contrasting two elements also explicitly mark the focus. In such cases, the element which is the focus of the negation will be the one preceding the coordinator. These structures are generally introduced by the expletive 'it'.

(46)   It was not (**Mary**^{FOCUS} who cried)^{SCOPE}, but James.

(47)   It was not (**Azathoth**^{FOCUS} who destroyed the earth)^{SCOPE}, but Yog-Sothoth.

7.3   Reinforcement and Pronouns

Negation which includes multiple negation cues, or pronouns such as 'anything', or 'anyone', tend to either be the focus of the negation themselves. The objects of determiners, such as 'any', also tend to be the focus of the negation.

(48)   There isn't^{NEG} (any **motive**^{FOCUS} for the murder)^{SCOPE}.

(49)   He hasn't^{NEG} (bought **anything**^{FOCUS})^{SCOPE}.

8   Implicit Focus

8.1   Constituent Markers

The constituent focus is the element which is completely affected by the negation. As the title suggests, the focus is within a constituent.

(50)   It is not^{NEG} (an **impossible**^{FOCUS} task)^{SCOPE}.

(51)   I want to live in a world without^{NEG} (**war**^{FOCUS})^{SCOPE}.

8.2   Sentential Markers

8.2.1   Intransitives and Existentials

With verbs which require only one argument, such as intransitives, the focus generally falls directly on the verb. However, when a more meaningful negation is possible, such as an adverb or an adjunct, the focus will prefer the more likely element.

(52)   Don't (**run**^{FOCUS})^{SCOPE}, please.

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(53)   Don't (run **quickly**^{FOCUS})^{SCOPE}
(54)   I didn't (**speak**^{FOCUS})^{SCOPE}.
(55)   Do not (walk on **the grass**^{FOCUS})^{SCOPE}.

Sentences introduced by the existential 'there' are special. The focus of such constructions will generally be the object following the keyword, unless a more meaningful negation can be achieved through focus on an adjunct.

(56)   There is no^{NEG} (**employment**^{FOCUS})^{SCOPE}.
(57)   There is no^{NEG} (employment in **this city**^{FOCUS})^{SCOPE}.
(58)   There's no^{NEG} (**money**^{FOCUS})^{SCOPE}.
(59)   There's no^{NEG} (money to repair **the car**^{FOCUS})^{SCOPE}.

8.2.2 Transitives and Auxiliaries
Generally, the focus of transitive verbs falls on the direct object.

(60)   I don't^{NEG} (eat **tomatoes**^{FOCUS})^{SCOPE}.
Verbs which are used with auxiliaries mark their focus on the complement.

(61)   I haven't^{NEG} (done **the chores**^{FOCUS})^{SCOPE}.
(62)   We haven't^{NEG} (made **the cake**^{FOCUS})^{SCOPE}.

When the complement is an NP with may modifiers, the focus will generally fall on the last of these additional elements.

(63)   We aren't (reading the book about the astronaut in **space**^{FOCUS})^{SCOPE}.
(64)   They haven't (seen the outer god known as **the Crawling Chaos**^{FOCUS})^{SCOPE}.

Verbs that take or require a preposition will mark their focus on the object of that preposition.

(65)   We don't^{NEG} (negotiate with **terrorists**^{FOCUS})^{SCOPE}.
(66)   I never^{NEG} (looked up **the address**^{FOCUS})^{SCOPE}.

8.2.3 Copulas
Verbs which link a subject to an attribute, such as 'be', 'seem', or 'appear', tend to mark as focus the predicate attribute.

(67)   They didn't^{NEG} (find him **reliable**^{FOCUS})^{SCOPE}.
(68)   That author doesn't^{NEG} (seem **healthy**^{FOCUS})^{SCOPE}.
(69)   My mother isn't^{NEG} (**a neurosurgeon**^{FOCUS})^{SCOPE}.

8.2.4   Ditransitives

Ditransitives, verbs which take three arguments, can be challenging to interpret. Such structures have multiple options for the focus of the negation, thus the most oblique argument should be chosen. This is the element which is most likely in the given context.

(70)   Illuvatar would not[NEG] (bequeath **Melkor**[FOCUS] the flame imperishable)[SCOPE].

(71)   Danae won't[NEG] (give John **the cold shoulder**[FOCUS])[SCOPE].

8.2.5   Coordinators

When two verbs which have the same complement are coordinated, the focus will be on the complement of the verbs.

(72)   I neither[NEG] (make nor[NEG] eat **cheese**[FOCUS])[SCOPE].

(73)   We don't[NEG] (read on paper or online **the news**[FOCUS])[SCOPE].

8.2.6   Adjuncts

Since adjuncts mark additional information, they generally attract the focus of any negation. In most cases, an adjunct will be the focus of the negation.

(74)   It's not[NEG] (safe **here**[FOCUS])[SCOPE].

(75)   I cannot[NEG] (find my glasses **unless I find my glasses**[FOCUS])[SCOPE].

9   Multiple Foci

If a noun phrase contains a relative clause with coordinating structures, all of the coordinated elements within the clause, excluding the coordinating conjunction, will be marked as foci. This will include the entire relative clause.

(76)   Cleaning up your mess is not[NEG] (the responsibility of the people who **mop the floors**[FOCUS] and **dust the cabinets**[FOCUS])[SCOPE].

(77)   He isn't[NEG] (the one who **broke in**[FOCUS] and **stole the diamonds**[FOCUS])[SCOPE].

10 Context Cues and Focus

Sometimes written discourse can relay cues, or even intonation, through emphasis or context. In such circumstances, it is possible for the focus of the negation to seemingly fall outside of the scope. Examples of emphasis in written discourse include tools such as capitalization or bolding. These cues pull indicate that the target is the intended focus of the sentence. Contextual cues generally appear in previous sentences, or clauses, of the discourse. It is important to keep these features in mind when annotating for focus.

10.1 Focus through Emphasis

A writer may choose to emphasize a word or phrase through capitalization, bolding, italicization, underlining, or through a combination. When a part of the sentence is emphasized, it becomes the focus, regardless of whether or not it is inside the visible scope.

(78)   *I*[FOCUS] didn't[NEG] (say she was a coward)[SCOPE]. (Someone else said it)
(79)   I didn't[NEG] (**SAY**[FOCUS] she was a coward)[SCOPE]. (I thought it)
(80)   I didn't[NEG] (say **SHE**[FOCUS] was a coward)[SCOPE]. (I said someone else was a coward)
(81)   I didn't[NEG] (say she **WAS**[FOCUS] a coward)[SCOPE]. (She still is a coward)
(82)   I didn't[NEG] (say she was **A COWARD**[FOCUS])[SCOPE]. (I said she was something else).

10.2 Focus through Context

Previous information in the discourse, such as the preceding or following sentences, may provide some insight into the focus of the negation.

(83)   I'm not[NEG] (going to buy food for **the dog**[FOCUS])[SCOPE].
         I'm going to buy food for the cat.
(84)   I'm not[NEG] (**going**[FOCUS] to buy food for the dog)[SCOPE].
         I already bought food for the dog.
(85)   I'm not[NEG] (going **to buy**[FOCUS] food for the dog)[SCOPE].
         I'm going to make it myself.
(86)   I'm not[NEG] (going to buy **food**[FOCUS] for the dog)[SCOPE].
         I'm going to buy a bone.

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