HANDOUT
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‘Few’, ‘A Few’, and ‘Only’ Noun Phrases, Non-Monotonic Quantifiers, and Negative Polarity Items

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(1) a. Few trees will blossom or die ||- Few trees will blossom and few trees will die.
b. Few trees will blossom and few trees will die ||-/ Few trees will blossom or die.
c. Few trees will blossom and die ||-/ Few trees will blossom or few trees will die.
d. Few trees will blossom or few trees will die ||- Few trees will blossom and die.
(2) *Few trees blossom or few trees die* ||- *Few trees blossom and die*.
(3) *Not many trees blossom or not many trees die* ||- *Not many trees blossom and die*.
(4) “Few As are so-and-so” = “Most As are not so-and-so but some are.”
(5) For Sommers (1982: 370) *Few N* is a downwards monotonic quantifier.
(6) For Geach (1980: 108) *Few N* is an upwards monotonic quantifier.

	Pronoun [plural] **Few**	Adjective **Few N**	Adjective **A few N**
Fowler	*small number*	*some & not many N*	*some N*
American Heritage	*small number*	∅	*more than one but an indefinitely small number*
Random House	*small number*	*not many but more than one N*	∅
Merriam Webster	*not many*	*only a small number of Ns*	*at least some but an indeterminately small number of Ns*
Webster’s Universal	*not many*	*only a limited number*	*a small number*

(7) *Party-spirit, which at best is but the madness of many for the gain of a few…*
(8) *He rather hated the ruling few than loved the suffering many*.
(9) *For many are called, but few are chosen*.
(10) *Few misfortunes can befall a boy which bring worse consequences than to have a really affectionate mother*.
(11) *Young children have no sense of wonder. They bewilder well but few things surprise them*.
(12) a. *Few things surprise them* ||- ¬ (*Many things surprise them*).
b. ¬ (*Many things surprise them*) ||-$_I$>> *Many things do not-surprise them*.
(13) a. *A few things surprise them* ||-/ ¬ (*Many things surprise them*).
b. *A few things surprise them* ||-$_S$>> ¬ (*Many things surprise them*).
c. *Many things surprise them* ||- *A few things surprise them*.
d. *A few things surprise them* ||- *At least one thing surprises them*.
(14) a. < …, *a thousand or so, hundreds, a few hundred, a hundred or two, scores, a few score, a hundred or so, dozens, a few dozen, a score or two, a dozen or two, a score or so, a dozen or so, several, a few, two or three, one or two*>,

with the further caveat that:

(14) b. if "the impression of number is still vaguer, one uses 'many', 'a good many', 'a large number' and so on."

At the lower end I note Graves and Hodge's judgment on the scale <*a score, a dozen, several, a few, two or three, one or two*> and the position of 'a few' in the following scale, my variant of the Graves-Hodge scale:

(14) c. <*…most Ns, many N*s, …, *a few N*s, *a N or two, a N or so*>.

The observations in (13) allow us to characterize the logical relationship between 'a few N' and 'few N'. Suppose that one were to consider the hypothesis (H) '*A few N are F* ||- *Few N are F*'. From (H) and observation (13c) that 'many' entails 'a few', it would follow that (J) *Many N are F* ||- *Few N are F*. But (J) is obviously absurd, and the absurdity can be seen as follows: since we accept (12a) that 'few' entails '¬ many', if we also supposed (J) that 'many' entails 'few', it would follow that (K) *Many N are F* ||-
¬ (*Many N are F*), which is obviously absurd. So (J) cannot be correct, and in turn (H) cannot be correct. That is, we accept the non-entailments in (15a,b):

(15) a. *A few N are F* ||-/ *Few N are F*.
b. *Many N are F* ||-/ *Few N are F*.

(16) a1. *Few N are F* ||- ¬ (*Many N are F*),
Few N are F ||- ¬ (*Most N are F*),

or equivalently:

a2. *Many N are F* ||- ¬ (*Few N are F*),
Most N are F ||- ¬ (*Few N are F*).[1]

b1. *Few N are F* ||- *A few N are F*.
b2. *A few N are F* ||-/ *Few N are F*.

c1. "*A few N are F*" ||-$_S$>> ¬ (*Many N are F*),[2]
"*A few N are F*" ||-$_S$>> ¬ (*Most N are F*).

c2. " ¬ (*Many N are F*)" ||-$_I$>> *Many N are not-F*,[3]
" ¬ (*Most N are F*)" ||-$_I$>> *Most N are not-F*.

d. *Few N are F* > *Many N are not-F*,[4]
Few N are F > *Most N are not-F*.

(17) **P1. Few N are F -||- Only a few N are F.**

P2. Only a few N are F -||- A few N are F & {At most, No more than} a few N are F.[5]

P2′. Only a few N are F -||- A few, and {at most, no more than} a few, N are F.

On the hypothesis of **P1**, the relationships in (16a1, a2) obviously follow analytically. The data in (16b1, b2) obviously follow. The scalar implicatum in (16c1) arises from the Graves and Hodge's lexical scale of quantity terms. The Informativeness implicatum (Horn R-implicatum) in (16c2) is explained by the theory defended in Atlas and Levinson (1981), Horn (1984), Atlas (1989), Horn (1989), Levinson (2000), Atlas (2005), Huang (2007), etc. The generic inference in (16d) could, perhaps, have the following two-stage analysis in (18i):

(18) (i)
(a1) *Few N are F* ||- ¬ (*Many N are F*),
(c2) " ¬ (*Many N are F*)" ||-$_I$>> *Many N are not-F*.[6]

The analysis in (18i) is NOT similar to the one for comparative adjectives and adverbials of degree offered in Atlas (1984, 2005). In the latter analysis the relationship between 'almost F' and 'not F' also proceeded in two stages, but the first stage was an implicature from 'almost F' to 'not quite F', and then from the implicatum 'not quite F', depending on the character of the predicate 'F', to an entailed 'not F'. The implicature must come first; the entailment second. In

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[1] I include 'Most N' here as a nod to Peter Geach's intuitions, discussed earlier.
[2] The symbol '||-$_S$>>' indicates a Scalar Quantity Implicature
[3] The symbol '||-$_I$>>' indicates an Informativeness Implicature.
[4] The symbol '>' representes a generic inference, the exact nature of which is left undetermined.
[5] In various uses 'a few N', if it denotes a particular cardinal number at all, will have a denotation that depends on the context. Let's suppose that the cardinal is n_0. Then 'At most a few N are F' may be written in first-order logic in the usual way: $\exists x_1 \exists x_2 \ldots \exists x_{n0} \forall y[(x_1 \neq x_2 \wedge x_1 \neq x_3 \ldots \wedge x_1 \neq x_{n0} \wedge x_2 \neq x_3 \ldots \wedge x_{n0-1} \neq x_{n0} \wedge \mathrm{N}x_1 \wedge \mathrm{N}x_2 \wedge \ldots \mathrm{N}x_{n0} \wedge \mathrm{F}x_1 \wedge \ldots \mathrm{F}x_{n0}) \wedge (\mathrm{N}y \wedge \mathrm{F}y \rightarrow (y=x_1 \vee y=x_2 \ldots \vee y=x_{n0}))]$.
[6] The arguments above are the same for 'Most N'.

the analysis here, the order is reversed, so the phenomenon is a quite different one. Generally, it would make no sense to try to implicate a proposition from an unstated entailment of a sentence that is stated, as implicata by definition arise from inferences made from overt assertions. (For more discussion, see Atlas (1984, 2005).) The data here for ‘Many N’ and ‘Most N’ call for a different conceptualization of the inference. Another possibility of the same kind might be the following:

(18) (ii)

(b1) *Few N are F* ||- *A few N are F*.

(c1) “*A few N are F*” ||-$_{S}$>> $\neg$ (*Most N are F*).

(c2) “ $\neg$ (*Most N are F*)” ||-$_{I}$>> *Most N are not-F*.

The same theoretical difficulties arise for this possibility as for (18)(i). Yet a third possibility makes use of the Atlas-Kempson view of the semantical non-specificity of ‘not’.[7] We reformulate (a1) in its non-specific form, with English ‘not’ rather than a logical connective and with an intensional version of the logical consequence relation suitable for semantically non-specific relata, call it ‘||≈’:

(18) (iii)

(a*1) *Few N are F* ||≈ *It’s not the case that many N are F*.

(c*2) *It’s not the case that many N are F* $\angle$ *Many N are not-F*,

where the symbol ‘$\angle$’ means ‘expresses’; the sentence on the left-hand side expresses the right-hand side. In the case of a semantically non-specific sentence, the right-hand side is one of several possible semantic “specializations” or “instantiations” of the sentence on the left-hand side. In my view the non-specificity account in (18)(iii) is the most theoretically coherent, but it is also the most obscure, for obvious reasons. For purposes of this essay, I shall let the matter rest here.

There are also predictions about the behavior of ‘Few N’ sentences that my proposal in (17) offers. It is clear from **P2** and **P2′** that ‘Few N’ is a conjunction (or an embedded conjunction) of an upwards monotonic and a downwards monotonic quantifier. Thus, on my proposal ‘Few N’ is non-monotonic! It is not “negative,” i.e. not downwards entailing, in the same way that ‘Only John’ turned out not to be negative, yet it will license “weak” Negative Polarity Items.

‘Few N’ has been standardly taken to be downwards monotonic, and hence to license Negative Polarity Items, on the grounds, I suggested, that it was tacitly understood to mean ‘$\neg$ Many N’. The proposal that I am offering needs to explain why it would be natural to interpret intuitively ‘Few N’ as meaning ‘$\neg$ Many N’. On the view in (17), ‘Few N are F’ is logically equivalent to, and may also be synonymous with, ‘A few N are F & at most a few N are F’. The second conjunct analytically entails ‘$\neg$ (Many N are F)’. The first conjunct, were it to be asserted independently of the conjunction, would have ‘$\neg$ (Many N are F)’ scalar-implicated by the

[7] See Atlas (1974, 1975, 1977, 1978, 1979, 1989), Kempson (1975), and Kempson (1988).

speaker as a generalized conversational implicatum. So nothing in the meaning or the illocutionary potential of the first conjunct will conflict with the second conjunct's entailment.[8]

In the case of 'Only John' being interpreted *à la Horn* in an assertion of the sentence as 'No one other than John', the interpreter is diminishing the semantic importance of the content of the "positive" or "prejacent" clause 'John Fs'. On Horn's (1969, 1992, 1996, 2002, 2009) views since 1969, the positive clause in the 'Only John' sentence, namely 'John Fs', was not asserted but presupposed, or implicated, or otherwise back-grounded. By parity of reasoning, Horn should say the same of my proposed analysis of 'Few N are F'. The positive clause 'A few N are F' would not be asserted but be presupposed, implicated, or otherwise back-grounded. Therefore it is understandable that an assertion of 'Few N are F', if Horn took my suggestion for the analysis, should be interpreted by Horn as '¬ (Many N are F)' or, as on my analysis, 'At most a few N are F'. On his current view of the pragmatic licensing of Negative Polarity Items by what is asserted in, rather than entailed by, the sentence, the asserted clause 'At most a few N are F', which is downwards monotonic, happily licenses Negative Polarity Items. I have expressed in *Atlas* (2007) my qualms about the current formulation of Horn's pragmatic theory of the licensing of Negative Polarity Items, but if it can be made adequate, it will give Horn an elegant pragmatic explanation of the licensing of NPIs by 'Few N are F', even if I am correct that the sentence-type is semantically non-monotonic. Thus my new analysis of 'Few N' in (17) can meet the needs of Horn's (2002, 2009) recent pragmatic theory of the licensing of Negative Polarity Items.

[8] I do not believe that one conjunct is actually asserted in the course of asserting a conjunction, *pace* Stalnaker (1974: 211) . Stalnaker's view is that it is "an uncontroversial assumption about the semantic properties of the word *and* … that when one asserts a conjunction, he asserts both conjuncts." On this view in asserting <A & ¬A> one would never (or never only) assert a NECESSARY falsehood but instead (or in addition) individually assert the two CONTINGENT, component conjuncts (assuming that <A> is not itself a necessary truth or a necessary falsehood). That, I take it, is absurd (on either interpretation of Stalnaker's assumption) and is a *reductio* of Stalnaker's and others' view; in any case one ought to have been suspicious of a claim that the semantics of 'and' had such implications for the speech-act of making an assertion. There are those in the history of logic and philosophy who have taken the view that one cannot ASSERT sentences of the form <A & ¬A>. That animadversion will not save Stalnaker's assumption. Let <B> be a sentence non-identical with but logically equivalent to <A>. My *reductio* argument applies equally well to <A & ¬B>. See L. Goldstein (1988) and JD Atlas (1988, 2005).