CHAPTER 3
Affirmative Semantics with Negative Morphosyntax

Negative Exclamatives and the New England So AUXn’t NP/DP Construction

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1. INTRODUCTION

Natural language abounds with expressions in which there are more or fewer elements assumed to be negative morphemes than one would expect on the basis of (i) the semantic polarity of the expression and (ii) the assumption that each negative morpheme corresponds directly to an instance of logical semantic negation. There is no one-to-one correlation between morphologically overt negative marking and logical semantic negation. Semantically negative sentences often have more than one negative morpheme; examples of this include bipartite negation such as French ne pas, which is found in various forms in a number of languages (cf. Bell 2004), as well as negative concord in general, in its various forms (cf. Muntañá 2008). For example, consider the sentence in (1), taken from Muntañá (2008: 164). (The speaker of this sentence comes from Kent County in southeastern England.)

Note: I am extremely grateful to Larry Horn and Raffaella Zanuttini for extensive comments and discussion of several drafts of this paper. Thanks also to Mark Baltin, Chris Barker, Tricia Irwin, Paul Postal, the audience and participants of the Workshop on Microsyntactic Variation in North-American English at the 85th LSA, and the graduate students at the University of California, Berkeley in 2012, for discussion of different versions of this material. The judgments in this paper come primarily from my own intuitions as well as from discussion with Melinda Kaye Wilson and Joanne Deming, to whom I’d like to express my gratitude for their time.
None of his men wasn’t allowed to smoke.

Here, there are two negative markers (none and wasn’t), but only one semantic negation, such that (1) has the same meaning as None of his men were allowed to smoke in other (“standard”) varieties of English. Conversely, the sentences in (2) have no overt negative markers. They are referred to as ‘hyponegation’ in Horn (2009, 2010), and are semantically negative insofar as they can be paraphrased by semantically negative sentences with overt negative markers, and can license negative polarity items.

(2) a. I could care less (about ever seeing her again).
   = ‘I don’t care (if I ever see her again).’

   b. Like he would know anything about it!
   = ‘He would not know anything about it.’

   c. That’ll teach you to do anything without a spreadsheet.
   = ‘That’ll teach you not to do anything without a spreadsheet.’

On the surface, then, semantically negative sentences can contain more than one negative marker or no negative marker at all.

Along similar lines, semantically affirmative sentences often contain negative morphemes. Some examples (from Horn 2009, 2010) include the following (see also Yoon 2011a, 2011b, 2013 for many more examples from a number of languages and dialects):

(3) a. I miss not seeing you. = ‘I miss seeing you.’

   b. How can I keep from not worrying?
   = ‘How can I keep from worrying?’

   c. plus que je ne pensais
   ‘more than I thought’

   (French)

   d. No ga-lo magnà tuto!
   NEG has-S.CL eaten everything
   ‘He ate everything!’

   (Paduan)

   e. Mne xorosho gde by ja ni byl.
   meDAT good where SBJV I NEG was
   ‘I’m fine wherever I am.’

   (Russian)

In this paper, I focus primarily on one such expression, the New England So AUXn’t NP/DP (henceforth SAND) construction, which involves the negative marker n’t but has affirmative force: (4b) is truth-conditionally equivalent to (4c), and not to (4d).²

1. The following abbreviations are used in this paper: DAT = “dative”, NEG = “negative”, SBJV = “subjunctive”, s.CL = “subject clitic”.

2. This is sometimes referred to as the “So don’t I” construction. I avoid this term since it seems to imply an idiom with a fixed auxiliary and/or subject. As shown here, though, neither is fixed.
(4)  a.  I play guitar.
    b.  Yeah, but so don’t I.
    c.  = Yeah, but I do too.
    d.  ≠ Yeah, but I don’t either.

SAND has only been discussed, or even mentioned, by a small number of authors
2004, Wood, 2008), often in passing. The full extent of its geographic distribution
and grammatical properties is unknown, and no analysis has been proposed. One
primary goal of this paper is to provide a thorough description of the syntax, seman-
tics, and pragmatics of this construction.

However, while SAND is remarkable among English dialects, in that it is seldom
discussed and often incomprehensible to English speakers unfamiliar with it, it is by
no means unique in having a negative morpheme in the CP domain of a clause that
appears not to be strictly negative. In Standard English, exclamative sentences of the
sort in (5) share this property.4

(5)  a.  Well don’t you look pretty! = ‘You look very pretty!’
    b.  Well aren’t they fortunate! = ‘They are very fortunate!’
    c.  Well wouldn’t you like to know! = ‘You would really like to know.’

Despite the negation, exclamatives of the sort in (5) are strongly affirmative seman-
tically, and I will claim that SAND and exclamatives of the sort in (5) have a number
of properties in common. They differ in that unlike SAND, these exclamatives require
the presence of some kind of scalar element in the clause. This restriction is not
found with SAND:

(6)  Negative exclamatives
    a.  *Well isn’t that a bus!
    b.  Well isn’t that a big bus!

(7)  So AUXn’t NP/DP
    a.  This is a bus, but so isn’t that.
    b.  This is a big bus, but so isn’t that.

I will discuss this constraint further below.

3. Freeman (2004) provides a brief analysis, which says that the negated auxiliary un-
dergoes T-to-C movement. The negation is claimed to be pleonastic. See below on what is
known about its geographic distribution.
4. In this paper, unless otherwise explicitly stated, when I refer to “exclamatives” or
“negative exclamatives,” I am referring to the sort in (5), with the negative-marked auxiliary
to the left of the subject. It should be clear that by “negative exclamative” I am referring to
the morphosyntactic marking rather than the semantics. For reasons of space and time, I
do not discuss affirmative, wh-, or nominal exclamatives.
The main claim I would like to make is that in these (and possibly other, similar) cases, negation is not a semantically vacuous morphological marking, but rather serves a syntactic and semantic function, and this function explains certain pragmatic constraints on such sentences. Specifically, I propose that both SAND and negative exclamatives involve double negation, which is achieved by syntactically constructing a question-answer pair clause internally. Pragmatically, this is employed to remove a negative proposition \( \neg p \) from the discourse. The morphologically visible negation reflects the negativity of the proposition to be removed. An operator in \( C^0 \) turns this negative proposition into a question, which is formally a disjunction containing a double negative, \( \neg p \lor \neg (\neg p) \). The question is resolved by asserting \( \neg(-p) \); this is achieved syntactically by moving so, which is argued to be an affirmative polarity marker, to the left periphery.

The chapter is organized as follows. In section 2, I present the descriptive properties of the SAND construction, including its productivity, its grammatical properties, and pragmatic constraints on the construction. The latter are important because I will argue that they follow from the syntactic and semantic properties of the construction. In section 3, I show in detail that SAND and negative exclamatives are affirmative in that they fail a series of negativity tests but pass tests for affirmativity. In section 4, I set the stage for the analysis of negative exclamatives by looking more closely at the degree element restriction that they do not share with SAND. In section 5, I look more closely at the elements so and too, which play a crucial role in the analysis. In section 6, I present the analysis of the SAND construction and negative exclamatives (as well as standard English so-inversion). I discuss further issues revolving around the syntax of polarity and negation in section 7, before concluding in section 8.

### 2. So AUXn’t NP/DP

Before turning to the syntactic, semantic, and pragmatic properties of SAND, a brief word on its geographical distribution, about which, as mentioned above, not a whole lot is known. It is best known as a Boston or New England expression, and Pappas (2004: 59) used survey data to show that it exists at least from as far north as York, Maine, spanning through New Hampshire and Massachusetts to as far south as New Haven, Connecticut. It is found in Erie, Pennsylvania, according to Horn (2011), citing an entry from the forthcoming Volume V of the *Dictionary of American Regional English* as well as Bryan Gick, pers. comm. It is also used productively in DeKalb County, Illinois, according to Lawler (1974). In a posting on Language Log, Lawler notes that many DeKalb county settlers originally came from (western) New England.\(^5\) In discussion forums online, one can find references to its use in “upstate

\(^5\) http://www.umich.edu/~archive/linguistics/linguist.list/volume.3/no.801-850
New York” (the rural/suburban part of the state), but apparently not in New York City. \(^6\) The informants for this study (including myself) all come from southern New Hampshire.

### 2.1 Basic Properties and Productivity

SAND can occur with any auxiliary compatible with \(n't\), and with all types of subjects (other than NPIs, as shown below), as far as I have been able to tell. \(^7\) This is illustrated in part below with examples found on a Google search, all of which are grammatical for me and my informants. (8a–b) use \(aren't\), and (8c–d) use the modals \(shouldn't\) and \(wouldn't\), respectively. As for subject types, (8a) has a quantified DP, (8b–c) have definite DPs with \(the\), and (8d) has an -ing gerund subject (\(everybody\ actually paying taxes\)).

\[(8) \quad a. \quad \text{Went here the other night with a girlfriend. Sure it’s trendy, but so aren’t most NYC clubs.} \\
\quad b. \quad \text{I so agree - we do need to let go and laugh and live. And we so need our gal pals - hubbys and kids and other family are essential for most of us, but so aren’t the gals in our lives.} \\
\quad c. \quad \text{Yes, the “Somalis” should be treated with respect but so shouldn’t the Americans.} \\
\quad d. \quad \text{National healthcare would be great, but so wouldn’t everybody actually paying taxes.}\]

To further illustrate this point, consider the examples in (9), which show proper names and all personal pronouns with \(be\). Example (10) shows a constructed dialogue with the modal \(shouldn’t\). Example (11) shows a constructed dialogue with the perfective auxiliary \(haven’t\).

6. One comment to this effect, responding to the claim that SAND is a Boston expression, is particularly interesting, anecdotally (punctuation modified): “I grew up in the burbs of NYC then moved to the Finger Lakes region of central NY. […] I thought so don’t I was from the hillbillies of central NY. They use it in all forms: so wouldn’t I, so didn’t I, so can’t I.” (Retrieved from http://www.universalhub.com/glossary/so_dont_i.html.)

7. The only auxiliary I know of that is compatible with \(n’t\) but not SAND is \(need\) in its auxiliary use. See section 3.7 on this auxiliary. Three other auxiliaries are worth mentioning at least briefly, though they play no role in what follows. \(Must\), \(might\), and \(may\) do not occur naturally in the SAND construction. \(May\) is independently incompatible with \(n’t\). \(Mustn’t\) and \(mightn’t\) are not completely impossible, but are awkward/unnatural enough in their own right to make it very difficult to judge them in the SAND construction. Even without \(n’t\), … but so must you and … but so might you are highly marked for me (and not obviously part of my grammar). I thank Larry Horn for a very interesting discussion of \(mightn’t\) and \(mustn’t\), which I unfortunately can’t do justice to here.
Melinda is intelligent . . .
  a. . . . but so isn’t John/he.
  b. . . . but so aren’t I/you/we/they.

Alice: You should be more careful.
Fred: So shouldn’t John/you/he/they.

Context: John and Melinda are going on an organized group trip to London, and there is a pre-trip orientation.
  a. Melinda: This orientation is going to be so boring.
  b. John: I’m glad I don’t have to go.
  c. Melinda: Why don’t you have to?
  d. John: Because I’ve been to London before.
  e. Melinda: So haven’t I!

The examples in (12) are from a Google search, and all are acceptable to me and my informants. They are further illustrations that quantified subjects are possible in the construction.

(12) a. That is a huge drop and I too never make snide comments about how much GM workers get paid cause I too would want a job that paid that much and so wouldn’t everyone else.
  b. Not only would I greatly appreciate it, but so wouldn’t every man or woman living with cancer today!
  c. Not only should SuperMoto, and road bike racers in general, check their stems, but so shouldn’t all street bike riders.

Now, the appearance of n’t here is limited to so in its “also” use, and it is limited to cases with subject-aux inversion. Moreover, note that (i) no similar construction exists for the negative neither (13a), (ii) it is obligatorily affirmative and cannot take a negative antecedent clause (13b), and (iii) there is no noninverted version with too (13c), as originally pointed out by Lawler (1974). It will be illustrated in the next section in detail that n’t does not license negative polarity items (NPIs) in this construction.

8. I will refer to the clause that licenses the additive meaning (i.e., the “alsoness”) of a so/too clause as the “antecedent clause.”

9. Examples of sentences like (13b) can be found online, and I have occasionally encountered speakers who find them to be marginally acceptable (with a negative interpretation, however); they usually say that such sentences sound sarcastic or “cheeky,” so it is hard to know how to characterize the phenomenon. Importantly, they are ungrammatical for speakers of the dialect in question. All of my informants unequivocally rejected such sentences, often asking what such an expression could possibly mean. Note moreover that, as pointed out in Horn (2009, 2010, 2011), SAND is not intrinsically sarcastic, cheeky, or ironic.
(13)  a. *He can’t touch the ceiling, and neither can’t I.
b. *He can’t touch the ceiling, but so can’t I.
c. *Bill is going to school, and Harry isn’t too.

Only n’t is possible in this kind of construction; sentential not does not have the same effect, and is not grammatical with so-inversion, even for SAND speakers.

(14)  a. *John can play guitar, but so can I not.
b. John can play guitar, but so can’t I.

This is likely related to the fact that the negative marker in SAND precedes the subject, due to subject-aux inversion, whereas not cannot do this in many contemporary colloquial varieties of English. That inversion itself is independently required can be shown by looking at the few cases where this kind of so does not require inversion, namely in correlative constructions introduced by just as. The following is an example from a literature textbook (Annas and Rosen 2007: 1530).

(15) Just as persuasion may be found in narrative nonfictional prose, so narrative elements are often part of rhetorical nonfictional prose.

Although inversion would be possible here with SAND, the example is sharply ungrammatical if the auxiliary is left in place.

(16)  a. Just as some parents ignore their children, so don’t some children ignore their parents.
b. *Just as some parents ignore their children, so some children don’t ignore their parents.

There is a curious restriction on SAND. Ordinary so-inversion allows an optional too (17a), but this is sharply impossible with SAND (17b).

(17)  a. Just as children ignore their parents, so (too) do parents ignore their children.
b. Just as children ignore their parents, so (*too) don’t parents ignore their children.

Notice that this is a positional constraint, because, as discussed below, too can appear at the end of the clause.

(18)  a. They play well, but so don’t we, too.
b. They play well, but so do we, too.

10. See the discussion surrounding (100).
To summarize this section, the basic properties of SAND are as follows. All auxiliaries compatible with *n't can be used (with the exception of *need), and all (non-NPI) subject types are possible as well (pronouns, proper names, definite DPs, quantified DPs, gerunds, etc.). Despite the presence of *n't, the construction has affirmative force, as will be shown in detail in the next section. This use of *n't with preposed *so is possible only with subject-aux inversion, and has no counterpart with neither. Whereas too may optionally appear between *so and the auxiliary with standard *so-inversion, it is impossible in this position with SAND. The antecedent clause of SAND must also be affirmative.

### 2.2 Pragmatic Properties and the Force of Negation

In general, SAND can be used felicitously when the speaker believes there to be a mismatch between his beliefs and his addressee's beliefs. The most common case of this is when a speaker says something that carries an (exhaustivity) implicature which is not correct.

(20)  
  a. **Melinda**: Why are you going to bed so early?  
  b. **John**: Because I have to teach early tomorrow.  
  c. **Melinda**: Well so don't *I*, and you don't see me going to bed so early.

In this dialogue, Melinda interprets John’s answer to her question as implying that she, unlike him, does not have to teach early in the morning. It is as though John’s answer contained an implicit *unlike you, as in, “Well unlike you, I have to teach early in the morning.” Melinda’s response is similar to something like the double negation sentence in (21).

(21)  
  I don’t not have to teach early tomorrow too.

Or, at a more metalinguistic level, a statement of the sort in (22).

(22)  
  Your implication that I don’t have to teach in the morning is not accurate.

If John's statement in (20b) is instead, “Because like the rest of us, I have to teach early tomorrow,” Melinda's response in (20c) would be infelicitous, as pointed out by Larry Horn (pers. comm.).

This kind of implicature negation can be targeted at the addressee as well, such as in the following dialogue.
(23)  a. **John:** You’re so funny—you always get so nervous before your evaluation.

   b. **Melinda:** So don’t you! So wouldn’t anyone who had a boss like mine!

Here, John’s statement is taken to imply that Melinda is unique or exceptional in getting nervous before evaluations. Melinda’s response is targeted at this implication, since she thinks there is nothing exceptional about her in this regard; it’s not the case that John doesn’t get nervous before evaluations, and in fact, anyone with a boss like hers would.

It is not necessary to be talking about discourse participants, as shown in the following dialogue.

(24)  a. **Melinda:** I can’t believe they chose Alice for that promotion instead of Helga.

   b. **John:** Well Helga IS very often late to work.

   c. **Melinda:** But so isn’t Alice!

   d. **John:** Is she really?

   e. **Melinda:** Yes! And Helga’s a much better worker!

   f. **John:** Yeah, that’s true.

John’s supposition is based on his belief, which turns out to be incorrect, that a relevant difference between Alice and Helga is that Helga is often late to work. Melinda rejects this by saying that it’s not the case that Alice isn’t also very often late for work.

Whenever SAND is used, it obligatorily forces this reading (i.e., where speaker assumed that the addressee assumed the corresponding negative statement). In the following dialogue, where there is no implication that Melinda would not be hungry as well, it is very odd to use the SAND construction.

(25)  **Context:** John and Melinda have both slept in on a Saturday, and each would expect the other to be hungry.

   a. **John:** Have you eaten yet?

   b. **Melinda:** No.

   c. **John:** I’m hungry.

   d. **Melinda:** So aren’t I.

To this John would be likely to reply, “I never said you weren’t.” That is, Melinda’s response here would come off as exceptionally defensive, and inappropriate for the circumstances. In contrast, Melinda could felicitously, in this context, reply, “So am I.”

However, it is also not strictly necessary that a discourse participant intend to imply the negative proposition that is to be rejected. SAND can also be used when the proposition is just surprising or unexpected.
(26) a. **Steve**: I’m from Merrimack.
    b. **Nick**: No kidding! So aren’t I!

Here, the surprise comes from the fact that Steve probably assumed that Nick was not from Merrimack. Nick’s response expresses something like (27).\(^{11}\)

(27) You asserted that you are from Merrimack. It is not often that one encounters people from one’s hometown, so you probably assumed that I am not from Merrimack. But in fact, it’s (surprisingly) not the case that I’m not from Merrimack!

The pragmatic constraints on the SAND construction show that the *n’t of SAND is not completely “pleonastic” or “expletive.” Its appearance correlates with the implication of some negative statement, a negative statement that the speaker wants to reject. I will propose below that this follows from the syntax of the construction. Before presenting the analysis, however, I will show that despite the presence of *n’t, the SAND construction fails tests for negativity and passes tests for affirmativity, and it shares this property with negative exclamatives. The latter constructions, moreover, involve *n’t being attached to an auxiliary that has undergone subject-aux inversion, just as in the SAND construction.

### 3. AFFIRMATIVE DESPITE NEGATIVE MORPHOLOGY

In this section, I apply a series of tests for clausal negation, originally developed by Klima (1964), to show that the SAND construction has clear affirmative force. Whenever possible, I will compare SAND with the negative exclamatives shown above, and conclude that they all share the property that subject-aux inversion with *n’t correlates with the loss of affirmative force.

#### 3.1 Negative Polarity Item Licensing

The most frequently encountered test for negation is the ability to license NPIs. It is also, unfortunately, among the less reliable negation tests in English, since a great many non-negative clauses also license many NPIs like *any, so long as there is some downward entailing element (or nonveridical element, for “free choice” items) in an appropriate structural configuration.

Nevertheless, the problems with NPI licensing as a test for negation will not concern us here, because the problems involve cases where something other than

\(^{11}\) If we replace Merrimack with a larger city such as Boston in (26a), it is less likely to be surprising. However, SAND wouldn’t be ruled out as a response so long as the speaker found it surprising or unexpected that they would both be from Boston.
negation licenses an NPI. Here, I will show that the SAND construction fails to license NPIs, and so this issue will not concern us (cf. McCawley 1998: 502).

First, observe that the SAND sentence in (28a), with an NPI, is unacceptable. This is similar to Standard English so-inversion in (28b).

(28)  

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<tbody>
<tr>
<td>a.</td>
<td>*Some swimmers showed up at the zero-gravity expo, but so didn’t any astronauts.</td>
</tr>
<tr>
<td>b.</td>
<td>*Some swimmers showed up at the zero-gravity expo, but so did any astronauts.</td>
</tr>
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</table>

As Larry Horn (pers. comm.) points out to me, there are cases where any can appear in the subject position of a SAND construction, but, as he notes, they are all cases where this is possible with ordinary so-inversion as well. That is, they involve “free choice any,” licensed in these cases by relative clauses. The sentence in (29a), from the web, illustrates this when compared to Standard English so-inversion in (29b).

(29)  

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<tbody>
<tr>
<td>a.</td>
<td>Jennifer is having problems, but so wouldn’t anyone who went through what she did . . .</td>
</tr>
<tr>
<td>b.</td>
<td>Jennifer is having problems, but so would anyone who went through what she did . . .</td>
</tr>
</tbody>
</table>

One can control for the “free choice” confound by using the past tense of do, and no relative clause. When this is done, as in (28), NPIs are strictly ungrammatical with SAND. Cases that do allow “free choice any” or similar elements are also possible when n’t is not present, showing that n’t is not what licenses the NPI in those cases.

A similar test, pointed out to me by Larry Horn (pers. comm.), involves disjunction (Horn 1972, LeGrand, 1974). In English, or is conjunctive when under the scope of negation. For example, consider the sentence in (30).

(30)  

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<tr>
<td>John didn’t hold his breath underwater for longer than 30 seconds, but neither did Mike or Joanne.</td>
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</table>

The second clause, on the relevant reading, entails that both Mike and Joanne failed to hold their breath. The negative marker neither scopes over the subject, and requires the negative proposition to hold of each disjunct.

In contrast, SAND never forces a conjunctive reading with or. The examples in (31) do not differ in this respect.

(31)  

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<tbody>
<tr>
<td>a.</td>
<td>John held his breath underwater for 30 seconds, but so did Mike or Joanne.</td>
</tr>
<tr>
<td>b.</td>
<td>John held his breath underwater for 30 seconds, but so didn’t Mike or Joanne.</td>
</tr>
</tbody>
</table>
Both (31a) and (31b) can be true if either Mike or Joanne held his/her breath for thirty seconds. It is not necessary that the proposition apply to both of them, unlike in (30).

3.2 Positive Polarity Item Licensing

In a similar fashion, it can be shown that PPIs are possible with SAND, where they are ungrammatical in the negative counterparts with neither. SAND again behaves like Standard English so-inversion in this respect.

DPs quantified with some are PPIs, as they are quite odd under the scope of negation (Baker 1970: 176; Szabolcsi 2004). This is illustrated with a neither sentence in (32b).

(32)  a. Some swimmers didn’t show up.
     b. *Some swimmers didn’t show up, but neither did some astronauts.

(32a) shows that some swimmers can occur in the subject position of a negative sentence. However, this is only if it has scope over negation. That is, (32a) can be paraphrased “there are some swimmers such that they didn’t show up” but cannot be paraphrased “it is not the case that some swimmers showed up.” In (32b), inversion of neither forces negation to scope over the subject (some astronauts), and the result is ungrammatical.

In contrast, both SAND and Standard English so-inversion lack the kind of negative force that precludes PPIs.

(33)  a. Sure, some guitarists wanted to play, but so did some drummers.
     b. Sure, some guitarists wanted to play, but so didn’t some drummers.

(34)  a. I know that the professors wanted to ask some questions, but so did some students.
     b. I know that the professors wanted to ask some questions, but so didn’t some students.

(35)  a. Some dogs are mean, but so are some cats.
     b. Some dogs are mean, but so aren’t some cats.

That the (b) examples in (33–35) are possible shows that SAND sentences do not have negative force, despite the presence of n’t.

Exclamatives with n’t behave like SAND and affirmative sentences, in that NPIs are impossible and PPIs are possible. Suppose Fred knows that his roommate dresses up only for special occasions, and sees his roommate wearing exceptionally fancy clothes. In such a context, Fred could utter the exclamative in (36b) with the PPI somewhere, but not (36a) with the NPI anywhere.

(36)  a. *Well aren’t you going anywhere special!
     b. Well aren’t you going somewhere special!
For both SAND and negative exlamatives, we reach the same conclusion: despite the presence of *n’t, NPIs are impossible and PPIs are possible, suggesting that such sentences are affirmative rather than negative. In the following subsections, I will employ some negation tests that are more reliable than NPIs and PPIs, and this conclusion will be very strongly corroborated.

### 3.3 Tag Questions

In English, tag questions typically have the opposite polarity from the main clause (Klima 1964: 263–264). An affirmative sentence can be followed by a negative tag, and a negative sentence can be followed by an affirmative tag.\(^{12}\)

(37) a. He doesn’t play guitar, does he?
   b. He plays guitar, doesn’t he?

(38) a. *He doesn’t play guitar, doesn’t he?
   b. *He plays guitar, does he?

SAND is possible only with a negative tag, like Standard English *so*-inversion and unlike *neither*-inversion.

(39) A: He knows how to swim.
    B: Well so don’t we, don’t we?
    B:’ *Well so don’t we, do we?

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12. Here I stick to the simplest cases and gloss over many complex and interesting issues in the syntax of tag questions. For many speakers (including myself), sentences like (38b), termed "reduplicative" tags by McCawley (1998: 501), are possible, with a very different intonation from (37b) (see Klima 1964: 263). (For me, the second he in (38b) has a lower pitch than the first he, whereas the second he in (37b) typically has a higher pitch than the first he.) The acceptable reading of (38b) also makes a very different pragmatic contribution; according to Cattell (1973: 615), matching tags are used when the main clause expresses "point of view that the speaker is [not] putting forward as his own." There is considerable dialectal variation in the syntax of tag questions, which I cannot do justice to here. Apparently far fewer speakers accept negative reduplicative tags (see e.g., McCawley 1998: 519); even Cattell (1973: 616), who finds certain such cases acceptable in his Australian English, observes that "the use of matching negative polarity is much more restricted than that of matching positive polarity, for reasons which I do not know." For example, although he accepts reduplicative tags with affirmative yes/no questions, such as *Did John drink beer, did he?, they are not possible with negative-marked yes/no questions, such as *Didn’t John drink beer, didn’t he? In Tottie and Hoffmann’s (2006) corpus study, they found “only two bona fide examples of the negative-negative polarity type” (291). In my own dialect, tag questions are not possible with yes/no questions at all. See also Kimps (2007) and Tottie and Hoffmann (2009) for further empirical discussion and references.
(40) A: He knows how to swim.  
   B: Well so do we, don’t we?  
   B: ’Well so do we, do we?  
(40) A: He doesn’t know how to swim.  
   B: ’Well neither do we, don’t we?  
   B: ’Well neither do we, do we?  

This shows that the SAND construction does not have negative force.

Negative exclamatives are not possible with tag questions, so they cannot be submitted directly to this test. However, a similar result obtains with certain kinds of addressee responses.

(42) A: Isn’t he a good swimmer!  
   B: I know, isn’t he?  
   B: ’I know, is he?  

In this dialogue, (B) accepts the proposition expressed by (A) (I know...), and continues with a negative tag, where an affirmative tag would be unacceptable. This suggests that the proposition that (B) has accepted is affirmative, despite the presence of n’t.

Tag questions, then, show that SAND is affirmative, and to the extent that negative exclamatives can be tested, they pattern like SAND in this respect.

### 3.4 Scope of too

The additive focus particle too is very odd under the scope of negation (cf. Klima 1964: 261–262). Sentences where too is c-commanded by a negative operator are sometimes possible, but only where too scopes over negation. This can be shown by manipulating the sentences previous to a too sentence.

(43) a. *They didn’t go to class, and we didn’t go too.*  
    b. *They went to class, but we didn’t go too.*  

Too scopes over the negation in (43a), meaning that we also did not go to class. However, as shown in (43b), we didn’t go too cannot mean that it is not the case that we also went to class.

With SAND and Standard English so-inversion sentences, it is possible to add too to the end of the sentence, but this is not possible with neither-inversion sentences.13

13. It is also possible to insert too between so and the auxiliary, but I do not discuss this here since this is not possible with SAND, as discussed above.
(44)  
  a.  The girls went to class, but so didn’t the boys, too.  
  b.  The girls went to class, but so did the boys, too.  
  c.  *The girls didn’t go to class, but neither did the boys, too.  

Negative exclamatives behave like SAND with respect to this test. It is possible in such exclamatives to use the focus particle too, but either is clearly out, as demonstrated by the contrast in (45).

(45)  
  a.  Well aren’t you pretty too!  
  b.  *Well aren’t you pretty either!  

This is consistent with the results from above. SAND and negative exclamatives both allow too, like affirmative sentences and unlike negative sentences.

3.5 (Not) even

Only negative sentences can be continued by not even X (Klima 1964: 262–263, 287). Affirmative sentences must be continued by even X. This is illustrated in (46).

(46)  
  a.  They didn’t finish cleaning the kitchen,  
      not even with all the help they had.  
  b.  They finished cleaning the kitchen,  
      even with all the difficulties they faced.  
  c.  *They finished cleaning the kitchen, not even with all the help they had.  

Standard English so-inversion sentences as well as the SAND sentences also resist not even X, unlike neither-inversion sentences.

(47)  
  a.  We didn’t finish, but neither did they, not even with all the help they had.  
  b.  They finished, but so did we, (*not) even with all the difficulties we faced.  
  c.  They finished, but so didn’t we, (*not) even with all the difficulties we faced.  

Negative exclamatives behave the same way as affirmatives, allowing even and disallowing not even.\(^{14}\)

(48)  
  a.  Well aren’t you happy, even blissful!  
  b.  *Well aren’t you happy, not even blissful!  
  c.  *Well aren’t you happy, not even content!  

14. The example in (48c) is to control for the fact that if n’t did have negative force, the scale induced by not even would go in the reverse direction from even; I assume that the relevant “happiness scale” would be something like ⟨content ⟨happy ⟨blissful⟩⟩⟩.
SAN and negative exclamatives behave like affirmatives, despite the presence of *n’t*, with respect to the *not even X* test, consistent with the results from above.

### 3.6 “Until” achievements

Achievements, in the sense of Vendler (1967) (see also Dowty 1979: 58–59), are very odd with *until* modifiers when they are affirmative (Klima 1964: 288–289).

(49)  
\[ \begin{align*}
\text{a. } & \text{?”The boys discovered the hole in the wall until 6:00 PM.} \\
\text{b. } & \text{?”The boys discovered the hole in the wall until they moved that painting.}
\end{align*} \]

To the extent that they are possible, it is only by coercing an activity reading of the verb. In the sentences above, for example, we might imagine the boys engaged in some kind of “discovering” activity, poking at the hole, or something along those lines.\(^{15}\) But it is not possible to maintain *discover* as an achievement verb and use an *until* modifier in this way.

When the sentence is negated, on the other hand, the achievement reading is possible, with the meaning that the achievement did not occur before the time point referred to by the *until*-modifier (and implicates that the achievement did occur at that time).

(50)  
\[ \begin{align*}
\text{a. } & \text{The boys didn’t discover the hole in the wall until 6:00 PM.} \\
\text{b. } & \text{The boys didn’t discover the hole in the wall until they moved that painting.}
\end{align*} \]

Applying this test to Standard English *so*-inversion, *neither*-inversion, and SAND, we see that *so*-inversion and SAND pattern together with the affirmative sentences above, and *neither*-inversion with the negative sentences.

(51)  
\[ \begin{align*}
\text{a. } & \text{They didn’t discover the hole in the wall, but neither did we until we happened to move that painting.} \\
\text{b. } & \text{They didn’t discover the hole in the wall, but neither did we until just last night at 11:00 PM.}
\end{align*} \]

(52)  
\[ \begin{align*}
\text{a. } & \text{*They discovered the hole in the wall, but so didn’t we until we happened to move that painting.*} \\
\text{b. } & \text{*They discovered the hole in the wall, but so didn’t we until just last night at 11:00 PM.*}
\end{align*} \]

15. This reading is quite far-fetched for me, but it is the only conceivable sense in which the sentences in (49) would be possible.
(53) a. *They discovered the hole in the wall, but so did we until we happened to move that painting.
   b. *They discovered the hole in the wall, but so did we until just last night at 11:00 PM.

Negative exclamatives, like SAND and ordinary so-inversion, behave like affirmatives with respect to the until-achievement test.

(54) a. Well didn’t you discover a big hole!
   b. *Well didn’t you discover a big hole until 6:00 PM!

3.7 Auxiliary need

Klima (1964: 288) points out that auxiliary-like behavior of need—where the latter takes no agreement morphology and a bare infinitive complement rather than one headed by to—is restricted to NPI-licensing sentences (negatives, questions, etc.). It is thus possible in (55a–b), with the sentential negative not and negatively quantified DP object, but not in the affirmative (55c). Non-auxiliary uses of need show no such restrictions, as shown in (56).

(55) Auxiliary need
   a. He need not accept suggestions.
   b. He need accept no suggestions.
   c. *He need accept suggestions.

(56) Non-auxiliary need
   a. He doesn’t need to accept suggestions.
   b. He needs to accept no suggestions.
   c. He needs to accept suggestions.

Neither-inversion sentences are negative as well, and license auxiliary need, as shown by the following examples from Google.¹⁶

(57) a. A businessman is not required always to be soft. But neither need he be always ruthless as a matter of course.
   b. The seeker certainly should not emulate these, but neither need he be troubled about them. . .

¹⁶. Auxiliary need is also restricted to certain registers, and is not generally very colloquial, though I do not think one should overestimate this, as I hear it in colloquial speech on occasion. Auxiliary dare as in He dare not say any more behaves much like need, but cannot be tested with SAND since it is independently incompatible (for me and my informants) with n’t.
c. If people don’t like answering the question, they needn’t do so, but neither need they make nasty comments.

d. A haiku, for example is not a complex poem; neither are the lyrics of this song; neither need they be.

Auxiliary need is not possible with Standard English so-inversion or with SAND.

\[(58)\]  
a. *Teachers have to be very understanding. But so need they be tough on occasion.

b. Teachers have to be very understanding. But so should they be tough on occasion.

\[(59)\]  
a. *Teachers have to be very understanding. But so needn’t they be tough on occasion.

b. Teachers have to be very understanding. But so shouldn’t they be tough on occasion.

Negative exclamatives also resist auxiliary need.

\[(60)\]  
a. Well shouldn’t you be excited!

b. *Well needn’t you be excited!

This again supports the claim that SAND and negative exclamatives are not negative, despite the presence of n’t. Needn’t is the only auxiliary I know of that is compatible with n’t but cannot occur in the SAND construction. The reason is clear: auxiliary need occurs only in negative sentences, and SAND sentences are not negative.

3.8 Summary of Negation Tests

This section has shown conclusively that as far as syntax and propositional semantics are concerned, SAND sentences are clearly affirmative. They express an affirmative proposition, fail all negation tests, and pass all affirmation tests, revealing no difference between Standard English so-inversion and SAND with respect to propositional polarity. Neither-inversion sentences, which are the most similar formally, pattern as expected: they are negative. Negative exclamatives, which also have n’t attached to an auxiliary moved to the left of the subject, exhibit properties similar to SAND. They behave like affirmative sentences with respect to NPIs, PPIs, tag questions (to the extent that they are testable with negative exclamatives), too/either, even/not even, until-achievements, and auxiliary need.

I would like to claim that the affirmative properties of these clauses are related to the movement of AUXn’t to the left of the subject. I will provide an analysis that implements this claim below, and I will also briefly discuss some cases where n’t seems to undergo this same movement without losing negative semantics (as well as a case where negative semantics is lost without movement of n’t). First, however, I discuss
an important difference between SAND and negative exclamatives, which will lead me to elaborate on the role of so in SAND and standard English so-inversion.

4. NEGATIVE EXCLAMATIVES: A FIRST PASS

Although SAND and negative exclamatives have a lot in common, there is at least one important difference between the two. Unlike SAND, negative exclamatives require some kind of scalar element somewhere in the clause. (61a) is quite bad, while (61b), with the scalar element big is acceptable. This restriction is not shared by the SAND construction, as shown in (62).

(61) Exclamatives
   a. *Well isn't that a bus!
   b. Well isn't that a big bus!

(62) So AUXn't NP/DP
   a. This is a bus, but so isn’t that.
   b. This is a big bus, but so isn’t that.

This restriction is not always self-evident, as shown by the following examples, provided by Larry Horn (pers. comm.):

(63) Isn’t that a { relief / coincidence / disappointment / kick in the teeth / kick in the balls / pain }!

These involve DPs without any scalar adjective, and are perfectly natural exclamatives. For all of these examples, however, a non-negative, non-exclamative with such is possible.

(64) That is such a { relief / coincidence / disappointment / kick in the teeth / kick in the balls / pain }!

The meaning of this use of such approximates “very much.” The DPs in (63–64) are either (i) themselves inherently scalar, (ii) coerced to be understood as scalar, or (iii) accompanied by null adjectives or scalar elements in sentences like (63–64). I will not choose between these options here, but my claim is that when a negative exclamation of the (61b) sort is acceptable, there is either an overt scalar element or else a

17. This should be distinguished from the anaphoric use of such, as in Maybe there are people who dislike Radiohead, but I’ve never met such a person. This use of such is not associated with a degree element and does not correspond to exclamatives of the sort under discussion.

18. Notice that cases like kick in the teeth have a gradable metaphorical reading and a non-gradable literal reading, but in (63–64), only the metaphorical (gradable) reading is available.
corresponding declarative where degree so or such is possible. Note that degree such is possible in many cases where a considerable amount of coercion or silent structure is necessary to get from the denotation of the DP to the meaning that such modifies. Consider the following\(^\text{19}\):

\begin{equation}
\begin{array}{l}
\text{(65) a. Well aren't you a linguist!} \\
\text{b. You are such a linguist.}
\end{array}
\end{equation}

The sentence in (65a), more natural than (61a), and corresponds to the reading in (65b). In contrast, That is such a bus! is quite bad, in my judgment. However, it improves in certain contexts. For example, if I am talking about something that is in fact not a bus, but shares many properties with a bus, it is much better: John's car is such a bus! If I am with a group of people all piling into John's car, I might say Well isn't this a bus! or, to John, Well aren't you driving a bus! For non-scalar elements, then, a scale can apparently be coerced, by taking "characteristic properties" of the element, and then measuring the extent to which the referent has those properties. (61a) is impossible when referring to an ordinary bus, like a city bus or a school bus, because typically buses don't vary in their bus-like properties: they either have the relevant properties and are buses, or they don't and are not. As soon as we move the context to entities or vehicles that are more or less bus-like, the exclamative and degree use of such become possible. The more "atomic" or "plus or minus" an element is construed to be, the harder this coercion is.

\begin{equation}
\begin{array}{l}
\text{(66) a. *Well isn't this a guitar string!} \\
\text{b. *Well isn't this an oil filter!} \\
\text{c. *Well isn't that a No. 2 pencil!} \\
\text{d. *Well isn't that a proton!} \\
\text{e. *Well isn't this oxygen!} \\
\text{f. *Well isn't this your drivers license!}
\end{array}
\end{equation}

I wouldn't necessarily claim that all of these examples are completely immune to the kind of coercion that is possible with the bus example, if one is creative enough. But these examples were chosen to resist this. In some cases, the specialized use of the DP makes it harder; no matter how "guitar string like" or "oil filter like" something is, it won't really have the "characteristic properties" of a guitar string or an oil filter unless it can be used on a guitar or in a car, respectively. Similarly, an entity either is or is not a proton, though one might imagine a physicist being able to say (66d) if s/he encounters some non-proton particle that behaves like a proton in a surprising number of ways. The point is the scalar restriction on exclamatives is real, even if it can be met by coercion (or perhaps silent scalar elements) in many cases. The more the DPs are manipulated to prevent such coercion, the harder it is to get the exclamative reading.

19. A more natural example of this kind of alternation, provided by Richard Kayne (pers. comm.), would be Well isn't he a liar! along with He's such a liar!
Zanuttini and Portner (2003: 62) claim that one of the distinguishing characteristics of exclamative clauses is a wh-dependency, and speculate that a null operator is at work in what they call yes-no exclamatives, exclamatives of the form *Boy, if syntax isn’t fun!* (See discussion surrounding 90 below on this type of exclamative.) The scalar restriction in exclamatives would make sense if such clauses involve movement of a null degree operator to the left periphery of the clause. (Here and elsewhere, all caps indicates non-pronunciation.)

\[(67)\]

| a. Isn’t that a big bus!  
  = DEG/SUCH isn’t that t_{DEG/SUCH} a big bus |
| b. Aren’t you pretty!  
  = DEG/SO aren’t you t_{DEG/SO} pretty |

On this analysis, the ungrammaticality of (61a) follows from the fact that there is no place to base-generate the null DEG/SO/SUCH.

There are two pieces of evidence in favor of this idea. First, exclamatives of this sort are quite odd with overt degree modifiers (Geukens 1989: 136).

\[(68)\]

| a. ?*Isn’t that such a big bus!  
  = DEG/SUCH isn’t that t_{DEG/SUCH} a big bus |
| b. ?Isn’t that a very big bus!  
  = DEG/SO aren’t you t_{DEG/SO} pretty |
| c. ?*Aren’t you so pretty!  
  = DEG/SO aren’t you t_{DEG/SO} pretty |
| d. ?Aren’t you very pretty!  
  = DEG/SO aren’t you t_{DEG/SO} pretty |

For me, all the sentences in (68) are equally bad. However, some speakers have reported that modifiers like very are much better in such exclamatives than such or so, supporting the possibility that the null degree element is to be identified in some close way with these overt elements.\(^{20}\)

\(^{20}\) Geukens (1989: 136) claims that this can be accounted for on the basis of the pragmatics of exclamative constructions—namely, that the exclamative already implies some extreme degree, so that degree cannot be further specified. To support this, he also claims that these elements cannot themselves be further modified, but this is not exactly true. Degree elements such as so can modify them.

(i) a. She was so very pretty.  
  b. The bus was so very big.

Since so can appear with very, the latter cannot be excluded from exclamatives on the basis that it would require them to be “further intensified.” This further supports the suggestion above that the null degree element should be identified with so or such. Even if the claim were true, then it only begs the question: Why do exclamative clauses express such extreme degrees? Natural language does not eschew redundancy—in form or use—so the unavailability of overt degree modifiers requires some explanation related to the mapping of syntax to semantic/information structure. For example, this kind of reasoning would lead us to expect forms such as *So do I, too* and *So too do I* to be ungrammatical, contrary to
A second piece of evidence for this is that if the scalar element is embedded in an island, the exclamative is quite bad. In the direct object of a complement clause, it gets a bit better, suggesting a movement dependency.

(69)  
a. *Isn’t that the bus [that you thought was DEG big]!  
b. *Doesn’t he play guitar [while singing DEG a long song]!  
c. ?Don’t you think [you’re DEG a big star]!

In fact, there is independent evidence for the existence of such a null operator in language. In Icelandic, degree questions are expressed with an apparent left-branch extraction, where a wh-word moves independently of the head it modifies, as in (70a). Interestingly, in Northern Norwegian, this element is apparently null, as seen in (70b).

(70)  
a. Hvað ert-u gammall?  
what are-you old  
‘How old are you?’  
(Icelandic)  
b. Er du gammel?  
are you old  
‘How old are you?’  
(Svenonius and Kennedy 2006, 134;  
Northern Norwegian)

This same wh-element is also present in certain Icelandic exclamatives, as shown by Jónsson (2010).21

(71)  
a. Hvað ðessi mynd er fælegg!  
what this picture is beautiful  
‘How beautiful this picture is!’  
(Icelandic)  
b. Rosalega var hann fjótur!  
extremely was he quick  
‘How extremely quick he was!’  
(Icelandic)  
c. Mikið voru ferðamenninnir óheppnir!  
much were the tourists unlucky  
‘How unlucky the tourists were!’  
(Jónsson 2010, 38, 43, 45; Icelandic)

Both mikið “much” and rosalega “extremely” can be fronted at the same time.

fact. Suppose they were ungrammatical; this could then be “explained” by saying that a sentence with an “also”-like meaning cannot be further modified by an “also”-like element. But the examples are grammatical, as are many natural language expressions with “extra” elements, so it does not seem that (68) can be ruled out in this way.

21. When the wh-element is used in exclamatives, the verb does not move past the subject. Other degree elements are possible as well, and when they are used without the wh-element, the verb moves, as seen in (71b–c).
(72) Mikið rosalega var hann fljótur!
        much extremely was he quick
    ‘How unbelievably quick he was!’ (Jónsson 2010, 6; Icelandic)

Jónsson (2010) shows that these are not base-generated in the left-periphery with the data in (73), which show that they obey island constraints.

(73) a. *Rosalega var ég sofandi [meðan hann var fljótur]!
        extremely was I asleep while he was quick (Icelandic)
     b. *Mikið var ég sofandi [meðan hann var fljótur]!
        much was I asleep while he was quick (Icelandic)

In these sentences, given the non-scalar nature of “asleep,” the only possible scalar elements that rosalega “extremely” and mikið “much” can associate with are in an extraction island, and the sentence is bad, as expected if the sentences in (71) and (72) involve movement of those elements. Despite this, Jónsson (2010) points out that mikið “much,” unlike rosalega “extremely,” is rather bad when left in the position to the left of the adjective (examples from Jónsson 2010: 44–45).

(74) a. Hann var rosalega fljótur.
        he was extremely quick
    ‘He was extremely quick.’ (Icelandic)
   b. ??Ferðamennir voru mikið óheppnir.
    the.tourists were much unlucky (Icelandic)

This shows that there can be a movement dependency between a degree element and a scalar element where the degree element cannot stay in situ, which resembles many wh-dependencies (in the canonical cases).

The present proposal is that the “extreme” reading of exclamatives and the disappearance of degree modifiers are syntactically related. Exclamatives are formed by moving a degree element, and therefore in order to form them, the degree element needs to have a base position from which it can move.

This analysis raises a number of questions, among them what the role of movement is in the affirmative status of the construction. I return to this question below, after discussing elements like so that play an important role in the analysis.

5. SO, TOO, POLARITY AND DEGREE

The English elements so and too show up in a variety of similar constructions in a way that suggests they are related. Following Wood (2008) (and in part Laka 1990), I propose that the primary function of so, in at least some of its uses, is to mark an
affirmative polarity feature [AFF]. This is based mostly on paradigmatic considerations such as the following.

(75) a. They might be there. If so/not, ...
   b. I think so/not, I hope so/not, etc.
   c. i. John: You won’t walk the dogs. Melinda: I will SO/TOO!
      ii. John: You’ll forget to walk the dogs. Melinda: I will NOT!22

In (75a–b), so alternates with not in reference to an antecedent proposition. In (75c), so and not alternate in terms of the polarity of an emphatic denial. However, in the affirmative variant in (75ci), so and too are both possible with no detectable change in meaning. Below we will see several other alternations indicating a close relationship between so and too.

Further supporting the claim that so reflects [AFF] in so-inversion is the fact that so-inversion and neither-inversion act complementarily as affirmation-negation tests in Klima (1964: 265–266, 288, 304).

(76) a. Joanne doesn’t play guitar, and neither does Melinda.
    b. *Joanne doesn’t play guitar, and so does Melinda.
    c. John plays guitar, and so does Simon.
    d. *John plays guitar, and neither does Simon.

Either is, independently of so-/neither-inversion, the NPI counterpart of too in many constructions.

    b. A: I don’t trust birds. B: I don’t either.

    b. A: I’m not tired. B: Me either.

These paradigms are automatically accounted for if so and n- are [AFF] and [NEG], respectively, and the focus particles too and either are polarity-sensitive counterparts of one another, as schematized in (79).

<table>
<thead>
<tr>
<th></th>
<th>Polarity Marker</th>
<th>Focus Particle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affirmative</td>
<td>so</td>
<td>too</td>
</tr>
<tr>
<td>Negative</td>
<td>n-</td>
<td>either</td>
</tr>
</tbody>
</table>

22. Some speakers also accept I won’t EITHER! for a response in (75ci). As far as I know, it is never possible to object *I will NEITHER! This may be related to the fact that most speakers I have asked also reject *I will SO TOO! However, Jon Brennan (pers. comm.) informs me that this is acceptable for him and some other speakers. See also Wood (2008: 313, ex. 33), for a potentially related constraint on the use of neither.
Note that so-inversion is not the only construction where the two differ as to what can/must be pronounced.

    b. A: I’m not tired. B: Me (n)either.

In the construction in (80), the polarity marker is either impossible (a) or optional (b). In so-/neither-inversion, it is the focus marker that is either optional (81a) or obligatory (81b).

(81) a. So (too) do I.
    b. N*(either) do I.

The polarity marker is obligatory for both in the inversion construction.

(82) a. *Too do I.
    b. *Either do I.

The non-overtness of SO/SUCH outlined in (67) is plausibly a specific instantiation of the generally elusive nature of overt/null alternations of so, too, n-, and either.23

The paradigmatic analysis in (79) accounts for a difference between so- and neither-inversion noted in Huddleston and Pullum (2002: 1539), namely that the latter is not compatible with an additional focal element.

(83) a. John plays guitar, but so (too) does Mary.
    b. John doesn’t play guitar, but neither (*not/*nor/*either) does Jim.

In my analysis, this is because the additional focal element is always present in neither-inversion, as n-either.24

So and too also seem to have a close relationship in degree configurations, suggesting that we are not dealing with homophones. However, they cannot occur together overtly.

23. I will not have any explanation in this paper for why SO/SUCH is silent in exclamatives, whereas so is overt in SAND. Possibly, this has to do with the fact that it involves (what looks like) left-branch extraction, which is generally not allowed in English, but overtly possible in other languages, such as the Icelandic examples presented in (70–72) above (see Thráinsson 2007: 108, fn. 17, and the references there). Cf. Chomsky (1995: 262ff.) on feature movement, where left-branch violations are proposed to result from a PF condition, which would suggest that extracting null elements from a left branch should be fine.

24. This might reduce to the obligatoriness of the polarity element. Both so and n- are obligatory in the inversion construction, but while so is a “free morpheme” rather than an affix (and thus has no morphological need for too), n- cannot occur without another morpheme adjacent to it, in this case either. This, of course, doesn’t explain why so is ruled out in (80a) while n- is optional in (80b). See also note 22.
(84) Degree so/too
a. I'm so tired.
b. I'm too tired.
c. *I'm { so too / too so } tired.
d. I'm so very tired.
e. *I'm { too very / very too } tired.

It is possible that so and too do not co-occur here, even in silent forms. They have different meanings, and they have a selectional relationship with different kinds of clauses.

(85) a. I'm {so/*too} tired that I can't stay awake.
b. I'm {*so/too} tired to stay awake.

The adjective alone cannot select such clauses.

(86) a. *I'm tired that I can't stay awake.
b. *I'm tired to stay awake.

However, another possibility is that so and too in degree environments are related to a common null morpheme. That is, so is still [AFF], and too is (or modifies/identifies) the degree element. However, so and too are only pronounced, respectively, in mutually complementary environments, leading to the apparent selectional differences noted above. That is, so is pronounced in the presence of a (sometimes implicit) that-clause, and too is pronounced in the presence of a (sometimes implicit) to-infinitive. But both are present in both cases, and in both cases so reflects [AFF]. So appears to be a degree element because when it occurs overtly in the extended projection of scalar elements, there is a silent degree element.25

In the next section, I present my analysis of SAND and negative exclamatives, and show that under the assumption that both degree constructions and “additive” constructions (i.e., constructions with an "also" meaning) contain an affirmative morpheme that is pronounced in some cases as so, a unified analysis is possible of these and possibly other instances of negative markers in semantically affirmative sentences.

6. SAND AND YES-NO EXCLAMATIVES: SYNTAX AND SEMANTICS

The analysis I will propose is that movement of the negative morpheme realized as n't is driven by an element that yields the semantics of a question (a propositional disjunction, as in Karttunen 1977). Movement of the affirmative morpheme, realized as

25. This is similar to the silent TOO in So do I TOO, proposed in Wood (2008) and discussed in the next section.
so in SAND and as null SO/SUCH in exclamatives, resolves the question semantics and returns a proposition. The overall effect is like resolving a question-answer pair in one clause. By asserting a sentence of this kind, the speaker opens a question and answers it simultaneously. This, I propose, underlies the pragmatics of the constructions, and could also shed light on some other cases in English where the appearance of n’t yields an affirmative sentence.

I would like to propose that the negated auxiliary moves to C in SAND and negative exclamatives for the same reason it does in yes-no questions. I assume that some feature of C (for example, a “Q” feature) attracts the auxiliary and introduces the semantics of a question—a propositional disjunction of the form \( \lambda p. p \lor \neg p \). If the proposition \( p \) is already negative (i.e., \( \neg p \)), this will yield \( \neg p \lor \neg (\neg p) \). This is a question, and one of the disjuncts needs to be chosen in order to turn it back into an assertion. I would like to claim that so, in its silent or overt form, is capable of doing this, and that it always chooses the “affirmative” variant, either \( p \) or \( \neg (\neg p) \).\(^{26}\)

A simplified representation of a SAND sentence would then be as in (87) below.\(^{27}\) (I will elaborate on these structures in what follows.)

(87) So doesn’t John (play guitar).

\[ 
\begin{array}{c}
\text{CP} \\
\neg p \\
\text{So} \\
\neg p \lor \neg (\neg p) \\
\text{C'} \\
\neg p \\
\text{C} \\
\text{TP} \\
\neg p \\
\text{C} \\
\text{t} \\
\text{John} \\
\text{t} \\
\text{T'} \\
\ldots \\
\text{play guitar} \\
\text{t}_{So} \\
\text{TOO} \\
\end{array} \]

26. This could be accomplished by assuming that so is systematically ambiguous in English, assuming that \( p \) and \( \neg (\neg p) \) are not equivalent. This is supported by morphological evidence from Icelandic, where there are two words for “yes”: jà, which answers non-negative questions (asserting \( p \)), and jú, which answers negative questions (asserting \( \neg (\neg p) \)) (Guðmundsson, 1970). Alternatively, so might take a propositional disjunction and throw away \( \neg p \), yielding \( p \) when the disjunction is \( p \lor \neg p \), and \( \neg (\neg p) \) when the disjunction is \( \neg p \lor \neg (\neg p) \).

27. In all of the trees in this paper, I use indices and traces as presentational conveniences, although I assume no such devices in the grammar. I assume that movement is internal merge.
Here, a feature of C attracts T and forms a question at C’. [NEG] moves with T, though the TP itself is still interpreted as a negative proposition. Because of this, the propositional disjunction at C’ contains a negative proposition in each disjunct, one of them being doubly negated. So resolves the disjunction by picking out and asserting this doubly negated proposition.

Thus, what the construction effectively does is resolve or express a question-answer pair within one clause. This relates to its pragmatic properties. As discussed above, SAND is used to deny a negative proposition. I can felicitously use (87) if I believe my interlocutor believes that John does not play guitar—that ¬p holds. Assuming that discourse participants operate on a Common Ground of propositions believed to be known by all other discourse participants (Stalnaker 1978), I want to remove ¬p from the Common Ground (and presumably from my interlocutor’s beliefs). This is accomplished by taking a representation of ¬p (TP), turning it into a question (C’), and resolving that question in favor of the negation of the originally held negative proposition (CP).

The same analysis can be extended to negative exclamatives, as shown in (88). The only difference here is that SO is silent, and originates with the adjective pretty, which as described above forces the presence of a null degree element. This derives the “extremeness” interpretation: Aren’t you pretty! is related to You are so pretty!

(88) Aren’t you pretty!

28. Note that the feature on C, and the C-T relation, is what is important, not the T-to-C movement itself; see the discussion of if-questions and if-exclamatives surrounding (89) and (90).

29. This analysis requires that the evaluation of NPI/PP licensing, or lack thereof, is computed on the whole doubly negated proposition, and not the negative proposition represented by the TP in (87). This consequence dovetails nicely with the view that logical forms are computed at the CP (phase) level and not earlier, at the TP level (Chomsky 2001, Chomsky 2008), as well as with the assumption that the negative n’t of SAND actually originates higher than TP, as in (99) below. I thank an anonymous reviewer for raising this point.

30. In a parallel manner, So doesn’t John (play guitar) is related to the objection John does so play guitar!
In this analysis, it is an element in or feature of \( C \) (e.g., a “Q” feature) that alters the negative proposition in a manner that ultimately leads to it being affirmative (or doubly negative), by virtue of turning the negative proposition into a disjunction. That this is done by an element in \( C \), and not by subject-aux inversion specifically, is supported by the fact that subject-aux inversion is not required to achieve similar effects, as shown by if-clauses. The latter, in both embedded questions and exclamatives, pass affirmativity tests.\(^{31}\)

\((89)\) \textbf{If}-questions
\begin{enumerate}[a.]
\item I was starting to wonder if this wasn’t the worst day of my life, even worse than the time I fell off that cliff.
\item I was starting to wonder if he wasn’t about to burst into tears on me \{too/*either\}!
\item I was starting to wonder if we hadn’t discovered the biggest crater in history (*until we used our binoculars).
\end{enumerate}

\((90)\) \textbf{If}-exclamatives
\begin{enumerate}[a.]
\item If you aren’t the cutest thing—even cuter than the last time I saw you!
\item If it isn’t my best friend John \{too/*either\}!
\item If you didn’t discover quite a crater (*until you used your binoculars)!
\end{enumerate}

Here, the negative auxiliary does not move to the left of the subject, and the presence of \textit{if} appears to be involved in yielding affirmative semantics.

Given that movement of the negative auxiliary is not essential in yielding affirmative semantics, why is movement necessary with SAN\(\text{D} \)? Consider (91) and (92).

\((91)\) \begin{enumerate}[a.]
\item Just as some parents ignore their children, \textbf{so don’t some children} ignore their parents.
\item *Just as some parents ignore their children, \textbf{so some children don’t} ignore their parents.
\end{enumerate}

\((92)\) *Bill is going to school, and Harry isn’t too.

The analysis of SAN\(\text{D} \) outlined above accounts for the obligatoriness of head-movement in the following way. To turn the proposition into a disjunction, the same feature of \( C \) that forms yes-no questions is employed. This feature drives subject-aux inversion in matrix questions, and the latter provide the disjunction that \textit{so} operates on. In (91b) and (92), this feature is not present in \( C \), so it can neither drive subject-aux inversion nor provide the necessary disjunction. In embedded questions, the feature is treated differently (expressed, for example, by \textit{if}), and does not

\(^{31}\) Zanuttini and Portner (2003: 62) claim that in if-exclamatives, an element such as \textit{boy} is obligatory, as in *(Boy), if syntax isn’t fun! For me, \textit{boy} and similar elements are optional, but presumably some speakers would require them in the examples in (90).
require movement to C. In short, subject-aux inversion is necessary in these cases because it is necessary in yes-no question formation, and the latter is an intermediate step in the derivation of semantically non-negative sentences with negative morphosyntax.

Lacking the necessary yes-no question formation as an intermediate step, (91b) and (92) are simply negative propositions, which yields several problems, including the low scope of *too and the affirmative polarity of the antecedent clauses. The unacceptability of (93a) is also accounted for, in the same way as the unacceptability of (93b): there is no affirmative antecedent clause.

(93)  
a. *He can’t touch the ceiling, but so can’t I.  
b. *He can’t touch the ceiling, but I can too.

I assume that the requirement for an affirmative antecedent clause derives from the polarity sensitivity of and alternative semantics induced by the focus particle *too, which is sometimes silent in so-inversion and SAND. (See the discussion surrounding (77). However, what is important here is that some analysis rules out (93b), and whatever that is, it will also rule out (93a), on the present analysis.

However, what is not yet accounted for is the impossibility of *too between so and the auxiliary. As noted above, this is a distributional restriction: *too is perfectly fine with SAND as long as it occurs somewhere else.

(94)  
a. Just as some parents ignore their children, so {too} do some children ignore their parents {too}.  
b. Just as some parents ignore their children, so {*too} don’t some children ignore their parents {too}.

It is tempting to relate this to the impossibility of *Neither don’t I, which like *So too don’t I, is sharply ungrammatical, given the paradigmatic parallels seen above and illustrated in part in (95).32

(95)  
John likes dogs and . . . John doesn’t like birds and . . .  
a. I do too.  
b. I don’t either.  
c. *I do so.  
d. *I do neither.  
e. So too do I.  
f. Neither do I.  
g. *So too don’t I.  
h. *Neither don’t I.

However, it was also seen above that the appearance of *so and *too on the one hand, and n- and *either on the other, is a very complex matter. It may be that the

32. Of course, (95c) and (95d) are both grammatical strings, but not with the relevant readings. (95c) cannot mean (95e), and (95d) cannot mean (95f).
impossibility of *Neither don't I is independent of *So too don't I. I will set *Neither don't I aside for now.

To sketch an analysis of the impossibility of *So too don't I, first consider how the acceptable So too do I is derived. In Wood (2008), I develop an analysis based on Kayne’s (1998) analysis of particles including too, where the latter originates in the vP periphery and attracts its focus to its specifier. This is followed by vP-preposing (and other movements, depending on the sentence; see Kayne 1998). As for so, I propose that it occupies the specifier position of a low PolP with an affirmative feature (recalling Pollock’s 1989 analysis of French pas “not” in SpecNegP).33

\[\text{(96)}\]

\[\text{PolP}\]

\[\text{so}\]

\[\text{Pol}^0\]

\[\text{FocP}\]

\[\text{DP}_i\]

\[\text{Foc}^0\]

\[\text{vP}\]

\[\text{t}_i\]

play guitar

After \(T^0\) is merged and attracts the subject to its specifier, a polarity focus head \(\Sigma^0\) in the CP domain attracts the PolP to its specifier (following its evacuation by the vP) and forces subject-aux inversion, as in (97). Here I assume that \(\Sigma^0\) carries the feature driving question formation and subject-aux inversion.

\[\text{(97)}\]

\[\text{ΣP}\]

\[\text{PolP}\]

\[\text{So t}_i\]

\[\text{too t}_v\]

\[\text{Σ}^0\]

\[\text{TP}\]

\[\text{T}^0\]

\[\Sigma^0\]

\[\text{DP}_i\]

\[\text{I}\]

\[\text{t}_T\]

\[\text{vP}\]

\[\text{t}_v\]

\[\text{play guitar}\]

In Wood (2008), I assumed that silent TOO is in the same position(s) as overt too. This implies that the structure of So do I is identical to that of So too do I, modulo the

33. This is a slight departure from the analysis in Wood (2008). It suggests that so is itself (or can be) an XP, rather than just a head, an assumption supported by the predicative uses of so as in Is this so? “Is this true?”
pronunciation or non-pronunciation of *too. But this leaves little room for what appears to be a syntactic difference in the SAND construction. Instead, suppose that there are two distinct possibilities when \( \Sigma^0 \) merges: either it agrees with Pol\([\text{neg}]\) and attracts the entire PolP, as shown in (97), or else it agrees with so in SpecPolP, attracting the latter on its own, as shown in (98).

\[ (98) \]

Then, the pronunciation of *too is optional in the final position due to optionality in the target of ellipsis. Either the vP is elided, yielding So do I, too, or a node dominating vP is elided, yielding So do I. When the entire PolP moves to Spec\( \Sigma \) as in (97), however, too is pronounced, yielding So too do I. This reduces the arbitrariness of the previous analysis in that non-pronunciation is a matter of picking a node for ellipsis and failing to pronounce everything that that node dominates—an independently needed process—rather than picking an arbitrary terminal element within an XP and failing to pronounce that element only.

The impossibility of *So too don’t I can be understood as the impossibility of the derivation in (97) when n’t is present; only (98) is possible. To be more precise, I adopt from Zanuttini (1997) the assumption that there are as many as four positions in the clause for placing sentential negation morphemes, including one above TP where n’t can originate (Holmberg 2003, van Craenenbroeck and Temmerman 2010). So still originates in the lower PolP. (97) is impossible when n’t heads the higher PolP because of minimality; \( \Sigma^0 \) cannot attract the lower PolP when there is another active PolP intervening. So must then be distinct enough from Pol\([\text{neg}]\)/Pol\([\text{aff}]\) to be able to move past the higher Pol\([\text{neg}]\). The proposed derivation is given in (99).

34. That is, \( T_{\text{[neg]}} \) in (87) is a syntactically derived complex head, where \( T^0 \) has moved to the higher Pol\([\text{neg}]\). See also Sigurðsson (2012) on the formation of complex feature bundles.
So do PolP [NEG]n’t PolP tP PolP vP tIP vP PolP \[AFF\] t$_{\text{Foc}}$ t$_P$ t$_{\text{Foc}}$ [AFF] t$_P$ t$_{\text{Foc}}$ too t$_{\text{IP}}$

The impossibility of (14a), (repeated here as (100a)), follows if not (unlike n’t) originates in the low PolP\[^{35}\]; it is incompatible with the presence of so.

(100)  
  a. *John can play guitar, but so can I not.  
  b. John can play guitar, but so can’t I.

According to an anonymous reviewer, negative exclamatives such as (101b) are possible in some varieties of (British) English.

(101)  
  a. Isn’t she a charming woman!  
  b. ??Is she not a charming woman!

The present analysis does not require movement of negation to the left of the subject (see note 28), so (101b) is not automatically ruled out in the way that (100a) is ruled out. In the dialect described in this paper, (101b) is generally not accepted. This may relate to the general preference of n’t over not in finite contexts (and especially in subject-aux inversion contexts) in these dialects.\[^{36}\] The same holds of if-exclamatives:

(102)  
  a. Well, if it isn’t John and Melinda!  
  b. * Well, if it is not John and Melinda!  
  c. ??Well, if it’s not John and Melinda!

35. Supported, for example, by contrasts such as (i)

  (i) a. *When he arrives, I hope to haven’t done that yet.  
      b. When he arrives, I hope to have not done that yet.

36. Thus, as Richard Kayne (pers. comm.) points out, many speakers find even a sentence like John has not arrived yet (with has not in place of hasn’t) unnatural in colloquial speech unless not is stressed.
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(100a) is, then, ruled out twice over: it is ungrammatical because so occupies the position not would occupy, and even if this weren’t the case, it would be rendered at best marginal for the same reasons that (101b) and (102b–c) are, at best, marginal (in the dialect in question).

The analysis where so originates in the specifier of Pol_{[app]} might shed light on other uses of so, and/or its multifunctionality more generally. Irwin (chapter 2 in this volume) discusses a use of so that is apparently a relatively recent development (gaining popularity in the 1980s), and that is not commanded by all English speakers. An example is given in (103).

(103) I so don’t agree. (= ’I very much disagree’)

Irwin (Chapter 2) shows that this so cannot occur under the scope of negation, and argues that it modifies a silent speaker-oriented adverbial TOTALy. The PPI behavior that she shows suggests that so still has affirmative features/properties in this use. The idea would then be that so could occur in the specifier of an affirmative polarity head, in which case its affirmative features simply match those of that head, or in the specifiers of other heads, in which case it will appear to have other functions. This is consistent with the discussion of degree so in section 5. See den Dikken (2008) for discussion of other uses of so.

Interestingly, Szabolcsi (2004) argues that PPIs are, formally, double negations. The someone of He saw someone, for example, has the denotation shown below (Szabolcsi 2004: 431).

(104) He saw someone. \[\lambda p \neg \exists x [\text{person}(x) \land P(x)]\]

If so picks out \(\neg(\neg p)\) from the disjunction \(\neg p \lor \neg(\neg p)\), as I am proposing, then it is not surprising that in other contexts, it behaves as a PPI. PPIs, according to Szabolcsi (2004), inherently possess two instances of negation.

In sum, so has affirmative features, and in so-inversion and SAND originates in the specifier of Pol_{[app]}. A polarity focus head in CP, \(\Sigma^0\), forms a yes-no question and in matrix clauses drives subject-aux inversion. It also enters into an Agree relation with PolP, agreeing with either its head, Pol^0, or its specifier, so. In the first case, the entire PolP moves to Spec\(\Sigma\)P and too is pronounced between so and the auxiliary (so too have...). In the second case, so moves directly to Spec\(\Sigma\)P and too may or may not be pronounced, depending on how much structure is elided. Semantically, \(\Sigma^0\) forms a yes-no question from a negative proposition, yielding \(\neg p \lor \neg(\neg p)\). So in Spec\(\Sigma\)P “answers” this question by picking \(\neg(\neg p)\). The upshot is that the “presuppositional” flavor of affirmative sentences with negative morphosyntax derives from the fact that negation is active, and a negative proposition is operated on. If a negative proposition is in the Common Ground, it can be removed by a speaker with a construction.

37. Put in prose, roughly: “The set of propositions for which x is an argument, and it is not the case that there does not exist x, where x is a person.”
that simultaneously questions the proposition and answers to the contrary. However, this is not a constructional primitive or a primitive operation; rather, it derives from the independent properties of the elements involved.

7. **WHY-QUESTIONS AND POLARITY**

In this section, I briefly discuss some other potential cases of negative morphosyntax with affirmative semantics: certain kinds of why-questions. Although they seem similar in some ways, I will argue that why-questions involve direct negation of a negative, without forming a propositional disjunction first. This is related to the constructions of primary interest in that it involves a double negation analysis of the affirmative semantics with negative morphosyntax, but distinct in that a crucial step is missing, which accounts for certain differences between why-questions on the one hand, and SAND on the other.

So far, I have shown several cases where a feature of a CP head (Σ⁰) turns a negative proposition into a disjunction, which feeds its ability to become affirmative. In the cases of primary interest, this feature drives subject-aux inversion, but if-questions and if-exclamatives (89–90) show that this is not necessary. Subject-aux inversion with a negative auxiliary is not only not necessary to derive affirmative sentences with negative n’t, it is also not sufficient. Certain wh-questions, such as with argumental DPs, remain negative despite subject-aux inversion, as shown in (105a).

Still, other wh-questions, such as why-questions in the present tense, do seem to be affirmative, as exemplified in (105b). That subject-aux inversion is to blame for this might be suggested by the fact that how come, which also means why but has no subject-aux inversion, does not have this effect, as shown in (105c) (cf. Collins 1991).

(105)  
\[
\begin{align*}
(105a) & \quad \text{Who don’t you like?} \\
& \quad \text{Why don’t you take out the trash?} \\
& \quad = ‘\text{Please take out the trash.}’ \\
& \quad \text{How come you don’t take out the trash.} \\
& \quad = ‘\text{Please take out the trash.}’ \\
& \quad \rightarrow \text{You don’t take out the trash.}
\end{align*}
\]

(105a) is negative; the question is asking for the set of people the addressee does not like. In (105b), there is no implication that the addressee does not take out the trash, and it is in fact expected that s/he will. In contrast, (105c) entails or presupposes that the addressee does not take out the trash, and cannot be used as a suggestion or request. The why-question in (105b), unlike (105c), fails negativity tests. The former are shown directly below:

38. Larry Horn (pers. comm.) points out the following minimal pair, which he attributes to Barbara Partee:

(i)  
\[
\begin{align*}
(105i) & \quad \text{Why don’t you love me anymore? [complaint]} \\
& \quad \text{Why don’t you love me some more? [suggestion]}
\end{align*}
\]
Affirmativity tests—when *why don’t* is affirmative, suggestion reading available

a. Why don’t you take out some trash?
   = ‘Please take out some trash.’

b. Why don’t you take out the trash too?
   = ‘Please take out the trash too.’

c. Why don’t you take out the trash, even the recyclables?
   = ‘Please take out the trash and the recyclables.’

Negativity tests—when *why don’t* is negative, suggestion reading is unavailable

a. Why don’t you leave until 6:00 PM?
   ≠ ‘Please leave at 6:00 PM.’
   → You don’t leave until 6:00 PM.

b. Why don’t you take out any trash?
   ≠ ‘Please take out the trash.’
   → You don’t take out any trash.

c. Why don’t you take out the trash either?
   ≠ ‘Please take out the trash.’
   → You don’t take out the trash either.

d. Why don’t you take out the trash, not even the recyclables?
   ≠ ‘Please take out the trash and the recyclables.’
   → You don’t take out the trash or the recyclables.

However, *why*-questions have properties of their own that suggest that subject-aux inversion is not to blame for the affirmative nature of (105b). First, *why*-questions are affirmative with *n’t* in only a restricted range of cases. Certain operators such as past tense apparently prevent *why*-questions from being affirmative with *n’t*, as shown in (108).

(108) Why didn’t you take out the trash?
   → You didn’t take out the trash.

Second, note that (105b) is not just affirmative; it doesn’t mean “You do take out the trash” or “Why do you take out the trash”; it is a suggestion, which is more like an imperative. Note that imperatives also disallow past tense. The “speech act” nature of this construction can be illustrated with a third-person subject.

(109) a. Why doesn’t he take out the trash?

b. Why don’t they take out the trash?

c. Why don’t John and Melinda take out the trash?

Out of the blue, such sentences seem to behave like the past tense one in (108)—they strongly imply that the subject does not take out the trash. However, if a group of
people are cleaning, and two people are in charge of delegating responsibilities, the affirmative suggestion reading returns.

(110) I got an idea. Why don’t they take out the trash while we clean the kitchen?

The affirmative suggestion reading is acceptable in this case because the addressee has some control over whether they take out the trash. It suggests that the addressee will, if s/he agrees with the speaker, go to them and ask or tell them to take out the trash (or allow the speaker to do so).

Third, just as negative-marked why-questions have an affirmative-like interpretation, affirmative why-questions seem to have a negative component, in that in asking Why do you take out the trash? I imply that there might be reason not to. Thus, Gordon and Lakoff (1971: 70) point out that one natural response to (111a) would be (111b).

(111) a. Why are you painting your house purple?
   b. What’s wrong with purple?

Nevertheless, affirmativity and negativity tests show that affirmative why-questions are affirmative. Though I find PPIs to be slightly odd (112a), and NPIs to be OK (113b), the NPI/PPI test is much less reliable, especially in question environments. Other tests show that affirmative why-questions are indeed affirmative and not negative.

(112) Affirmativity tests
   a. ?Why do you take some trash out?
   b. Why do you take out the trash, even the recyclables?
   c. Why do you take out the trash too?

(113) Negativity tests
   a. *Why do you leave until 6:00 PM?
   b. Why do you take out any trash?
   c. *Why do you take out the trash, not even the recyclables?
   d. *Why do you take out the trash either?

The reason for this seems to be that affirmative why-questions are not used to make suggestions. By saying Why do you take out the trash? I may feel as if you don’t need to take out the trash, but I am not saying anything like, “Please don’t take out the trash.” If a boss asks an employee, “Why do you ignore customers?” he is asking for a reason the employee does this; he is not saying, “Please don’t ignore customers,” though he may well say this after hearing the employee’s response. This difference can be illustrated with two hypothetical dialogues:

(114) a. Boss: Why don’t you take out the trash?
   b. Employee: Okay, I will.
The dialogue in (114) is complete, coherent and natural, but the dialogue in (115) is not. There, it seems as though the employee is trying to dodge the question—like s/he is trying to jump to the point without having to own up to his/her reasons. I will not have an explanation for why affirmative why-questions are not suggestions in the same way as negative-marked ones are. However, that the suggestion reading is the important factor in the “polarity switch” is shown by “short why-questions,” which are interpreted as suggestions in both affirmative and negative cases:

(116)  
a. Boss: Why not take out the trash while you're waiting?  
b. Employee: Okay, I will.

(117)  
a. Boss: Why ignore customers like that?  
b. (?)Employee: Okay, I won’t.

As pointed out to me by Larry Horn (pers. comm.), short why-questions differ from ordinary why-questions in that the former actually do pass negativity tests (cf. Horn 1978a, 147, Horn and Bayer 1984, 407–409):

(118)  
a. *Why are you hiring him until he lowers his salary demands?  
b. (?)Why hire him until he lowers his salary demands?

Unlike Why are you hiring him?, Why hire him? is very close to meaning “You shouldn’t hire him.” Both affirmative and negative short why-questions, then, are suggestions, and the polarity of both is the opposite of what one would expect on the basis of morphological marking. This is distinct from the situation with SAND and so-inversion, where the result is affirmative regardless of morphology.

(119)  
a. I would go, and so would you. (affirmative marking, affirmative meaning)  
b. I would go, and so wouldn’t you. (negative marking, affirmative meaning)

(120)  
a. Why go (anywhere) now? (affirmative marking, negative meaning)  
b. Why not go (somewhere) now? (negative marking, affirmative meaning)

39. There may, however, be polarity asymmetries even in short why-questions, which seem to resist not even: *Why hire him, not even for a week?/Don’t hire him, not even for a week!  
40. Note that if-questions with no negative marking are not negative ("I was starting to wonder if you would forgive me either."), and if-exclamatives actually seem to require negation ("If you are the (cutest/ugliest) thing!"). This makes them seem more like SAND than short why-questions in that there is no affirmative-marked variant with negative meaning. Thanks to Larry Horn for discussing this point.
Note also that there is no auxiliary present in short why-questions, so why must be able to switch the polarity without an auxiliary.41

Now, the present analysis of negative-marked affirmatives is that a semantically negative sentence is turned into a disjunction, \( \neg p \lor \neg(\neg p) \), and then some operator picks out \( \neg(\neg p) \). The question for any particular construction is how the operator picks it out, and what it does with it. A fully elaborated analysis of why-questions is beyond the scope of this paper. However, in light of the preceding, it seems that why-suggestions take a propositional input \( p \) (which is often true at the moment of utterance) and gives the addressee its negation \( \neg p \), allowing the addressee a chance to give reasons to reject \( \neg p \). If the original proposition was already negative, it would take \( \neg p \) and return its negation, \( \neg(\neg p) \). If the addressee cannot give any (acceptable) reasons, s/he is expected (or maybe encouraged) to “make \( \neg p \) (or \( \neg(\neg p) \)) true,” either by doing something himself or herself, as in (105a), or by getting someone else to do something, as in (110). Past tense sentences like (108a) lack this reading because a speech act cannot involve requesting that the addressee change a proposition presupposed to hold in the past. Similarly, unless the addressee has some control over the subject of the sentence, the addressee cannot be expected to make a proposition true if that proposition requires someone else doing something.42

SAND sentences, on the other hand, have nothing like the past-tense restriction, because they involve asserting a proposition, rather than a suggesting or a requesting that the addressee make the (doubly negated) proposition come about. Although I have to leave many of the specifics of this account for future work, it seems to be generally compatible with the present approach, where negative-marked affirmatives involve some operator or element providing the negation of a negative proposition. Why negates the proposition directly, whereas so always selects the affirmative of a disjunction \( (p \lor \neg(\neg p)) \), which has to be formed independently.43 Bare affirmative-marked why-suggestions behave like negatives, and this symmetry supports the double negation

41. However, one might pursue the possibility that there is a silent modal and subject in short why-questions, as proposed for certain imperatives in Romance by Kayne (1992, reprinted in Kayne 2000).

42. To provide one more example, if a military officer asks a subordinate, “Why don’t they go instead of us, soldier?” the soldier will either (i) presuppose that “they” don’t go (I don’t know, sir!) or (ii) be at a loss for words, assuming that the soldier has no power over who goes where. However, if that same officer is asking his own superior, “Why don’t they go instead of us, general?” the general could easily answer, “Well that’s a good idea, captain.”

43. What I mean by “directly” is that there is no intermediate step of propositional disjunction, unlike with SAND and negative exclamatives. Since why does not always have the suggestion reading, and since the suggestion reading has syntactic effects, it would seem that it is not really why itself that does the negating, at least not intrinsically. Note further that why can occur in exclamatives (or exclamative-like sentences) such as Why I never! or Why it’s Christmas Day! where it doesn’t seem to have any “reason-like” meaning. This suggests that either (i) why optionally has a feature (perhaps a [NEG] feature) in why-suggestions or (ii) why can be accompanied by silent syntactic material that does the negating (perhaps along with a silent REASON, as proposed by Kayne 2010, 83 for therefore and what for).
analysis of the affirmative properties of negative-marked *why*-suggestions, which behave like affirmatives. All that needs to be said is that *why* in these uses is minimally \( \lambda p. \neg p \) (though as mentioned in the previous note, there is obviously more to it than that). To the extent that this double-negation analysis accounts for the affirmative properties of negative-marked *why*-suggestions, and to the extent that those properties are similar to SAND and negative-marked exclamatives, it supports the present account of the latter, which also involves double negation, though this is achieved through an extra, intermediate step that is not present in *why*-suggestions, namely the formation of a propositional disjunction. This extra step and the properties of *so* (as opposed to the properties of *why*) account for the differences between the two, such as the lack of a person/tense restriction and the contrast in symmetry shown in (119–120).

8. CONCLUSION

In this paper, I have shown that SAND is affirmative, and have illustrated a constellation of restrictions on its use, including the impossibility of *too* between *so* and *AUXn’t* and the obligatoriness of subject-aux inversion. It is, however, clearly productive, in that any auxiliary compatible with *n’t* (other than auxiliary *need*, as discussed in section 3.7), and any non-NPI subject type may occur (e.g., names, definite DPs, indefinite DPs, quantified DPs, gerunds, etc.). I have further shown that negative exclamatives behave in similar ways with respect to negation tests. It was pointed out that despite being non-negative in the propositional sense, SAND has strong pragmatic effects, which I have argued derive from the syntax and semantics of the construction. Specifically, I have argued that the properties of SAND and negative exclamatives derive from the syntax of resolving a question-answer pair within one clause. The morphological negation reflects the negative proposition that the speaker wants to reject, and this is accomplished by questioning the proposition and picking its negation (i.e., the negation of the negative proposition, \( \neg(-p) \)).

If this is on the right track, then many cases of presuppositional or pleonastic negation warrant further scrutiny, such as those where operators in the CP domain are arguably to blame. The Russian example (3e) presented in the introduction is a case in point, where the subjunctive complementizer may be involved, and the French comparative in (3c) might get a related analysis as well. Exclamatives headed by *like*, as in (2b), are also worth investigating from this perspective. *If*-questions and *if*-exclamatives show that movement of negation to the left of the subject is not necessary, and a variety of other cases show that it is not sufficient. Nevertheless, a close examination of the elements involved (many of which are only sometimes pronounced) shows that elements in the CP domain can manipulate the polarity of a proposition in rather dramatic ways.

A particularly interesting phenomenon in this respect is the metalinguistic uses of *n’t* such as those discussed in Horn (1985: 135), which show interesting properties,
such as being unable to license NPIs, and do not obviously reflect any interaction between Pol\(^0\) and the CP domain.

(121) I didn’t [mêˈnɪːj] to solve {some/*any} of the problems—I [mænɪːd] to solve some of the problems.

In these sentences, the negation certainly seems to be interpreted—despite being unable to license NPIs—except that it is not interpreted as propositional negation. Rather, negation seems to scope only over some component of a speech act. Although it is far from obvious how to handle these kinds of sentences at the syntax-semantics interface, a growing number of researchers have begun to revive various versions of what has been called the “neo-performative” hypothesis (cf. Holmberg 2010: 61), namely, the hypothesis that participants and features of the speech event are syntactically represented in (usually the left periphery of) the clause (cf. Speas and Tenny 2003, Bianchi 2003, 2006, 2008; Sigurðsson 2004a, 2004b, 2009, 2010, 2011; Hill 2007; Baker 2008; Holmberg 2010; Collins and Postal 2012; Zanuttini et al. 2012). In the spirit of the approach taken here, instances such as (121) might reflect an interaction between Pol\(^0\) and the CP domain after all, and the right neo-performative theory could provide the tools needed to better understand such metalinguistic negation. At this point, such sentences must be left for future research.

I have argued that SAND is related to a family of cases where negative morphosyntax appears to have affirmative semantics, and that it is especially closely related to negative-marked yes-no exclamative sentences. However, I have not provided an explanation for why SAND is not more widespread. My suspicion is that (perhaps ill-understood) constraints on the movement of polarity elements, such as the movement of so past the high Pol\(_{[\text{NBO}]}\), are to blame. Understanding precisely how other dialects of English are constrained, I believe, will lead to a better understanding of the mapping from syntax to semantics, pragmatics, and morphology in general. It may be that other supposed mismatches between morphological form and logical form are not mismatches at all, but rather tell us something about how logical forms are generated in the first place.

REFERENCES


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