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NEGATIVE ATTRACTION AND NEGATIVE CONCORD IN ENGLISH GRAMMAR

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The attraction of the negative to subject *any* is an invariant rule for all dialects of English, and appears to respond to the distributive and hypothetical features of this indeterminate. Negative concord, on the other hand, is a variable rule which distributes the negative rightward in response to affective factors. It is progressively extended from one dialect to another in an implicational series which initiates negation in new positions as the rule approaches obligatory status in the original environments.¹

1. A SEMANTIC CONTRADICTION. The following sentence poses a difficult problem for linguistic analysis, since it has two directly opposite meanings, depending on who hears it:

(1) It ain't no cat can't get in no coop.

This is a sentence of the Black English (BE) vernacular spoken by Speedy J., the fifteen-year-old leader of the Cobras. It was recorded in a discussion of pigeon flying during a group session in the course of recent studies in South Central Harlem.² For speakers of other dialects, this has the meaning of Standard English (SE)

(2) 'There isn't any cat that cannot get into any [pigeon] coop.'

But this was not the meaning intended by Speedy. This will be clear if we place ex. 1 in a larger context:

(3) CR: Do cats ... ever get in your cage?

Speedy: They never got in one of mine.

Junior: No; they scree—unless they got th—one of them *JIVE* coops!
[general laughter]

Speedy: [chuckle] It ain't no cat can't get in no coop.

Speedy's meaning is plainly (4), the direct opposite of (2):

(4) 'There isn't any cat that can get into any [pigeon] coop.'

Whatever the historical origins of BE may be, it is now a dialect of English. In case after case, we find that striking differences from other dialects may be traced to minimal adjustments in English phonological and grammatical rules

¹ A preliminary version of this paper was given at the 1968 winter meeting of the Linguistic Society of America, New York City, based upon work supported by the Office of Education as Coöperative Research Project 3288. The present form of the analysis reflects original contributions of Paul Cohen, as well as discussions with Edward Klima, Charles Fillmore, Bruce Fraser, C.-J. Bailey, and Harris Savin, whose assistance is gratefully acknowledged. The analysis of the semantic features of *any* in §6 is particularly indebted to recent work by Savin, whose views provide the point of departure for the logical characterization of the quantifiers given there.

² For an account of the field methods and the social background of the various groups studied, see Labov et al. 1968. Most of the data on BE cited in the present paper is the product of the field work of John Lewis and Clarence Robins.

(Labov 1969; Labov et al. 1968). There are differences in the selection of redundant elements, different choice of dummy elements, and a few differences in delicacy of verbal aspect.³ But on the face of it, ex. 1 poses a much more dramatic difference which seems quite unrelated to aspect, emphasis, or style. For one surface structure, we have two contradictory interpretations which must correspond to the deep-structure difference.

This is not an isolated case. As we will see (§4), it is one of a half dozen examples where the BE rules of negative concord produce forms that are interpreted with exactly the opposite meaning by white listeners. The immediate problem for the linguist—or for speakers of other dialects who would like to understand BE—is to discover the nature of the rule which produces such an effect. What are the conditions under which BE speakers can duplicate a negative in a following clause without changing the meaning of the sentence? What process of change could have caused a sentence which means X in dialect A to mean not-X in dialect B? And how do speakers of A and B come to understand each other if this is the case? The problem has even greater interest for our understanding of linguistic evolution, since we do not yet understand the ways in which dialects in close contact diverge to the point of unintelligibility and become distinct languages (Labov 1971a).⁴

It appears that the problem of dialect differences in negative concord has not been properly appraised. The naïve schoolteacher's view is that the non-standard dialects simply have too many negatives. Historically-minded linguists and dialectologists point out that multiple negation is the traditional pattern, and that our standard form is a rule imposed on English by grammarians in the 18th century. More recently, students of syntax have pointed out that standard *any* in *He doesn't know anything* already reflects the presence of a negative (or other affective element) commanding it, so that *He doesn't know nothing* simply does with the second *no* what SE does with *any*. Thus dialect differences are summarized by Stockwell et al. (1968:272): 'The question of grammaticality for double negation is complicated by the existence of a substandard dialect which, like Chaucerian English, converts all *some*'s directly into *no*'s in negative sentences, rather than leaving all but one of them as *any*'s.'

As we will see, there are many dialects of English which convert some *any*'s into *no*'s, differing from SE in a variety of ways, but there is no dialect which converts all *any*'s in negative sentences into *no*'s. In other words, dialect differences cannot be encapsulated by a *some-no* suppletion rule opposed to a *some-any* rule. In the course of our analysis of negative transfer rules, we will encounter

³ It is the invariant *be* registering habitual aspect which has drawn most attention in BE; the preterit and future tenses are strongly represented, and the progressive and past perfect as well. However, the present perfect shows many peculiarities in BE which have not yet been well charted.

⁴ In some ways, BE is converging with other dialects of English, and reflects a Creole origin with structures more different from English than we now observe. But so far as the rules of negative concord and negative attraction are concerned, we are looking at the further development of traditional, well-established English rules with no reflection in Creole structures. We are therefore examining a divergence of dialect rules responsible for such a phenomenon as sentence 1.

other evidence that dialect differences in the handling of negation are more extensive than these authors suggest.

The problems posed by real language phenomena can best be handled with a three-pronged attack. In this and other studies, we combine the abstract analysis of our intuitive data with naturalistic observation of language in use, and supplement this with experimental tests of well-defined variables. This paper will attempt to solve the semantic and grammatical problems posed by sentence 1, using several kinds of data to converge upon a single solution. §§2–4 will present the basic linguistic and dialectal data on three kinds of negative transfer: negative attraction to subject *any*, negative postposing to indeterminates, and negative concord. In §5 I will consider the possibility of combining these three rules into a single transformation. From a purely formal point of view this is not impossible. But when deeper questions are asked about what these transformations accomplish for speakers of the language, it appears that we are dealing with two radically different kinds of grammatical operations. The strongly obligatory character of negative attraction provides a puzzle in itself, and in §6 I undertake an analysis of the semantics of *some*, *any*, *each*, and *all*, in order to understand this categorial rule. In §7, the variable nature of negative concord will engage our attention, and it will appear that the contrast between categorial and variable rules lies at the heart of our problem. §8 integrates these findings into an over-all view of negative transfer rules; and from this over-all pattern, the answer to the problem raised by sentence 1 will be found.

2.1. NEGATIVE ATTRACTION. We must begin with the analysis of the *no* in *It ain't no cat*, since this contains the semantic features which govern the transformational rules operating in 1. It is generally agreed that the *no* in *no cat* represents an underlying indefinite *any* combined with a negative which has been attracted to it from elsewhere in the sentence. To understand the movement of negatives in such sentences, we must deal with the whole range of rules which govern negative attraction in English. These include the obligatory attraction of the negative to subject indefinites—

(5) *Anybody doesn't go → Nobody goes;

the optional postposing of the negative to object indefinites—

(6) He doesn't like anything ~ He likes nothing;

non-standard negative concord—

(7) He doesn't like anything ~ He don't like nothing;

and various forms of negative inversion—

(8) He didn't ever go ~ Never did he go;

(9) Nobody saw it ~ Didn't nobody see it.

These rules all involve the attraction of NEGATIVE to the 'indeterminates' *any*, *ever*, and *either*. This paper will be confined principally to these elements, without taking up the problems associated with adverbs, prepositions, and conjunctions that contain the negative feature.⁵ The label 'indeterminate' was first applied

⁵ Other indefinites and quantifiers are also involved in these rules; we will necessarily consider *some*, and will also touch briefly on *much* and *many*, which lie on the periphery of the rules being studied.

by Klima 1964 to distinguish *any*, *ever*, and *either* from other indefinites like *some*, primarily on the basis of their co-occurrence with negative and question features.

The analysis of the quantifier *no* in *no cat* into NEG + *any* is a fundamental given for our investigation. Klima assembles a great deal of evidence on this point, which can hardly be questioned if one gives any weight to relatedness between sentences. Typical is the alternation between active and passive forms of sentences containing two indeterminates and one negative:

- (10) a. No cook spoiled any broth.
 b. *Any broth was spoiled by no cook.
 c. No broth was spoiled by any cook.

There is no reason to think that most speakers would be aware of the underlying *any* in *no*, but evidence from linguistic pathology indicates that a deep-seated knowledge of this fact may in fact be present in most speakers. There is a particular schizophrenic verbal pattern of reversing positive and negative in a consistent and predictable way. A patient described by Laffal 1965 was exceptionally gifted in the use of this rule:

- (11) Doctor: Can you tell me now who invented the airplane?
 Patient: I do know.
 Doctor: You do know.
 Patient: Yes, I know ...
 Doctor: What you mean to say is that you don't know.
 Patient: I do know. If I don't know, I, I, I, I wouldn't be able to tell you.
 Doctor: You're not able to tell me, though, are you?
 Patient: Yes I am, for I do know.

The patient could of course have reversed meaning simply by adding a negative to every sentence. But he operated instead at a more abstract level, reversing the negative modality of each underlying sentence by an alpha rule:

- (12) [α neg] \rightarrow [$-\alpha$ neg]⁶

The effect is to remove any realization of an underlying negative. When the same patient was performing a word-association test, he responded

- (13) Home ... there's any place like

—demonstrating an unconscious knowledge of the NEG + *any* analysis of *no* through the production of this totally ungrammatical sentence.

The negative is, then, normally attracted to the indeterminates *any* and *ever*, realized as *no* and *never*. This attraction is obligatory for subject indeterminates, but optional with others, so that we have the alternation:

- (14) a. He didn't know anything about anybody.
 b. He knew nothing about anybody.

But no indeterminate can be skipped:

- (15) a. *He knew anything about nobody.
 b. *He ever knew nothing about anybody.

⁶ This is one of the phenomena which justify the use of the feature notation [+neg], implying the existence of a [-neg]. This patient's behavior could not easily be formalized without the use of [-neg].

The English NEGATTRAC rule can be summed up informally by saying that, in SE, the negative is attracted to the first indeterminate, obligatorily if it is a subject. The simplest form of transformation that will accomplish this, following Fillmore 1967, operates upon the negative in its sentence-initial position as modality or type marker.⁷ Our first approximation to this transformation would then be 16. (The category INDET stands for a set of features to be developed in §6; the left bracket (l) stands for 'contains', and \sim l for 'does not contain'.

(16) NEGATTRAC I

$$X - [+neg] - Y - INDET$$

$$1 \quad 2 \quad 3 \quad 4 \rightarrow 1 \quad 3 \quad 2 + 4$$

Conditions: (a) Obligatory if 3 = \emptyset

(b) 3 \sim l INDET

Condition (b) insures that 4 is the first indeterminate, and condition (a) is merely a first approximation to the statement of when NEGATTRAC is obligatory. If 16 does NOT apply, then the negative will be transferred to pre-verbal position by the usual rule.

Even when 3 is null, and we are dealing with a subject indeterminate, there are still many conditions under which NEGATTRAC is not obligatory. We will want to examine these marginal cases in order to come to grips with the central phenomenon of the categorical nature of NEGATTRAC. For when NEGATTRAC is obligatory, it is one of the most mysteriously compelling obligations of all. On the face of it, there seems to be no reason not to say

(17) *Anybody doesn't sit there any more.

But we can't say it, we don't say it, we won't say it; we reject it without hesitation or reservation. For most listeners, 17 has a curiously ill-formed, fascinatingly perverse character.

We get used to some ungrammatical sentences, and as we repeat them, we can almost see how we might have said them ourselves. We can certainly imagine someone saying

(18) *This bed was eaten potato chips in.⁸

If this is not already acceptable in some dialect, we would enjoy meeting the

⁷ Negative attraction is shown in 16 as a rightward movement from a leftmost abstract constituent, but this view will not survive in the present analysis. Such transformations will eventually be seen as leftward and rightward movements following negative placement in the unmarked pre-verbal position. The ultimate location of constituents such as NEG or Q in the underlying structure is of course currently in dispute. The analysis of negative attraction and concord in the original version of this paper took these and other modalities as features of a type marker which was a constituent of S in construction with NP and PREDP. More recent views of NEG and Q as predicates of higher level sentences, reflected in Carden 1970, are consistent with the present analysis. However, the analysis to be given here is neutral on this issue, as it does not rely upon the formal presence of higher level S, NP, and VP nodes which require lowering of quantifier or NEG.

⁸ This sentence cannot be reduced to the proper analysis for the passive transformation, $N_1 - AUX - VB - NP_2$. There is considerable latitude in the analysis of various verb + particle or verb + preposition combinations as VB; thus we have *This bed was slept in*, *This wall was stood beside*. But the only VB + N + PREP combinations which can fit into this analysis are idioms which have been lexicalized, like *make fun of*, *take umbrage at*. The acceptance of 18 involves accepting for the moment that *eat potato chips in* is such a VB.

man who had the imagination to say it. But we cannot imagine why anyone would say 17, which becomes worse as we repeat it. We cannot even imagine why we cannot imagine it; and if someone did say it, we are not at all anxious to meet him.

2.2. CONDITIONS SUSPENDING THE OBLIGATORY CHARACTER OF NEGATTRAC. Let us then consider some conditions where NEGATTRAC to subject indeterminates is not obligatory, with the hope that the exceptions will aid in understanding the rule. First we should note that a negative in the previous sentence has the effect of making NEGATTRAC optional. Thus we can say, without hesitation,

(19) I don't say that anyone didn't go.

In place of the explicit negative of *don't*, we are also entitled to use the implicit negatives in *deny* or *doubt*, or the presupposed negatives in *regret*, *am sorry*, or *apologize* with the same effect on the rule. As we might suspect, there is a wide range of acceptability of the incomplete or implicit negatives in suspending NEGATTRAC. A feature [affect] combined with the negative seems to have greater effect. In a series of test questions submitted to 52 student subjects,⁹ we observed the following pattern of judgments:

	GRAM- MATICAL	QUESTION- ABLE	UNGRAM- MATICAL
(20) a. I hated for anyone not to eat in my mother's restaurant.	56 %	33 %	11 %
b. I expected anyone not to eat in my mother's restaurant.	4	8	88

It is of course essential that the preceding negative be in the correct structural position to influence the NEGATTRAC rule; a preceding negative in a coördinated clause has no such effect:

(21) *I didn't go and predicted anyone else wouldn't either.

The necessary condition is that the [+neg] in X of 16 must COMMAND the indeterminate in the sense of Langacker 1969—that is, must be a member of an S which dominates the indeterminate and is not dominated by the indeterminate.¹⁰ We can then amend condition (a) of 16 to

(a) Obligatory if $3 = \emptyset$, $1 \sim [+neg]$ commanding 4.

In addition to this condition, there are three other sets of environments in which a subject indeterminate does not necessarily attract the negative. These are quite different on the surface, but on deeper analysis they can be seen as governed

⁹ The tests were carried out at Columbia University by a group of students, who submitted them to a range of non-linguistically trained subjects. They are therefore cited as relevant but by no means conclusive evidence, as the subject population was not chosen systematically or the tests administered in a uniform manner. Research on variation in grammaticality judgments is currently being carried out to confirm and develop these findings.

¹⁰ The conditions for removing the obligatory character of NEGATTRAC are quite similar to those which govern the replacement of *some* by *any* cited in Stockwell et al. (262 ff.)

by a single feature that may be added to condition (a). Starting from the ungrammatical **Anyone can't go*, we have:

- (22) HYPOTHETICALS
 a. If anyone can't go ...
 b. When anyone can't go ...
 c. Should anyone not be able to go ...
- (23) RESTRICTED INDEFINITES
 a. Anyone can't go who drinks.
 b. Anyone who drinks can't go.
 c. Anyone can't go unless he swears off drinking.
 d. Anyone who is anyone won't go.
- (24) EMBEDDINGS
 a. For anyone not to go was a shame.
 b. It's a shame for anyone not to go.
 c. 'Anyone's not going was a shame.

The hypotheticals of 22 are all easily and clearly acceptable. They involve the presence of a common feature which we may indicate provisionally as [+hyp]. In 23, the subject indeterminate is limited by a restricted relative clause. Traditionally, relative clauses on *any* have also been understood as reduced hypotheticals (Karttunen 1971):

(23a') If there's anyone who drinks, he can't go.

If we follow this derivation, both 22 and 23 can be accounted for by adding to condition (a) of 16 the requirement that the type marker must not contain [+hyp] if the rule is to be obligatory.

The nominalizations of 24 pose some difficult questions of syntactic and semantic analysis. First we may note that 24a-b are much more acceptable than 24c, which is marginal. These reactions are supported in our set of test questions:

	GRAM- MATICAL	QUESTION- ABLE	UNGRAM- MATICAL
(25) a. Anyone doesn't eat in my mother's restaurant.	0 %	4 %	96 %
b. Anybody's not eating in my mother's restaurant is a shame.	31	55	14
c. For anybody not to eat in my mother's restaurant is a shame.	73	27	0

This is merely one of many findings which show that the POS-ING and FOR-TO nominalizers are not equivalents, but differ in subtle and pervasive semantic effects. One explanation for the effect of FOR-TO in eliminating the obligatory character of NEGATTRAC is suggested by Klima (personal communication): such embedded sentences are almost always subjects of negative or negative-affective predicates. Since it has already been demonstrated that this category plays an important role in the syntax of indefinites (Klima 1964), the possibility should be considered. However, the test results show surprisingly little difference be-

tween the positive 'O.K.' and the negative-affective 'shame':

	GRAM- MATICAL	QUESTION- ABLE	UNGRAM- MATICAL
(26) For anybody not to eat in my mother's restaurant is a shame.	73 %	27 %	0 %
For anybody ... is O.K.	65	35	0

Whatever the affective character of *shame* may contribute here, it is obviously a smaller effect than that of embedding with the FOR-TO complementizer. For example, if the predicate *O.K.* is used with a THAT complementizer (*It's O.K. that anyone, etc.*), the corresponding percentages are 42, 56, 02. Or, as we see above in 25, switching to a POS-ING complementizer produces changes of comparable magnitude in judgments of grammaticality. The over-all pattern of the various constraints inhibiting the obligatory force of NEGATTRAC can be seen in Table 1, which lists sentence types in order of increasing acceptability.

The factors which favor the suspension of NEGATTRAC are combined in sentence 10 of Table 1: an affective implicit negative commands the indeterminate,¹¹ and it is embedded in a subject with the FOR-TO complementizer. Clearly the most heavily weighted condition is the use of the FOR-TO complementizer in sentences 7-10, as opposed to the POS-ING or THAT complementizers in sentences 3-6. How is this differentiation of FOR-TO and POS-ING to be understood? Our intuitive response would be that the FOR-TO embedding suspends most completely any actual predication, has the least 'predicating' effect of the three complementizers, and is therefore closest to the IF clause, while THAT with its finite tense marker is the furthest in the other direction. This general impression fits in with the efforts of the Kiparskys (1968) to correlate the complementizers with factive and non-factive predicators. While the data here are variable and at times contradictory, there are enough clear cases to lend weight to the argument.

We find that non-factive predicators like *want, prefer, believe* etc. tend to take the FOR-TO complementizer, while POS-ING regularly goes with such factives as *regret, approve, observe*. Some verbs take either complementizer, and the difference in assertiveness becomes obvious:

- (27) a. I liked Albert to scratch his back.
- b. I liked Albert's scratching his back.

The second appears to make it much clearer that Albert DID scratch his back. In general, we can say that, whenever there is an option, the POS-ING complementizer implies that the event took place, while FOR-TO makes no such claim.

There is a grammatical feature that 24 shares with 22 and 23, which is weaker and more general than [+hyp]: it is a superordinate of [+hyp] which we will designate [\pm fact]. The feature [+fact] is to be found in predicates containing preterits, progressives, and perfects in the indicative; but sentences with subjunctives or optatives, conditionals, or hypotheticals will show [-fact]. A sentence embedded with a FOR-TO complementizer, without a tense marker, is

¹¹ Extraposition plays a clear but minor role in promoting the acceptability of these sentences. Sentence 10 may be compared with sentence 8 in this respect, and sentence 9 with 7. The gain in acceptability is approximately the same: a shift of ten to fifteen per cent out of the 'questionable' column into the 'grammatical' column.

	GRAM- MATICAL	QUESTION- ABLE	UNGRAM- MATICAL
1. Anyone doesn't eat in my mother's restaurant.	0%	4%	96%
2. I expected anybody not to eat in my mother's restaurant.	4	8	88
3. It's not true that anybody doesn't eat in my mother's restaurant.	35	29	36
4. Anybody's not eating in my mother's restaurant is a shame.	31	55	14
5. I hated anybody's not eating in my mother's restaurant.	56	33	11
6. It's O.K. that anybody doesn't eat in my mother's restaurant.	56	42	2
7. For anybody not to eat in my mother's restaurant is O.K.	65	35	0
8. For anybody not to eat in my mother's restaurant is a shame.	73	27	0
9. It's O.K. for anybody not to eat in my mother's restaurant.	79	17	4
10. It's a shame for anybody not to eat in my mother's restaurant.	85	15	0

(N = 52)

TABLE 1. Grammaticality judgments of fifty-two subjects on conditions for obligatory negative attraction.

clearly non-factive and is to be assigned [-fact]. Thus we can say that NEGATTRAC is not obligatory in 22, 23, or 24, since the X of 16 contains [-fact] commanding the negative and the indeterminate.

It is not necessary for [-fact] to appear in the same clause as the negative and indeterminate, only that it appear in a clause dominating them. The obligatory character of NEGATTRAC is effectively cancelled in 22d:

(22) d. If John says that anyone shouldn't go, he's exceeding his authority.

e. *Anyone shouldn't go.

This is because the [+hyp] *if*, implying the presence of [-fact] in the higher clause, commands the negative and indeterminate.

The situation is not so clear with POS-ING complementizers. The 'questionable' reactions to sentences 4 and 5 in Table 1 match our own question mark in 24c. We are simply not sure if POS-ING is [-fact] or not. It is clear that POS-ING is more assertive than FOR-TO, as in 27a-b. On the other hand, 27b asserts that Albert did scratch his back much less clearly than 27c:

(27) b. I liked Albert's scratching his back.

c. I liked it that Albert scratched his back.

Rather than invent a new feature for POS-ING, it is best to say that, insofar as POS-ING is perceived as containing [-fact], it suspends the obligatory character of NEGATTRAC. That is, we have a match between two variable elements—the factual character of POS-ING and its effect on NEGATTRAC.¹²

Finally, we must not fail to include one condition that can suspend the obligatory character of NEGATTRAC: the presence of stress on *any*. The violations of NEGATTRAC cited, as in 17, become more acceptable when we use stressed *any*, and perfectly grammatical if *any* is preceded by *just*.

¹² There are several examples in this discussion of features which are perceived to a degree in specific lexical items, with uniformly vague reactions for many speakers. These phenomena are more challenging to our system of discrete distinctive features than arguments for *n*-ary as against binary features. Negative or non-factive features seem to be perceived as present to a certain degree in some words or constructions.

- (17') a. *Anybody can't eat there.
 b. 'Ánybody can't eat there.
 c. Just ánybody can't eat there.

We will refer to both the (b) and (c) possibilities as the presence of [+stress], which relieves the strongly obligatory character of NEGATTRAC. Many linguists would prefer to consider this stressed *any* as a different item altogether (R. Lakoff 1969, fn. 1). But such a strategy is appropriate only when we have no explanation as to how stress added to *any* produces this effect. In §6 such an explanation will be submitted; thus we will proceed as if we were dealing with a single *any*. Condition (a) of 16 must therefore indicate that *any* is unstressed if NEGATTRAC is to be obligatory.

We will thus rewrite condition (a) as follows:

- Condition (a): Obligatory if 3 = \emptyset ,
 4 is [-stress], and
 1 \sim [+neg] or [-fact] commanding 2 and 4.

This condition defines the profoundly ungrammatical core of NEGATTRAC violations exemplified by sentences 1–2 of Table 1. A penumbra of questionable sentences surround this core, as in 3–7, where NEGATTRAC is less strongly obligatory. I have analysed this variable character as depending upon our variable perception of a discrete feature, [-fact]. Though more might be said about this area, it is sufficient here to note the minimal conditions under which the categorical nature of NEGATTRAC is suspended, which has been done above. We can paraphrase this condition in a general statement that also includes condition (b):

- (28) Whenever an unstressed indeterminate *any*, without a negative feature of its own, is not commanded by a negative or non-factive feature, it may not be followed by a negative.

3. NEGATIVE POSTPOSING. Let us now consider in greater detail the optional displacement of the negative to an indeterminate when Y in rule 16 is not zero—that is, to the first object indeterminate after the verb. We will refer to this operation as 'negative postposing'. No special conditions need be stated as long as negative and indeterminate are within the same clause:

- (29) a. I didn't find a proof of the theorem in any of these texts.
 b. I found a proof of the theorem in none of these texts.

In most cases, the operation of negative postposing produces a marked form. Both 14a and 29a seem to be neutral conversational forms, while 14b and 29b are emphatic, perhaps formal or literary. There are some postposed expressions which seem quite straightforward, even unmarked:

- (30) a. That isn't anything new.
 b. That's nothing new.

But these seem confined to the simplest and most common expressions involving the contraction of the copula and other auxiliaries. Thus *There's nothin' to it*, *He's nowhere at all*, *You're nobody to talk* all show the same unmarked character as 30b. It is possible that these do not represent negative postposing at all, but

rather a different option at the level of contraction rules, yielding 's *no-* in place of *isn't any*. In any case, the vast majority of productive forms follow the pattern of 29a–b, with negative postposing as the marked form.

When the indefinite is contained in a following clause, the situation becomes more complex. In some cases, the postposed negative allows both interpretations—that the negative originated in the earlier or the later clause. This is the case with 31, where (b) is ambiguous in this respect:

- (31) a. I didn't tell John to paint any of these.
 b. I told John to paint none of these.

As long as we are dealing with infinitival complements of the verb, it seems that such negative postposing can, with some strain on the imagination, reach many clauses down from the original verb:

- (32) a. He didn't order George to tell Arthur to ask Sam to do anything like this.
 b. He ordered George to tell Arthur to ask Sam to do nothing like this.

When the next clause is finite, negative postposing seems far more difficult. It takes considerable imagination to give 33b the same reading as 33a:

- (33) a. I didn't say that John painted any of these.
 b. I said that John painted none of these.

When the indeterminate is in a relative clause, the situation becomes impossible for negative postposing:

- (34) a. I'm not going to sign a petition that any half-baked Stalinist wrote.
 b. I'm going to sign a petition that no half-baked Stalinist wrote.

There seems to be no way that 34b could be derived from 34a; it is not clear that 34b means anything at all. We are dealing here with the inverse of Ross's Complex NP Constraint (1967), since we are prevented from moving a negative into a sentence dominated by a lexical head noun.

We thus have at least two additional constraints on Y in 16 beyond the fact that it cannot contain an indefinite: the 'Inverse Complex NP Constraint' and the 'Finite Complement Constraint'. Both are difficult to state formally; both show exceptions and ragged edges. This is to be expected, because negative postposing is an odd, irascible, cranky kind of transformation that has very shallow roots in speaker intuitions.¹³ To cover these two conditions, we can add to 16 the following approximations to a formal statement:

Condition (c) ('Inverse Complex NP Constraint'): 4 cannot be dominated by an S dominated by a lexical NP which does not dominate 2.

Condition (d) ('Finite Complement Constraint'): 4 cannot be dominated by an S adjoined to THAT and commanded by 2.

Both constraints could be examined in greater detail, but it should be obvious

¹³ We would expect negative postposing to have a weak intuitive base because it is so much a part of the literary pattern learned as a superposed variety. This in turn reflects its origin in the normative patterns imposed upon standard English grammar.

that the conditions which control NEGATTRAC when Y is NOT zero are very different from those which operate when Y is zero, as discussed in §2.1. Conditions (b), (c) and (d), which control negative postposing, share no features in common with condition (a), which governs NEGATTRAC to subject indeterminates.

4. NEGATIVE CONCORD. In various non-standard dialects of English, our formulation of negative attraction must be extended to account for negative concord. Instead of saying that the negative is attracted to the first indeterminate, we might say for these dialects that the negative is attracted to indefinites generally. Thus the non-standard equivalents of 29–34 are:

(29') I didn't find a proof of the theorem in none of these texts.

(30') That ain't nothin' new.

(31') I didn't tell John to paint none of these.

(32') He didn't order George to tell Arthur to ask Sam to do nothing like this.

(33') I didn't say that John painted none of these.

(34') I'm not going to sign a petition that no half-baked Stalinist wrote.

Teachers and other opponents of non-standard dialects may argue that these sentences reverse the meaning of 29–34. But this is mere rhetoric; any speaker of English, no matter how refined, is familiar with the existence of negative concord and realizes that 29'–34' intend the same meaning as 29–34. When an underlying double negative is intended, speakers of non-standard dialects use the same device as speakers of SE—heavy stress on both negatives:

(31'') I DIDN'T tell John to paint NONE of these; I wanted to get some of them painted at least.

(See §8, ex. 145, for an example of this type of double negation in BE.)

The ordinary meaning of 29'–34' is therefore recognized by speakers of all dialects, and these sentences do not produce the reversal of expected meaning observed in §1. The general non-standard rule which operates here can be written as a simple pleonastic transformation, copying instead of chopping the negative:

(35) NEGCONCORD I

X - [+neg] - Y - INDET

1 2 3 4 → 1 2 3 2 + 4

Conditions: (a) Obligatory if 3 = ∅,

4 is [-stress], and

1 ~ [[+neg] or [-fact] commanding
2 and 4.

Here we must repeat the same condition (a) that was worked out for rule 16, since it applies to non-standard dialects as well as to SE. Condition (b) on 16, which governs negative postposing, is missing. So too is the Finite Complement Constraint (d), as indicated by 33'. None of the difficulty or strain in negative postposing to remote infinite complements, as felt in 32–34, appears here—as indicated in 32' and 33'. Even the Inverse Complex NP Constraint (c) does not apply, as 34' shows.

It would be going too far to say that there are NO constraints on NEGCONCORD. We find that we cannot transfer a negative to an indeterminate in a relative clause

if the indeterminate is a direct object. Thus 34 and 34' show NEGCONCORD to a SUBJECT indeterminate in a relative clause, possible for non-standard NEGCONCORD but impossible for standard negative postposing. With OBJECT indeterminates in relative clauses, any negative transfer is prohibited:

- (36) a. They wouldn't fire a man who could fix anything in a Ford.
 b. They would fire a man who could fix nothing in a Ford.
 c. They wouldn't fire a man who could fix nothing in a Ford.

All three of these sentences have different meanings. We therefore have to state a condition (c) on NEGCONCORD as:

Condition (c): 4 cannot be directly dominated by a VP dominated by an S dominated by a lexical NP which does not dominate 2.

Except for this one condition, we can say that NEGCONCORD applies much more regularly than negative postposing, and without the Finite Complement Constraint and the whole series of marginal judgments involved in it. We can easily construct such extreme examples as 37, with eleven pleonastic negatives in the surface structure all dependent upon a single negative in the deep structure:

- (37) I ain't [1] gonna sit here in no [2] chair and let no [3] crazy lawyer never [4] tell me no [5] lies about no [6] law that no [7] judge told no [8] smart-ass clerk to look up in no [9] book that no [10] smart politician wrote or nothin' [11] like that nohow [12].

Here we see that the negative can be reduplicated in coördinate structures [3], in subject indeterminates in relatives [7, 10], and also in oblique object indeterminates in relative clauses [9]. But copying on to a direct object indeterminate in a relative clause seems to lie just outside the operation of this rule.

Is there an equivalent of condition (b) for NEGCONCORD? That is, can we state that Y cannot contain an indeterminate? If we can establish enough parallels in the conditions on 16 and 35, then it might seem practical to combine both into a single transformation showing the over-all system of English negative transfer. If 35 applies to its own output, successively transferring the negative rightward, then we could write such a condition (b). But that would require that no indeterminate be skipped in the regular application of the rule. At this point, intuitions cannot be relied upon, and we have to examine the evidence of what speakers of the non-standard dialects concerned actually say. From the Outer Banks of North Carolina, we have:

- (38) We don't ever see none of them guys. (Monnie O., 35, Wanchese)

And from a railroad foreman in Georgia:

- (39) From then on, I didn't have any trouble at school, no more. (Henry G., 60, E. Atlanta)

And from a Black speaker raised in the Lower South:

- (40) Ain't nobody ever thought about pickin' up nothin'. (William T., 25, Florida)

Since it is possible to skip an indeterminate, then 35 can apply to any indeterminate anywhere in the sentence, and there can be no constraint parallel to condition (b) of 16.

4.1. NEGCONCORD TO PRE-VERBAL POSITION. In addition to the transfer of negatives to indeterminates, we also have the possibility of negatives appearing in the usual pre-verbal slot as well. There are many non-standard dialects which do not allow this, and reject such sentences as *Nobody don't know*.¹⁴ But this is a regular construction in many non-standard dialects throughout the United States. It is used in the white Southern dialect of the speaker quoted in 39:

(41) Nobody don't like a boss hardly.

We have not yet mapped all the dialects which permit transfer to the pre-verbal position as against those which do not. Northern New Jersey seems to permit this, while the white New York City vernacular definitely does not. We will use the cover terms WNS₁ and WNS₂ to refer to the groups of white non-standard dialects which respectively prohibit and permit negative transfer to pre-verbal position.

Since white New Yorkers are members of the WNS₁ group, they contrast sharply on this point with Black speakers in the same city. Negative transfer to pre-verbal position is quite common in BE:¹⁵

(42) Down here nobody don't know about no club. (William T., 25, Florida)

(43) None of our friends don't fight 'im. (Larry H., 15, Jets)

(44) Nobody don't know where it's at. (Douglas S., 17, Cobras)

(45) None of 'em can't fight. (Ray L., 14, Jets).

We can adjust our rule systems in one of two ways to account for this extension. In 35' we can show VB as well as INDET as the locus of transfer:

$$(35') \quad \begin{array}{ccccccc} X & - & [+neg] & - & Y & - & \left. \begin{array}{c} \text{INDET} \\ \text{VB} \end{array} \right\} \\ 1 & & 2 & 3 & 4 & \rightarrow & 1 \quad 2 \quad 3 \quad 2 + 4 \end{array}$$

The other possibility for dealing with pre-verbal negatives is to let the usual rule of negative placement put the negative before the verb in *Nobody don't know*. Since that is a simple categorical rule, it will always apply. But then we will have to change the NEGATTRAC rule (16) to make it a chopping rule for most dialects, and a copying rule for WNS₂ and BE. Furthermore, the copying will have to be OPTIONAL, since NEGCONCORD to pre-verbal position is variable in all dialects. To insert this kind of variability into the NEGATTRAC rule is contrary to its uniform, non-affective character. It is far more plausible to make this pre-verbal option a feature of the NEGCONCORD rule, since it shares the variable and affective character of that rule.

We have no choice in the matter when we observe that a dialect also exists

¹⁴ Bellugi (1967:143) shows that the children acquired a 'thick layer' of negation in the later stages of their development. In his fourth year, Adam began to use NEGCONCORD from subject indefinites to pre-verbal position, e.g. *No one can't even find me; But nobody wasn't gonna know it*. Bellugi argues that this is an internal generalization, since it is not found in any adult dialect. But as shown here, adult models are available for this pattern.

¹⁵ In the citations given, speakers are identified by their age and the area where they were raised from 4 to 13 years, except for members of the peer groups in South Central Harlem studied in Labov et al. These (all New Yorkers) are identified with the names of the peer groups: Jets, Cobras, Thunderbirds, Aces, and Oscar Brothers.

which transfers the negative to pre-verbal position in a FOLLOWING clause. For almost all speakers of English, this is an impossibility. If a negative appears with a verb in a following clause, it is inevitably interpreted as referring to a second deep-structure negative.

- (46) None that I had, I never had any that I couldn't break yet. (Mike G., 15, Sonora, Texas)

This sentence is rightly interpreted to mean that there is no horse that Mike could NOT break. The fact that negatives in following clauses are necessarily understood as independent is registered in our rule system by adding to 35' the condition that 2 and 4 must be clause mates—that is, there is no S dominating 2 which does not dominate 4 and vice versa. But this constraint does not hold for BE. We can see that ex. 1, *It ain't no cat can't get in no coop*, violates it: the negative in *can't* is copied from the first clause and has no independent meaning.

This is not an isolated instance. We have collected a number of parallel examples in our work with BE. A sales clerk in Harlem remarked one day:

- (47) When it rained, nobody don't know it didn't.

That is, nobody knew that it rained when it DID, not when it didn't. A 29-year-old man raised in the Bronx said:

- (48) Back in them times, there ain't no kid around that ain't—wasn't even thinkin' about smokin' no reefers.

That is, there wasn't any kid who WAS even thinking about smoking reefers. And in one of the long epic poems of Black folklore, 'The fall', we have the following description of the central character:¹⁶

- (49) Like a sex machine, she stood between
 Raindrops, snow and hail;
 She stood on hot bricks to lure her tricks
 Come cyclone, blizzard or gale.
 She tricked with the Frenchmen, torpedo men 'n' henchmen,
 To her they were all the same;
 She tricked with the Greeks, Arabs and freaks,
 And breeds I can not name.
 She tricked with the Jews, Apaches and Sioux,
 She even tricked in the house of God,
 For there wasn't a son of a gun who this whore couldn't shun,
 That claimed to play a rod.

The meaning of the next to last line is plainly that 'there wasn't a son of a gun who COULD shun this whore', and we have the same reversal of the expected meaning as in 1, 47, and 48. We also recorded the following interchange between our field worker John Lewis and Derek, one of the verbal leaders of the Cobras:

- (50) JL: What about the subway strike?
 Derek: Well, wasn't much I couldn't do.

¹⁶ The version of 'The fall' given here was recorded by John Lewis from Saladin, the most skilled and knowledgeable of all masters of the oral literature that we have met. He learned his version of 'The fall' in prison.

Here Derek plainly meant that there wasn't anything he *COULD* do. No indeterminates are involved here; this is a case where the *NEGCONCORD* rule must transfer the negative to the next clause (possibly governed by the quantifier *much*—see §7.3 below), and again there is no way for the regular rule of negative placement to account for it.

It should be emphasized that such extrapositions of the negative to following verb phrases are relatively rare. The normal construction in BE is *NOT* to apply the *NEGCONCORD* rule in this environment:

- (51) a. It wouldn't of been nothing I could do. (Larry H., 15, Jets)
 b. Ain't nothin' you can do for 'em. (Roy M., 56, South Carolina)

Furthermore, speakers of BE have no difficulty in using the negative position in a following clause for an underlying negative with independent meaning:

- (52) I was writin' for fun 'cause I ain't do it till nothin' was happenin'.
 (Florence, 13, West Philadelphia)

Here Florence is explaining that she didn't write with a red grease pencil on a car until there was nothing happening in the neighborhood. Nevertheless, the possibility of using *NEGCONCORD* with a following verb phrase is open to all speakers of BE, who interpret 1 and 47–50 correctly and automatically.

There is no way to account for this possibility if we transfer the negative to preverbal position by the usual cyclical rule of negative placement, since that rule could not possibly transfer a negative to a following clause. We therefore conclude that 35' is the correct expansion of *NEGCONCORD*; the condition that 2 and 4 are clause mates applies to *WNS*₂ and not to BE.

We can sum up this view of the distribution of *NEGCONCORD* by an expanded version of rule 35, following the same order of conditions used with *NEGATTRAC* and negative postposing:

(53) *NEGCONCORD* II

$$X - [+neg] - Y - \left\{ \begin{array}{l} \text{INDET} \\ \text{VB} \end{array} \right\}$$

$$1 \quad 2 \quad 3 \quad 4 \quad \rightarrow \quad 1 \quad 2 \quad 3 \quad 2 + 4$$

Conditions: (a) Obligatory if 3 = \emptyset ;

4 = INDET, [-stress]; and

1 \sim [[+neg] or [-fact] commanding 2 and 4.

(b) —

(c) 4 cannot be directly dominated by a VP in an S dominated directly by an NP which does not command 2.

(d) —

(e) 4 = VB in *WNS*₂ and BE only; in *WNS*₂, 2 and 4 must then be clause mates.

5. ONE NEGATIVE TRANSFER RULE? At this point we may feel compelled by principles of economy, or by a belief in one over-all system of English grammar, to write a single rule for *NEGATTRAC*, negative postposing, and *NEGCONCORD*,

combining 16 and 53. We can do this by making the pleonastic element variable:

(54) NEGTRANSFER

$$X - [+neg] - Y - \left\{ \begin{array}{l} \text{INDET} \\ \langle \text{VB} \rangle_1 \end{array} \right\}$$

$$1 \quad 2 \quad 3 \quad 4 \rightarrow 1 \quad \langle 2 \rangle_1 \quad 3 \quad 2 + 4$$

Conditions: (a) Obligatory if 3 = ∅;
 4 = INDET, [-stress]; and
 1 ~[[+neg] or [-fact] commanding
 2 and 4.

- (b) Y ~[INDET if < >₁ is not realized.
- (c) 4 cannot be (directly dominated by a VP)₁ in an S dominated directly by an NP which does not command 2.
- (d) 4 cannot be dominated by an S adjoined to THAT and commanded by 2 if < >₁ is not realized.
- (e) < >₁ not in SE; 4 = vb in WNS₂ and BE only, in WNS₂ only if 2 and 4 are clause mates.

This combined rule effects some economies, although certain conditions are awkward to write. The pleonastic operation of concord is represented by an option in angle brackets, with a subscripted cross-reference to the pre-verbal possibility. This has an additional set of parentheses, indicating that it is optional even if the subscripted option 1 is taken.

Conditions (b) and (d) are cumbersome to state because they are constraints only on the standard rules, and we have to mark them formally as operating only if option 1 is not taken.¹⁷ On the other hand, the subscripted insert on condition (c) condenses the conditions for standard and non-standard rules with considerable economy.

Condition (e) uses ad-hoc dialect labels. We could resolve these into a set of features, beginning with [±Std] and [±BE]. We would then have to add a feature [±NS] to differentiate WNS₁ and WNS₂, although there is no match with 'Northern States' vs. 'Southern States' in this distribution.¹⁸ We would then have:

(54') NEGTRANSFER

$$S - [+neg] - X - \left\{ \begin{array}{l} \text{INDET} \\ \langle \text{VB} \rangle_{-NS} \end{array} \right\}$$

$$1 \quad 2 \quad 3 \quad 4 \rightarrow 1 \quad \langle 2 \rangle_{-std} \quad 3 \quad 2 + 4$$

Conditions: (a) Same as in 54.
 (b) X ~[INDET / [+Std].

¹⁷ The angled brackets are used here in the conventional way for subscripting and cross-reference within the rule, to indicate co-occurrence restrictions. But the Finite Complement Constraint is also a variable constraint; if we were able to state it more precisely, we would want to show the rule operating more often with non-finite complements, but not confined entirely to them.

¹⁸ We would eventually want to replace the arbitrary designation WNS₂ with a series of dialects located in space or time, filling out the paradigm suggested by Bailey 1971.

- (c) 4 cannot be <directly dominated by a VP>_{-std} in an S dominated directly by an NP which does not command 2.
- (d) 4 cannot be dominated by an S adjoined to THAT and commanded by 2 / [+Std].
- (e) If 4 = VB, 2 and 4 are clause mates / [-NS, -BE].

This set of features gives us a more economical and less awkward representation than 54. It is possible that such a limited set of features will be satisfactory, but it is more likely that as our knowledge of NEGCONCORD grows, the number of sub-classifications will increase rapidly. Rather than a set of conditions, we will want to set up matrices of the kind to be developed in §8.

One difficulty with 54' is that the registration of dialect options makes it awkward to show variable constraints on the rule, and we will eventually want to do this. A deeper understanding of NEGCONCORD must include the fact that the rule applies more often in some environments than in others—e.g., more often when 4 = INDET than when 4 = VB.

The effort to produce a single rule schema can be rewarding in that it forces us to define the precise nature of the differences between dialects. If it also showed us interactions between conditions, it might actually explain why the rule develops as it does. Those who believe in internal evaluation measures would also believe that this condensation effort will help us select the correct form of the grammar and even give us such explanations.¹⁹ But without a direct demonstration of such a claim, we must admit that 54' explains very little. In fact, it obscures. A fundamental objection to 54' is that it combines two opposing grammatical processes: NEGATTRAC on the one hand, and negative postposing and NEGCONCORD on the other. NEGATTRAC is an obligatory process governed by abstract, conceptual constraints. Negative postposing and NEGCONCORD are optional, emphatic transformations. Since the argument of this paper will be seen to revolve about the difference between these two types of rules, the major point will be lost in such a global formulation.

The next two sections will examine the distinct semantic character of these distinct types of grammatical rules. §6 will explore the logical basis for NEGATTRAC, which will allow us to unify and simplify the conditions which govern the obligatory application of this rule. Instead of a rule which is obligatory in some environments, we will derive a simpler statement of the underlying logical configuration which is always prohibited in English and propose an explanation for the prohibition. §7 will then examine the affective character of NEGCONCORD, and place this rule within a larger context of devices for reinforcing negation. These findings will then be combined in §8, which will attack the problem posed at the outset: how can closely related dialects develop opposite interpretations of the same surface structure?

¹⁹ Lakoff 1971 notes (fn. 2) that the only explicit application of an internal evaluation measure in syntax is Chomsky's analysis of the auxiliary in *Aspects*. In the light of Ross's refutation of this, Lakoff argues that 'there is not the slightest reason to believe that evaluation measures play any role in the theory of grammar at all, much less in the innate biological mechanisms of the child.'

6. THE NATURE OF NEGATTRAC. At the end of §2, we arrived at a general principle (28) which summarized the conditions under which NEGATTRAC is obligatory: 'Whenever an unstressed indeterminate *any*, without a negative feature of its own, is not commanded by a negative or non-factive feature, it may not be followed by a negative.' While this output condition will produce the correct results, it is both miscellaneous and unmotivated. It is not clear why stress, non-factives, and negatives should appear together as a list of exceptions to the obligatory character of NEGATTRAC; and there is nothing here which helps us to understand why violations of the obligatory core of the rule are uninterpretable, or why they produce an incurable confusion in listeners of every age and background.

The generality and force of NEGATTRAC to subject indefinites cannot be overstated. It is equally strong in all the English dialects we have studied. So far we have considered data from the abstract analysis of our own intuitions, and from the observation of natural speech. We can also bring to bear the results of experiments with repetition tests which reveal the uniform character of the NEGATTRAC rule. These tests, carried out with groups of adolescent speakers of BE, showed that deep-seated rules of the vernacular influenced perception and production more than had been realized.²⁰ For a central core of vernacular speakers, BE forms were repeated verbatim, and certain SE forms were immediately translated into the corresponding BE forms. However, sentences which violated NEGATTRAC produced a different response: profound confusion. Here is the record of three subjects' attempts to repeat a sentence that violated output constraint 28:

(55) *Anybody doesn't sit there anymore, do they?*

Boot [1st trial]: Anybody—Hey, you goin' too fas'!

[2nd trial]: Any—I can't say it; I owe you a nickel.

David [1st trial]: Hunh?

[2nd trial]: That don't sound right!

Money [1st trial]: Anybody—eh—what is that?

[2nd trial]: Anybody ever sits there d—any more, do they?

[3rd trial]: Anybody nev—ever sits there—

Boot and David respond with total confusion. Money tries to solve the problem by removing the negative element; a fourth member of the group follows the same pattern, producing *Anybody ever sits there anymore, do they?*

Recent work with a wide range of English dialects shows that this confused response is not limited to BE speakers: violations of NEGATTRAC are hard to focus on, and impossible to interpret.

6.1. THE SEMANTIC FEATURES OF *any* IN POSITIVE SENTENCES. Responses to violations of NEGATTRAC suggest the presence of deep-seated logical incoherence which is not easily resolved by listeners trying to interpret such sentences. It will therefore be necessary to consider the general semantic features of *any*, first of all in positive sentences. This is an extraordinarily complex area with a long history of resistance to analysis, and only some of the problems will be considered here.

²⁰ See Labov et al., I:3.9. Broader applications of such repetition tests have been carried out on school populations, but violations of standard rules, as in 55, have not been utilized.

The discussion will be directed at uncovering just those central features of the quantifiers which are responsible for the phenomena outlined above.

Our current approach to the study of language in context is based on the strategy of a regular interplay between observations of natural behavior, the exploration of intuitions, and experimental testing (Labov 1970, 1971c). The analysis in this section starts from the empirical findings of the use of NEGATTRAC and NEGCONCORD in various dialects, and adds data from my own intuitions and those of other linguists, along with the evidence and arguments of scholars and philosophers. Some of the intuitive data will rest on a firm foundation of general agreement, using only well-known examples. But other sentence types may touch on unexpected areas of variability in judgment, and may contain uncorrected biases produced by the theoretical notions themselves.²¹ Recognizing the possibility of such a bias, I present this analysis with the hope that it will illuminate the earlier studies and lay the foundation for further empirical investigation.

Klima originally assigned the label 'indeterminate' to the class of *any* and *ever* on the basis of the formal properties noted in §2. His analysis of the behavior of *any* has semantic implications, since he notes its co-occurrence with *WH*- and verbs such as *wonder*, which he marks with the general semantic feature [+affect]. Nevertheless, Klima sees *any* in negative sentences as a formal suppletive alternant of *some*, usually obligatory but occasionally optional with unanalysed semantic consequences. Fillmore distinguishes two senses of *some* as [\pm specific]; he argues that it is the [-specific] which alternates regularly with *any*. In this view, *any* remains an automatic suppletive alternant in negative sentences which does not convey information of its own. Stockwell et al. (255-69) review these various possibilities and point out difficulties with the [\pm specific] hypothesis, but conclude that this is the most plausible account now available for the matter. Accordingly, they represent the *some-any* suppletion transformation with a structural analysis

$$(56) X - [+affect] - Y - \left[\begin{array}{l} -\text{spec} \\ -\text{indet} \end{array} \right] - Z$$

and instructions to change [-indet] to [+indet]. This formal analysis of *any* lacks the substantive semantic elements which would account for a large body of linguistic facts, including the obligatory character of NEGATTRAC. The feature [-indet] is simply a label; if 'indeterminate' had any significance at all, [-indet] would be oddly redundant. R. Lakoff 1969 demonstrates the existence of meaningful alternation between *some* and *any*. Typical are the oppositions:

- (57) a. Who wants some beans?
b. Who wants any beans?

- (58) a. Do you think those men want to do some work?
b. Do you think those men want to do any work?

Lakoff argues that *some* has a positive presupposition, *any* a negative one, and that this must be entered in the formal description by some mechanism not yet elaborated.²²

²¹ Current empirical research on variation in intuitive judgments includes the re-examination of many examples cited here to detect such individual or social differences.

²² She notes that there appear to be some 'purely syntactic constraints' on the positive

These are some of the many considerations which would lead us to believe that *any* embodies a set of semantic features distinct from *some*, in questions and negatives as well as in positive declarative sentences. As a quantifier, *some* is a limiter and designator of the extent of reference of the nominal being modified.²⁸ *Some* is an indefinite quantifier, as opposed to definite quantifiers such as *three*, and is partitive as opposed to *all* and *every*. We can sum up these characteristics in feature notation by saying that *some* is [+quantifier, –definite, +partitive], or refer to it in logical terms as the existential quantifier which binds variables in propositions $(\exists x)Fx$.

Any is also [+quantifier, –definite]; but it differs from *some* in at least three other semantic features—[+distributive], [–partitive], and [–fact]. We will consider these three features in positive contexts before going on to examine their interaction with the negative.

6.11. [+distributive]. *Any* is [+distributive], in that it considers items one at a time. *Any* shares this property with *each*, as opposed to *some*. When only one person can do a given activity, the difference comes out strongly. If you have three bridge players, you can turn to a crowd at the other end of the room and ask

(59) Can any of you make a fourth at bridge?

But you cannot ask

(60) *Can some of you make a fourth at bridge?

By the operation of the same semantic feature, you would be inviting trouble if you asked

(61) Can some of you play bridge?

6.12. [–partitive]. *Any* is generally equivalent to *every*, *each*, and *all* in its universal [–partitive] feature, as opposed to the existential [+partitive] character of *some*, *a*, and other quantifiers. In terms of truth values, *any* and *every* are equivalent in

- (62) a. Any boy can run a mile.
b. Every boy can run a mile.

These statements both apply to the class of all boys, and to each and every boy; for one to be true, the other must be true. There are also ambiguous occurrences of *any* which make it seem that there is a [+partitive] *any* in hypothetical sentences. The following pair cited by Fillmore (personal communication) illustrates such ambiguity:

- (63) a. If John can do it, anyone can do it. [–partitive]
b. If anyone can do it [\pm partitive], John can do it.

In 63a, the conclusion is that ‘everyone’ can do it, and is plainly derogatory. But 63b has two readings. The [+partitive] one is complimentary to John: ‘If there

use of *any* as in **Anyone left*. The analysis given below shows this constraint as a regular product of the semantic features of *any* and the preterit.

²⁸ In a recent discussion of logical properties of quantifiers, Keenan 1971 proposes three characteristic properties: binding, relative scope, and predication. All the items discussed here satisfy these requirements.

exists any one person who can do it, that person is John.’²⁴ The [–partitive] meaning has the same derogatory interpretation as in 63a: ‘If everyone can do it, John can do it.’ The ambiguity is then quite discrete, since the one meaning of *any* is a knock, and the other is a boost.

This ambiguity of *any* is present in any hypothetical clause, but can be seen most readily when we construct different consequences to the same antecedent.

- (64) a. If John can sleep with any of these girls, then at least he’ll have a roof over his head. [+partitive]
 b. If John can sleep with any of these girls, then he’ll have a decision problem. [–partitive]

One way to display the specific difference between these two uses of *any* is to consider what we would have to do to test the validity of 64a–b. In 64a, the consequence must be tested each time that a girl says yes and the antecedent holds; if each girl who says yes has an apartment, then 64a is true. But for 64b, no test of the consequence is relevant or necessary until the condition is seen to hold for each and every individual: after all the girls said yes, we could then test 64b by seeing if John indeed had trouble deciding what to do.

This view of the matter is consistent with the analysis of the ambiguity of *any* proposed by Savin 1971, in which 64a–b differ in the relative scope of the quantifier. Thus we can represent 64a in the following logical configuration:

- (65) $(\forall x)$ (John can sleep with $x \supset$ John will have a roof over his head)

where the scope of the universal quantifier extends over both the antecedent and the consequent. This is the characteristic property assigned to *any* by Reichenbach (1947:106)—‘that its scope is always the whole formula.’²⁵ But 64b shows a different scope for *any*—in this case the more limited scope which Reichenbach restricts to *every*:

- (66) $(\forall x)$ (John can sleep with x) \supset (John will have a decision problem).

In this analysis, *any* is always a universal quantifier, or [–partitive] in our feature notation, and the ambiguity is a structural rather than a substantive one. The ambiguity of 63b would then be represented as

- (63b’) $(\forall x)$ (x can do it) \supset (John can do it).
 (63b’’) $(\forall x)$ (x can do it \supset John can do it).

But the fact that we can differentiate the two *any*’s by scope is not decisive, since 64a and 65 are of the general form $(\forall x)(Fx \supset \alpha)$ where α is a constant, and this is equivalent to the formula with an existential quantifier with limited scope, $(\exists x)Fx \supset \alpha$. Thus we can rewrite 65 as

- (65’) $(\exists x)$ (John can sleep with x) \supset (John will have a roof over his head)

²⁴ There is a further ambiguity in the [+partitive] reading of 63b: ‘If any one person can do it, then John can do it (also)’ vs. ‘If any one person can do it, then John is that one person.’ The logical representations of these are quite different: $(\forall x)$ (x can do it \supset John can do it) vs. $(\forall x)$ (x can do it \supset John is x). Both are examples of the extended [+partitive] use of *any*, and both will be analysed as the result of the extended rather than limited scope of *any*.

²⁵ Although Reichenbach identifies the extended scope of *any*, as opposed to the limited scope of *every*, he does not refer to that use of *any* which has the same limited scope as *every* and is therefore responsible for the ambiguities noted here. He argues (106 ff.) for an invariant interpretation of *any* with a categorical rule of maximally extended scope.

which we can paraphrase as 'If there is any girl that John can sleep with, then he'll have a roof over his head.' We could therefore express the ambiguity of *any* as an operator with limited scope which is either a universal, [−partitive] quantifier equivalent to *every*; or an existential [+partitive] quantifier, so maintaining the [+partitive] analysis. Simplicity considerations alone do not easily resolve the situation in favor of a conjunctive definition with variable scope or a disjunctive definition with constant scope. But the variable scope proposed by Savin also explains certain peculiarities in the restrictions on *any* with preterits and progressives to be examined below, and will allow us to simplify greatly the statement of obligatory NEGATTRAC.

6.13. [−fact]. *Any* cannot be used in positive sentences with progressives and preterits, but it can be used with modals, the general present, the future, and any tense which does not assert that an event actually occurred:

- (67) a. *Anyone is going to his party.
 b. *Anyone went to his party.
 c. Anyone can go to his party.
 d. Anyone goes to his party.
 e. Anyone will go to his party.
 f. Anyone might have gone to his party.

This set of properties can be summarized by saying that *any* is incompatible with predicates which make particular existential statements, asserting that a given factual state of affairs is the case. It is compatible with any lesser or more general degree of assertion. I identified this feature as [−fact] in §2, and will continue to use this notation. In one sense, *Anyone can go* can be considered a statement of fact, since it can be factually disproved by finding someone who cannot go. But it is neutral in regard to whether anyone in fact did go.²⁶

In §2, it appeared that the obligatory character of NEGATTRAC to *any* was relieved by complementizers such as FOR-TO which are strongly selected in turn by the [−fact] predicates identified by the Kiparskys and by Karttunen. The mechanism of this connection remains to be elucidated; but if we are dealing with the same semantic feature, then *any* should be incompatible with [+fact] predicates in general. The most obvious cases are

- (68) a. *Anything is forgotten.
 b. *Anything is finished.
 c. Anything is possible.
 d. Anything is available.

Here predicate adjectives containing perfective features, necessarily [+fact], are incompatible with *any*, but those containing the semantic features of modality or modal suffixes are compatible. Adjectives neutral in regard to [+fact] do not conflict with *any*:

- (68) e. Anything is interesting.

The obverse of the [−fact] feature is that *any* is used to make lawful statements about general conditions. Savin has pointed out that *any* makes predic-

²⁶ The lawful generalizations expressed by *any* may be considered facts of a kind, though not statements about a particular state of affairs. To make this point clear, Savin uses the feature [−mere fact].

tions about counter-factual conditions which *every* does not make:

- (69) a. John spoke to everyone who came.
 b. John spoke to anyone who came.

Here 69a is a factual assertion from which nothing else follows. But it follows from 69b that if one more person had come, John would have spoken to him. There is therefore a strong interaction between the quantifier and the predicate, in that *any* is incompatible with a [+fact] predicate and also imposes a sense of lawful generalization upon it.²⁷ The feature [-fact] is therefore not a property of *any*, but rather something required in the environment of *any*, i.e. a transfer feature (Weinreich 1966:429). Transfer features can be seen operating in temporal adverbs like *ago* which transfer a temporal feature to the noun phrase with which it is in construction: symbolically [+temp → ⟨NP⟩]. The metaphor *a grief ago* does not yield a re-interpretation of *ago*, but rather imposes a temporal feature on *grief*. The transfer feature of *any* can thus be formalized provisionally as [-fact → ⟨pred⟩], leaving open for the moment how we identify the particular predicate phrase to be affected.

We noted, in 21–24, four sets of conditions which removed the obligatory character of NEGATTRAC: a preceding negative, a preceding hypothetical, a following relative clause, or embedding with non-finite predicates. All these also operate to remove the constraint that *any* cannot be used with preterits and progressives. The negative cases will be considered in the following section. In the positive cases, we see that *any* in such environments is compatible with preterit and progressive verbs:

(22') HYPOTHETICALS

- a. If anyone went to his party, they had a good time.
 b. When anyone went to his party, they had a good time.
 c. Should anyone be going to his party, they will have a good time.

(23') RESTRICTED INDEFINITES

- a. Anyone who was anybody went to his party.
 b. Anyone who is anybody is going to his party.

(24') EMBEDDINGS

- a. For anyone to have gone to his party was amazing.
 b. For anyone to be going to his party is astonishing.

In all these examples, the [-fact → ⟨pred⟩] feature of *any* is transferred to some other predicate higher than *went* or *is going*. They all have the general form

²⁷ Reichenbach argues that *any* statements like *Anything goes* are best shown without the universal quantifier as free variables, of the form Fx , and that this gives the support of natural language to operations with such formulas by logicians. It would follow that *any* is thus opposed to *every* and *all* as the absence of a quantifier, rather than as an indefinite quantifier. But Reichenbach also states that Fx 'means the same' as $(\forall x) Fx$, and this is a necessary intermediate for his interpretation of *any* sentences with extended scope. Furthermore, the distributive property of *any* is best shown logically as the ordering of quantifiers: $(\forall x) (\exists y) Fxy$ instead of $(\exists y) (\forall x) Fxy$. However, Reichenbach's argument for free variables may be relevant to the ultimate analysis of our problem, since the negation of Fx is not interpreted $\sim(\forall x) Fx$ but rather $(\forall x) \sim Fx$. This implies the possibility of a further logical motivation for the constraint on *All the boys didn't leave*, *Any boys didn't leave* etc., though the connection between the logical facts and the surface constraint is certainly not clear.

($\forall x$) ($Fx \supset Gx$). The logical representation of both 22'a and 22'b would be

(70) ($\forall x$) (x went to his party $\supset x$ had a good time).

There is no difficulty in reducing 23' to the same form, since, as noted above, it is generally agreed that this must be interpreted logically as equivalent to 'If there was anyone who was anybody, he went to John's party', giving us

(71) ($\forall x$) (x was important $\supset x$ went to John's party).

Here the scope of the universal quantifier is the entire sentence. Since both antecedent and consequent are [+fact] predicates, we must conclude that it is not necessary for *any* to be compatible with either. The transfer feature must therefore apply to the *if-then* element of the sentence, which must be interpreted as the highest predicate if our [-fact \rightarrow (pred)] notation is to be maintained. We would then have to establish the formal convention that the [-fact] feature is to be transferred to successively higher predicates (perhaps in the course of the cycle) until it agrees with one:

(72) I said that if John knew [-fact] that Harry invited anyone to the party, he told me a lie.

The scope of *any* here extends up to the conditional clause:

(72') I said that ($\forall x$) (John knew that Harry invited $x \supset$ John told me a lie).

But if there is no predicate which will accept the [-fact] transfer feature, then the use of *any* will be ungrammatical:

(73) *I said that John knew that Harry invited anyone to the party when he told me a lie about it.

If Savin's analysis of the ambiguity of *any* is correct, we should be able to find only one meaning in 22'–24'. A limited scope for *any*, confined to the antecedent, would be impossible because of the incompatibility of *any* with preterits and progressives. This seems to be the case: we cannot maintain the 'every' meaning of 64a if we change the antecedent to a preterit or progressive. Thus 64b' has lost completely the meaning that John had slept with ALL the girls:

(64b') If John slept with any of these girls, then he had a decision problem.

This finding shows that the [\pm partitive] theory is inadequate to account for the ambiguity of *any* in 63b and 64. If the scope of *any* were limited to the antecedent in both 64a and 64b, there would be no way to explain that only one of these meanings—the [+partitive] one—is compatible with a preterit or progressive verb, as in 64b, and is the only meaning which emerges when we change the antecedent of 63b to a preterit:

(74) If anyone did it, John can do it.

Since *any* is incompatible with *did* in 63b', its scope must necessarily extend beyond the antecedent, and no ambiguity is possible. The scope explanation proposed by Savin is the only one consistent with these facts.

The embedded sentences of 24' show an extended scope for *any*. It is possible to interpret these sentences as *if-then* conditions, and it seems likely that it is necessary for *any* to be compatible with the main predicate—in the case of *amazing*, *unlikely* etc. These involve negative presuppositions, that 'someone did not believe that anyone would go'. The problem of apparently neutral predicates

like *O.K. with me*, raised in 26 in connection with NEGATTRAC, seems to involve a more indirect type of presupposition: 'for someone it is not O.K. for anyone to go', but for me it is. An exact formulation of the conditions which permit *any* in these and parallel constructions is beyond the scope of this paper, though not presumably beyond the scope of any paper. They seem to involve all the semantic features we have identified in *any* and perhaps more.

We can sum up our characterization of *any* in positive sentences by paraphrasing *any X* as a prediction of the form:

- (75) If [-fact] you select [+quantifier], one at a time [+distributive], all [-partitive] of the items designated X, no matter which [-specific] or how many [-definite], you will find that ...

The combination of [+distributive, -partitive] is usually realized as *each*, so that we can reduce this to 'If you select each of the items designated X, no matter which ...' *Any* is thus opposed to *each* in its indefinite feature, to *all* by its distributive and indefinite features; and since *every* is [\pm distributive], its relation to *any* may be the same as *all* or *each*. The transfer feature [-fact] is not needed to distinguish these quantifiers minimally:

- (76) UNIVERSAL [-partitive] QUANTIFIERS
- | | | | |
|-----------------|-------------|--------------------|-------------|
| | [+definite] | | [-definite] |
| [+distributive] | each | every ₁ | any |
| [-distributive] | all | every ₂ | |

In §2, we observed that stress on *any*, with or without an attributive *just*, diminished the obligatory force of NEGATTRAC. It is therefore surprising to find that stress on *just any* has no such effect in eliminating the restriction against using *any* with preterits and progressives:

- (77) a. **Anyone is going to his party.*
 b. **Just anyone went to his party.*²⁸

6.2. *Any* WITH NEGATIVES. We now turn to the behavior of *any* in negative sentences, and reconsider the obligatory rule of NEGATTRAC in an effort to understand its strongly obligatory character in terms of the semantic features we have isolated. There is a general output constraint (28) which gives us a rather heterogeneous list of conditions under which NEGATTRAC is optional. Otherwise, we find that (I) NEGATTRAC is uniform in all dialects of English, (II) violations do not occur in natural speech, and (III) violations constructed by the linguist are not interpretable and do not become more acceptable on repetition. It is not our business to explain here the existence of the rule in English: it is the end result of the interaction between the properties of the negative and *any* as they have developed over the course of time. But in properties I-III, NEGATTRAC contrasts sharply with negative postposing and NEGCONCORD. The main focus of this paper is on the contrast between categorical (strongly obligatory) and variable rules, and our analysis is designed to illuminate properties II and III.

We noted above that the first generative formulations considered *any* a mere formal, suppletive variant of *some* in negative sentences. Klima's analysis implies

²⁸ Although *Just anyone went* is not acceptable in isolation, it seems more natural as the amplification of a negative response to *Did anyone go to his party? No, just anyone went.* Here the mechanism seems to involve the overt denial of the [-specific] feature of *any*, that it is not the case that it does NOT matter which of the members of the class are selected.

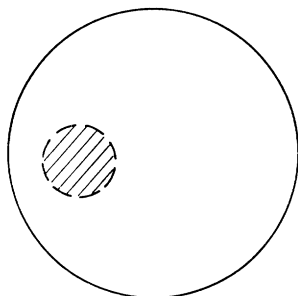
the following series:

- (78) a. I want some.
 b. I don't want any.
 c. *I want any.
 d. *I don't want some.

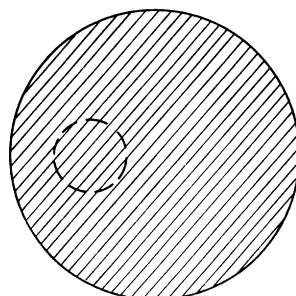
A careful reading of Klima's original discussion shows that he does not explicitly mark sentences of type 78d as ungrammatical, and many writers have since pointed out that they are quite acceptable in a wide range of contexts. As noted above, R. Lakoff has shown many meaningful alternations of *some* and *any* in questions.

There is no shortage of empirical evidence to show that 78d is grammatical. Among our BE-speaking subjects, we find many examples of *some* in negative sentences: *I don't want some more* (Keith W., 9, Thunderbirds); *I don't give my friends some* (David H., 13, Thunderbirds); *We don't sometime use that* (Kenneth S., 12, New York City). What then is the basis of the feeling behind Klima's formulation which marks *I don't want some* (78d) as at least awkward or unlikely in unmarked contexts, and *I don't want any* (78b) as much more natural? It seems to me that those who declare 78d ungrammatical are unconsciously treating it as the CONTRADICTION of 78a, and the full contradiction of an indefinite existential statement is a universal negative.

Consider someone looking out of a window who suddenly says, *There are some rabbits in that field*. If a friend comes to the window, he cannot deny the statement as quickly as it was made. Since the location of the rabbits is indefinite, he must now scan the entire field before he observes, *There aren't any rabbits in that field*. If he takes a quick look at one corner of the field and hastily observes, *I don't see some rabbits in the field*, then he has made a true observation, but he has not contradicted the first statement. It is necessary to search the entire field, and obtain class closure to contradict an indefinite statement.²⁹ This is shown diagrammatically as follows:



some



NEG + *any*

The correspondence of *some* \leftrightarrow NEG + *any* is thus a product of discourse considerations, rather than an automatic suppletive fact. We are dealing with a dis-

²⁹ The strong denial with [-partitive] *any* is opposed to the weak denial with [+partitive] *some* in the same way that a strong denial with the present perfect can be opposed to a weak denial with the preterit. *You never ate asparagus!* can be denied weakly with *Yes I did*, meaning 'at least once', but denied strongly with *Yes I have* meaning 'indefinitely many times'.

course strategy which established the sequence of 78a–b, rather than an obligatory rule of grammar. If the *any* in 78b were simply a formal alternant of *some*, we would expect to find the semantic features of *some*, such as [+partitive]. But by the argument advanced above, *any* is selected just BECAUSE it contrasts with *some* in being [–partitive]. We have every reason to believe that *any* in negative sentences is the same universal quantifier that we have just examined in positive sentences.

It is now generally understood that the negation of sentences with quantifiers can take several forms, and that some surface structures with quantifiers and negatives are ambiguous in this respect. Carden explains the two interpretations of *All the boys didn't leave* by readings of the deep structure with either the quantifier as the highest predicate (NEG-V) or the negative as the highest (NEG-Q). Logically, these two interpretations would be opposed as

- (79) a. NEG-V $(\forall x) (\sim Fx)$
 b. NEG-Q $(\sim \forall x) Fx$.

Carden finds that some subjects get both readings, some only one; but for every one NEG-V is rendered more naturally by *None of the boys left*. There seems to be general agreement on the following series for $(\forall x) (\sim Fx)$ readings:

- (80) a. All the boys didn't leave.
 b. Every boy didn't leave.
 c. ?Each boy didn't leave.
 d. *Any boy didn't leave.

While 80a–b are awkward but grammatical for most speakers, 80c is questionable or more than questionable, and, as we have seen, 80d is impossible for everyone. If the [+distributive] feature of *each* is responsible for 80c being worse than 80a, then 80b should be intermediate; some subjects should react to the [+distributive] alternant of *every*. And in fact preliminary investigations of this series suggest that this is the case: 80a–d form an increasingly ungrammatical series. For the NEG-V meaning, all these forms are replaced by *None of the boys left*, or *No boys left*; I have advanced reasons above for believing that NEG + *any* underlies *no* and *none* here. NEGATTRAC therefore seems to apply with moderate strength to *all* and *every*, strongly to *each*, and categorically to *any*. From our analysis of the feature system of these quantifiers in 76, it would seem that it is the interaction or cumulative effect of the non-partitive, indefinite, and distributive character of *any* which is responsible for the force of NEGATTRAC here. That is, [–partitive, –distributive, +definite] + NEG is awkward (*all*, *every*); [–partitive, +distributive, +definite] + NEG is objectionable (*every*, *each*); and [–partitive, +distributive, –definite] + NEG is impossible. The total effect of *Any boys didn't leave* is that of going up an indefinite number of garden paths, one after the other, and knowing all the time that there is nothing at the end of any of them. It should be borne in mind that a logical equivalent of the universal negation (79a) is the existential negation

- (81) $(\sim \exists x) Fx$

which is parallel to the equivalent surface structures:

- (82) a. None of the boys left.

- b. No one of the boys left.
- c. Not one of the boys left.
- d. There was not one of the boys that left.
- e. There wasn't any boy that left.

In all these versions of 81, the negative precedes the indefinite and therefore satisfies constraint 28. It is not likely that there is a one-to-one correspondence of logical representations 79 and 81 with surface structures 80 and 82. Nevertheless, the parallel is so striking that we might rewrite 28 as follows:

- (28') If a linguistic structure is interpreted as a positive universal quantifier applied to a simplex negative predicate, then the negative will precede or be incorporated with the quantifier in the surface structure—often when the quantifier contains a distributive feature, and always when it is indefinite.

This new constraint is broader than 28 since it includes all the quantifiers in 80. But it seems to lack the list of exceptions to the categorical operation of NEGATTRAC on *any*—that NEGATTRAC may not apply when the indefinite is (a) commanded by another negative, (b) commanded by a hypothetical, or (c) stressed. We can now use our analysis of *any* in positive sentences to show that these specifications are not needed in 28':

(a) Commanded by another negative: when a second negative commands the indefinite quantifier, as in 19, *I don't say that anyone didn't go*, the logical structure is not that of 28', but rather

$$(83) \sim((\forall x) \sim Fx)$$

—that is, 'I say that it is not the case that anyone didn't go.' In 19, negative raising is added to 83: the effect of a preceding negative without negative raising is seen in ex. 3 of Table 1. Such explicit negatives as *it is false* do relieve the categorical nature of NEGATTRAC; but, as noted in §2.1, they are not as effective as the implicit negatives in *regret*, *apologize*, *am sorry*, *hate* etc. It is not clear why these indirect negatives have a stronger effect.

(b) Commanded by a hypothetical: these are the cases listed under 22–23, and analysed above (§6.1) in their positive counterparts. From our discussion, it is clear that the logical structure of 22, *If anyone can't go ...* etc., and of 23, *Anyone can't go who drinks* etc., are not of the form $(\forall x) \sim Fx$, but rather

$$(84) \text{ a. } (\forall x) (\sim Fx \supset Gx) \\ \text{ b. } (\forall x) (\sim Fx \supset y).$$

Neither of these is specified in 28'. In the case of the embedded sentences of 24, *For anyone not to go ...* etc., the structure is either 83 or 84b, and it is difficult to decide which. That is, 24b, *It's a shame for anyone not to go*, may be read as

$$(85) (\forall x) (\exists y) (\sim(x \text{ go}) \supset \text{shame } y)$$

or we can refer to the presupposition of 24b: 'someone doesn't want anyone not to go':

$$(86) (\forall x) (\exists y) (\sim(y \text{ like } \sim(x \text{ go}))).$$

(c) Stress: in all the previous cases cited, the scope of *any* naturally expands to cover the entire proposition. We observe that, in 17'c, *Just anybody can't eat*

there (§2.2), the stress protects against the force of NEGATTRAC. But it is also clear that the meaning is quite different from *Nobody can eat there*. The logical representation would be equivalent to the NEG-Q reading of 79b:

(87) $(\sim\forall x)$ (*x* can eat there)

where the negative has a larger scope than the quantifier. This is not the normal scope for *any*; the limited scope shown here is more characteristic of *all* and *every*, as in *Not every boy can eat there*. But the stress on *any* has the effect of limiting its scope, so that the negation applies directly to the quantifier.³⁰ There is no need for any special representation of the effect of stress on *any*; contrastive stress normally focuses the semantic force of negation on the stressed particle so that the negative commands it. In

(88) The \acute{E} string didn't break

we assert that it was NOT the E-string but some other string which broke. And in 17'c we assert that it is not ANYBODY who can eat there, but only members of some other, less inclusive, set.

The mechanism of contrastive stress involved here does not operate without a negative feature. It is therefore understandable that the parallels between the constraints on *any* in positive and negative sentences come to an end here, and that stress on *any* does not make it compatible with preterits and progressive verbs.

6.3. THE LOGICAL REPRESENTATIONS. Though we should not attempt to make any direct connection between the logical representations and the relatively superficial rule of NEGATTRAC, it is evident that this transformation is governed by both logical configurations and abstract conceptual features of the sentence. These considerations are quite distinct from the emphatic, affective, and socially marked features of negative postposing and NEGCONCORD, and fully justify our treating NEGATTRAC as a separate transformation.

Although the informal logical representations given above are quite revealing, it is clear that they are not sufficient to show the meaning of *any*. *Any* is more than a universal quantifier; we would have to enlarge our representation of *Anyone can go* to read as follows:³¹

(89) $(\forall x)$ (*x* can go)
 [$-\text{fact} \rightarrow$ <pred>]
 [$+\text{distributive}$]

³⁰ In the representations used by Carden, this difference would be shown as a deep structure with the quantifier as the predicate of the highest level sentence, as opposed to one with the NEG as the predicate commanding the quantifier.

³¹ That is, features such as [$+\text{distributive}$], [$-\text{definite}$], [$-\text{fact} \rightarrow$ <pred>] are not shown in the logical representation. As noted above, [$+\text{distributive}$] can be shown logically as the difference between $(\forall x) (\exists y) Fxy$ and $(\exists y) (\forall x) Fxy$, but not for one-place predicates such as *Anyone can go*. The [$-\text{definite}$] feature may be shown by the absence of a quantifier, as indicated in fn. 27. The non-factual transfer feature might ultimately be reduced to a consequence of this free variable formula. Whether or not all the semantic features of the quantifiers can be reduced to a logical representation is still an open question; an answer will of course require a proof of such suggestions with an explicit connection between logical formulas and the grammatical end result.

We thus have three levels of semantic features operating in such sentences. There are features such as [+quantifier, -partitive] which can be completely accounted for by logical notations; there are abstract, conceptual features such as [-fact] which must be added to the two-valued logical notation; and there are affective features such as emphasis which have no place in the logical system.

Given the rules of English, we expect that an unstressed, unmodified, subject indefinite introduces a positive sentence. Violations of NEGATTRAC, e.g. **anyone can't go*, thus begin with what should be a positive sentence and then confront the hearer with a negative. Without the presence of a hypothetical feature, or a modifying clause which may be interpreted as a hypothetical feature,³² or of stress to limit the scope of *any*, the sentence remains an uninterpretable reversal of our expected pattern. It is possible that all universal and compelling prohibitions of this type involve abstract conceptual features with unexpected reversals of meaning. In any case, we have no choice but to regard NEGATTRAC as an entirely different rule from the rightward movement of the negative particle. To clarify further the distinction between obligatory and variable rules, we will now consider the way in which negative postposing and NEGCONCORD operate, and see what semantic or discourse functions can be assigned to these transformations:

7. THE NATURE OF NEGCONCORD. The semantics of NEGCONCORD is a much simpler study than that of NEGATTRAC. To begin with, we note that NEGCONCORD is an optional rule for almost all dialects of English. In this respect, it resembles negative postposing of the standard language. Both represent rightward movement of the negative beyond the verb, and they seem to share a strongly emphatic character:

- (90) a. I owe you nothing!
 b. I don't owe you nothin'!

Jespersen points out (1924:331) that the system of 90b is the normal one for most languages: negation is typically cumulative, not multiplicative. It is the cumulative character of NEGCONCORD, along with the postposing, which seems to put strong emphasis on the negation itself. It is not necessary to base such

³² The property of *any* which allows the interpretation of modifiers as hypotheticals is of considerable interest, and may be important for the exploration of the semantic value of various nominalizing processes of sentence reduction. We can construct a series of sentences with decreasing acceptability:

- Any boy who received an invitation went to his party.
 ?Any boy receiving an invitation went to his party.
 ?Any boy with an invitation went to his party.
 ?Any boy invited went to his party.
 ?Any boy on his block went to his party.
 ?Any boy here went to his party.
 *Any boy went to his party.

A purely logical representation will show the last item as a general hypothetical, as readily as the first: $(\forall x)$ (x is a boy $\supset x$ went to his party). But the grammar seems to reject this interpretation, just as it would reject the interpretation of **Anyone went* as $(\forall x)$ (x is [+human] $\supset x$ went). If we accept this extremely analytical approach, we must conclude that any indefinite expression which contains a semantic feature in addition to the quantifier is to be interpreted as a hypothetical, and logical interpretation would be at the mercy of the number of distinctions made in the pronoun paradigm.

observations on intuitive speculation. When the pattern typical of careful speech gives way to the vernacular, NEGCONCORD is used by speakers to make their strongest points stronger. The use of NEGCONCORD can be illustrated by an interview with a 60-year-old woman from a working-class family in East Atlanta, Georgia. Mrs. Gratton had only a grade-school education, but she was self-educated to the point of controlling most SE features when she wanted to. In the entire face-to-face interview, she used the standard rules for negatives with indeterminates 32 times (including three examples of negative postposing); she used NEGCONCORD only twelve times. For the first twenty minutes, Mrs. Gratton regularly used such standard forms as the following:³³

Interviewer: How do you keep it [the skillet] from getting rusty?

Mrs. G.: Well—uh—I haven't ever thought anything about it. I jus' wash it an' put it back [laugh], an' clean it and that's all.

IVer: Do you keep it on top of the stove?

Mrs. G.: No—I usually put it up. Now you see, I haven' put up anything.

But a little later, the conversation touched on a theme that produced a sudden switch to NEGCONCORD:

IVer: Do you make 'em [biscuits] from scratch?

Mrs. G.: Make 'em from scratch [chuckle].

{IVer: Wow! Do you measure the things when you put—

{Mrs. G.: I don't

Mrs. G.: measure nothin'! I never have

{IVer: Never, even when you first ...?

{Mrs. G.: measure' nothin'. I have never measured—

The emphatic character of Mrs. Gratton's response shows up in the repeated, strident overlap of speakers as well as her repetitions on the same theme. When this theme—cooking without measuring—comes up later in the interview, it is again given this emphatic treatment. (Note that the cultural feature [—book-learning] coincides with the use of non-standard grammar at this point, and reinforces the use of NEGCONCORD.) As the discussion continues, Mrs. Gratton switches back to standard forms:

IVer: How'd you learn how to make biscuits?

Mrs. G.: Well ...

IVer: Do you remember?

Mrs. G.: No I didn'. I didn' know how to do anything when I cooked. But—I could make 'im corn bread. That's about th'easies' thing anybody can do, can make corn bread; i's nothin' to that.

NEGCONCORD in other white dialects typically has this emphatic character:

(91) We wouldn't never have took it! (Marie C., 39, Hackney, London)

(92) You don't have to know too much of nothing. (Monnie O., 35, Wanchese, N.C.)

(93) He [my father] didn' take nothin' offa nobody. (Henry G., 60, E. Atlanta, Ga.)

In all such dialects, NEGCONCORD is optional. Mrs. Gratton's husband used

³³ I am indebted to Teresa Labov, who was the interviewer here, for initiating this exchange.

NEGCONCORD more than she did—17 times—but did not use it 12 times in the face-to-face interview. In group sessions within the family, the percentage of NEGCONCORD rises, but never predominates to the exclusion of the *any* forms. This confirms our view that *any* with the negative does not contain the feature [+neg] as some linguists have suggested, since it always contrasts with NEG + *any*.

7.1. NEGCONCORD IN BE. The first thing that we note in BE is the extraordinary proliferation of the negative:

- (94) Once you get an even break, don't fuck it up, cause you might not never get no time see 'im again. (Larry H., 15, Jets)
- (95) I ain't never had no trouble with none of 'em. (William T., 25, Fla.)
- (96) You better NOT never steal nothin' from me. (Jesse H., 16, Jets)
- (97) He ain't not no Collins. (Speedy J., 15, Cobras)

The expansion of the negative goes beyond the two environments INDET and VB, since in 97 two negatives are associated with the verb. *Not* can occur in foregrounded position without the attraction of an indeterminate:

- (98) I can walk through this wall, but not my physical structure can't walk through this wall. (Stanley K., 15, Cobras)

This development can be related to elliptical *not*, which negates noun phrases, adverbs etc. without verb phrases, as in standard *not exactly*:

- (99) Not no more. They don't fly no more. (Lawrence W., 15, Jets)
- (100) Not none—Not none o' our friends, but BIG people. (David H., 13, Thunderbirds)

This negative is realized from the sentence modality without going through the morphophonemics of pre-verbal location. The fact that it can do so means that we cannot allow NEGCONCORD to be dependent upon a pre-verbal transformation. There is also a metalinguistic *not*, used to edit texts and correct mistakes. This too can generate NEGCONCORD:

- (101) I went to some f—not no friends of mine, but a friend of MY friend. (Pauline J., 37, S.Car.)

Another aspect of the exuberant use of the negative in BE is NEGCONCORD referring to a negative not contained in the sentence at all, but contained in a presupposition or implication of the sentence. This 'NEG from nowhere' shows up in a toast, 'The letter'. A whore who left the hero to rot in jail asks him for a dime:

- (102) Bitch, before you get the price o' NOTHIN',
A grape got to grow as large as a pumpkin.

All dialects normally have *anything* in clauses introduced by *before*, *unless*, etc. The implication of 102 and all that follows is that she won't ever get any money. We also observe this abstract NEGCONCORD in

- (103) She always gets kids in trouble for nothin' they didn' do. (Vineland, N.J.)

Here the standard equivalent is not immediately obvious: 'She always gets kids

in trouble for things they didn't do.' The fact that those things are NOTHING from the standpoint of the kids seems to influence the NEGCONCORD.³⁴

The most relevant fact about NEGCONCORD in BE is that it is NOT optional; in the major environment, within the same clause, NEGCONCORD to indeterminate is obligatory. Before we examine the evidence for this statement, the relevant environments must be strictly defined and a number of distinctions made:

(I) NEGCONCORD is never obligatory to the pre-verbal position. We can easily locate BE sentences where the negative is NOT transferred to pre-verbal position:

(104) Nobody was after 'im. (Lawrence W., 15, Jets)

(105) Nobody fights fair. (Henry N., 29, Bronx)

(II) The indefinite article *a* is not an indeterminate and is not involved in NEGCONCORD:

(106) a. I ain't never lost a fight. I ain't never lost a fight. (Robert, 13, South Carolina)

b. Ain't nobody a man. (Stanley K., 15, Cobras)

c. You ain't got a funny bone. (Michael, 13, W. Philadelphia)

From evidence given in various sections of this paper, we conclude that the underlying form of *no* is NEG + *any*, not NEG + *a*, which is realized as *not a*:

(107) I'm not a baby. (Pam, 13, W. Philadelphia)

(III) Forms appended as sentence modifiers, like *either* or *anything*, are not to be considered within the same clause; they are to be classed with NEGCONCORD outside the sentence with NEG. Some of these show concord:

(108) I didn' know nothing' about the people, or nothin'. (Pauline J., 37, South Carolina)

(109) I might can't get no more fines, neither. (Thomas H., 11, New York City)

But very often we find no NEGCONCORD to such positions among vernacular speakers of BE:

(110) They're not too hip, or anything. (James T., 13, Jets)

(IV) The obligatory character of NEGCONCORD within the clause is not at all similar to the obligatory nature of NEGATTRAC. Any speaker is potentially capable of omitting the rule, and so producing sentences with *any*. He hears the standard form, and can interpret it, and in his careful speech he usually shifts away from the 100 percent use of NEGCONCORD. Even in casual speech many adults have shifted away from the BE vernacular and lost consistency in NEGCONCORD. And most importantly, consistent use of NEGCONCORD is the characteristic of core speakers of BE in their peer-group interaction. Marginal members of the peer-group culture and isolated individuals ('lames') do not show consistent NEGCONCORD.

Table 2 illustrates the four restrictions just outlined on the obligatory character of NEGCONCORD with evidence gathered from a large body of natural speech. This table shows five peer groups of BE speakers. We show figures from the

³⁴ This example is not from BE, but from a Puerto Rican family in Vineland, N.J., who had minimal contact with the BE of New York City and Philadelphia.

	STYLE	PROPORTIONS WITHIN THE CLAUSE			PROPORTIONS OUTSIDE THE CLAUSE
		TO INDETERMINATES		TO VERBS	TO INDETER- MINATES
		INSTANCES I	SPEAKERS II	INSTANCES III	INSTANCES IV
T-Birds (9-13 yrs.)	Group	62/62	5/5	2/13	
	Ind'l	94/96	11/13	12/34	1/11
Cobras (12-17 yrs.)	Group	70/70	11/11	12/35	0/1
	Ind'l	186/188	14/16	7/18	0/5
Jets (12-16 yrs.)	Group	149/151	13/15	10/38	1/3
	Ind'l	360/370	25/30	39/97	2/7
Oscar Bros. (15-18 yrs.)	Group	53/55	4/5	10/21	5/5
	Ind'l	79/81	3/4	6/12	0/2
Danger Girls (13-17 yrs.)	Group	48/48		4/13	
Lames	Ind'l	73/81	10/12	1/6	0/3
Inwood (white) (11-16 yrs.)	Group	25/32	2/7	0/36	0/2
	Ind'l	34/42	2/8	0/35	0/1

TABLE 2. Use of the NEGCONCORD rule by speakers of the BE vernacular and others.

Columns I, III, and IV indicate the proportion of times the rule applies out of the total number of possible instances.

Column II indicates the proportion of informants who used the rule 100% of the time, out of the total number of informants.

first four groups for NEGCONCORD in two styles: group and individual. The individual interviews were often lively, carried on with interaction from other members of the group; the interviewer (John Lewis) was a member of the vernacular culture himself. Nevertheless, the individual interviews cannot be taken as representative of the most casual style, where the minimum attention is given to speech (Labov 1970). As long as questions are being asked and answered, we consider the style used not to be the basic vernacular as just defined. The group sessions provide the context which defines the vernacular—where speech is controlled by the same factors operating in everyday life (Labov et al., I:57-64).

The first row of Table 2 shows that in group sessions, five members of the Thunderbirds spoke 62 sentences in which NEGCONCORD might have been used, and all speakers always did so. But in only two of thirteen cases was the negative transferred to the verb in the same clause. In individual sessions, concord was used in 94 of 96 possible cases. Eleven of the thirteen members scored 100 percent, but two members each used the standard form once. Again, transfer to the verb took place at a much lower frequency—12 of 34 cases—and in only one of 11 cases was the negative transferred to an indeterminate in a following clause.

The older groups show essentially the same pattern. The Cobras again show 100% NEGCONCORD, in group sessions, to indeterminates within the clause. In the case of the Jets, there are two cases in group sessions where one individual uses a standard form once. The Oscar Brothers, who are beginning to move out of the BE vernacular culture, show a slightly greater tendency in this direction.

In all cases, the frequency of transfer to the verb is much lower than to indeterminates, and transfer outside the sentence is irregular.

The 'lames' are isolated individuals interviewed in vacation day centers and on the streets of the Jet and Cobra areas, where it was known that they were not members of the central peer groups. Their use of NEGCONCORD is slightly less than that of the peer groups, though the difference is by no means as striking as in other indices of the BE vernacular (Labov et al., II:4.4). The white Inwood figures are markedly different: even with the small numbers of instances, we find that only two speakers use NEGCONCORD all the time, and of course there is no transfer of the negative to the verb. Other studies of NEGCONCORD among white speakers in New York City (Labov 1966) confirm this pattern.

Turning to the evidence of repetition tests with speakers of BE, we find a pattern of response which reverses the pattern seen with violations of NEGATTRAC. Sentences with or without NEGCONCORD are understood immediately, and repeated usually with NEGCONCORD. Here are some responses to a sentence without NEGCONCORD:

(111) *Nobody ever took an airplane, and none of us took a bus, either.*

Boot: N-N-Nobody never took a airplane, none of us took a bus, neither.

Money: None of us never took an airplane, and none of—take—none of us never take a bus, either.

Among the adolescent Jets, eight of sixteen sentences with negative plus *ever* were repeated with *never*, though a much smaller percentage of sentences with *any* was corrected to *none*. On the other hand, the majority of all BE NEGCONCORD forms were repeated without change. Sentences modified with *anyhow* or *nohow* were repeated without NEGCONCORD about 75 % of the time (Labov et al., 3.9).

Information from Shuy et al. 1967 fits in with this pattern. That study was limited to individual interviews, like the original New York City study of Labov 1966. The interviewers did not have as much success in identifying and separating casual speech from careful speech within these interviews, so that all the conversational parts are taken as a single style. Wolfram 1969 analyses the data for 48 Black speakers in the Detroit study, and includes NEGCONCORD in his data. In each social class, he selected four pre-adolescents, 10 to 12, and four adolescents, 14 to 17 years old. In the Lower Working Class, four of eight showed 100 % NEGCONCORD, and in the Upper Working Class, three of eight. If we compare these figures for the individual interviews in Detroit with our individual interviews by a Black participant observer, the Detroit study shows a similar semi-categorical use of NEGCONCORD in the BE vernacular. The Detroit study also agrees with our findings in the restrictions on NEGCONCORD. None of the adults show 100 % use of this rule. There is much less use of the rule with indefinites outside the clause, or in pre-verbal position; and if the indefinite article *a* is included in the analysis, the percent of NEGCONCORD drops sharply. Other data support the notion that the indefinite article is not to be included as a site for NEGCONCORD.

For a further body of independently gathered data, we can turn to a series of

	PROPORTIONS WITHIN THE CLAUSE			PROPORTIONS OUTSIDE THE CLAUSE
	TO INDETERMINATES		TO VERBS	TO INDETER- MINATES
	INSTANCES I	SPEAKERS II	INSTANCES III	INSTANCES IV
Girls (9-13 yrs.)	75/76	9/10	0/1	5/7
Boys (9-14 yrs.)	70/74	7/10	1/4	3/9

TABLE 3. Use of NEGCONCORD by two groups of pre-adolescent BE speakers in West Philadelphia.

recent observations made of pre-adolescent Black children in West Philadelphia by Marjorie Goodwin.³⁵ The groups were recorded after long-term participant observation, and the language recorded is that used in the course of everyday activities—making slingshots, jumping rope, gossiping—with members of the vernacular culture actively controlling each other's language. In both form and content, these samples of Philadelphia speech match the vernacular culture recorded in the group sessions in South Harlem. The use of NEGCONCORD is shown in Table 3. Both groups come close to consistent NEGCONCORD. Among the girls, there is only one use of a standard form. At one point it is suggested that fortune-telling can be the cause of a death in somebody's family. Pam, the leader of the group, says:

(112) No. I don't want anybody to die in my family.

The use of a standard form in a solemn context is a common form of code-switching, and supports the view that NEG + *any* is in another system as far as Pam is concerned.³⁶ A little later, she says:

(113) They ain't nobody died in my family.

Among the boys, there are a few more instances of the use of standard forms, mostly by older members of the group. The majority, however, use consistent NEGCONCORD to indeterminates within the sentence.

The use of NEGCONCORD outside the original sentence is less regular, but we do not have adequate data to distinguish various cases. In the Philadelphia group, the negative is consistently transferred to indeterminates in lower sentences commanded by the original negative:

(114) Y'all ain't gonna be able to make no slings till we get all these slingshots. (Poochie, 13)

(115) She didn't mean that to do nothin' to you. (Maria, 13)

(116) I ain't know I could do none of that. (Poochie, 13)

At the same time, the negative is less often transferred to reduced clauses or

³⁵ I am much indebted to Mrs. Goodwin for the use of these materials, which she gathered and transcribed in the course of research for the Center for Urban Ethnography at the University of Pennsylvania. Her analyses of personal interaction have also provided the insight necessary for a correct semantic interpretation of the sentences cited. In some cases only isolated sentences are quoted, but the interpretation is derived from the extended context of group interaction.

³⁶ There is a close parallel here with the form of code switching used in Hawaiian Creole in solemn narrations. The *-ed* past does not appear in the Creole, but is imported for solemn effects in such utterances as *He died* (Labov 1971b).

sentence modifiers:

(117) You can roll your eyes all you want to 'cause I'm tellin' you—tellin', I'm not—not askin' you. And I ain't say no please, either. (Pam, 13)

(118) They ain't hardly even gonna be able to load 'em that fast either. (Tokay, 13)

This extra-sentence *either* can contrast with the indeterminate *either* within the original sentence:

(119) We don't want neither one of y'all. (Michael, 13)

We thus find that the use of the NEGCONCORD rule for the West Philadelphia group is identical with that used in Harlem, and coincides with additional data from exploratory interviews in Detroit, Cleveland, Chicago, and Los Angeles. Since NEGCONCORD is practically obligatory in the most important case, we must raise the question: in what way can it be said to be an emphatic transformation?

7.2. THE EXPANSION OF EMPHATIC NEGATION IN BE. We have observed that the standard use of *any* + NEG is available for most BE speakers, but primarily as an importation from an outside system. Since NEGCONCORD is practically automatic within the original sentence, it cannot add any emphasis, as it did for Mrs. Gratton. It is simply an automatic adjustment of the grammar. For Mrs. Gratton, *I don't measure nothin'* contrasts with *I don't measure anythin'* by the addition of an optional [+neg] to the final lexical item. If such an addition is obligatory, it cannot contrast with its absence. How then do BE speakers convey the equivalent of the emphatic contrast registered by Mrs. Gratton?

There are a number of answers to this question, which we can illustrate with quotations from the West Philadelphia group. First, the BE vernacular often adds negatives beyond the provisions of the NEGCONCORD rule. Even within the rule, it provides for negatives in pre-verbal as well as in subject position. But indeterminate subjects are relatively rare. In most cases, NEGCONCORD operates from the verb rightward to an object indeterminate or to an indeterminate noun phrase modifier. Both cases appear in

(120) I ain't write nothin' in no street. (Pam, 13)

Sometimes an indeterminate modifier is added when there is really only one semantic object to focus on:

(121) She ain't in no seventh grade. She in eleventh grade. (Maria, 13)

The NEG + *any* which modifies *seventh grade* can only be understood as adding emphasis, since there is only one seventh grade to be considered here. That is, Maria is not reviewing all the possible seventh grades that the girl could be in, but is rejecting the notion that she is in the seventh grade at all. Thus *She ain't in no seventh grade* contrasts with *She ain't in the seventh grade* as a more emphatic denial. Similarly, we can observe a contrast of the indefinite article *a* with the NEG + *any* quantifier in

(122) I don't want a piece. I want a whole one. I don't want no piece. (Poochie, 13)

Here Poochie strengthens his first negation with the insertion of the underlying quantifier *any* which automatically attracts the negative. Emphasis is accomplished by substituting the universal [−partitive] quantifier *any* for the existential [+partitive] pronoun *a*. The NEGCONCORD rule heightens the effect in that it automatically adds [+negative] to reinforce the contrast.

Such postposed negatives can be heard as emphatic even when NEGCONCORD is obligatory, if they are moved further rightward. Florence of West Philadelphia follows up Pam's denial in 120 with a more emphatic form:

(123) We ain't write over no streets nothing.

Here the extraposition of *nothing* to the end of the sentence has the same general effect as standard negative postposing, *We wrote nothing over any streets*.

Even though negative concord is automatic in BE, we see that there are a number of resources for reinforcing negation in the original sentence: the introduction of extra quantifiers, postposing negatives, transfer to pre-verbal position, and reduplication of free *not*. In addition to these devices, BE has also extended the standard rule of negative inversion to give additional emphasis to sentences with indeterminate subjects. The standard rule as used by both black and white speakers preposes *neither*, *not*, or adverbs containing a negative feature:

(124) The Negro doesn't know about the Negro, and neither does the white know about the Negro. (Byrne C., 26, Ohio)

(125) Not until he came into United States did—uh—they decide to get married ... (Charles I., 31, Bronx)

In many Southern dialects, and in BE, the tense marker and negative can be inverted with an indeterminate subject, yielding

(126) Doesn't nobody really know that it's a God, you know. (Larry H., 15, Jets)

(127) Don't no average motherfucker make no fifty dollars a day. (Vaughn R., 16, Jets)

(128) Don't nobody break up a fight. (Willie J., 15, Chicago)

Along with the tense marker, the first member of the auxiliary can also be moved, just as in the flip-flop rule for questions. Thus negative inversion can involve *can't*, *wasn't*, *won't*, and *ain't*. A study of negative inversion would require a separate paper, but the most important feature to note here is its strongly emphatic character:

(129) Didn't nobody see it, didn't nobody hear it! (Benjamin S., 45, N.Y.C.)

(130) Ain't no white cop gonna put his hands on me! (Jesse H., 16, Jets)

(131) Ain't nobody in my family Negro! (Boot, 12, Thunderbirds)

(132) I know a way that can't nobody start a fight. (Willie J., 15, Chicago)

(133) Won't nobody catch us! (Willie J.)

Negative inversion plainly depends upon and follows NEGTRANSFER from subject indefinite to the verb, i.e. *Nobody will catch us* → *Nobody won't catch us* → *Won't nobody catch us*. Six cases of negative inversion in West Philadelphia should accordingly be added to the figures in Table 3 on NEGTRANSFER to the verb by rule 53, giving 3/4 for girls and 4/7 for boys. One could argue that the

movement of the negative to the left of the indefinite is a continuation of the NEGATTRAC rule, and is reinforced by the factors outlined in §6. But negative inversion is always optional, and it can be seen in these examples to have the same emphatic force as the NEGCONCORD rule.

When negative inversion moves an auxiliary like *won't* as in 133, it must be derived from an underlying sentence with only one tense marker (*nobody will catch us*). But when *ain't* precedes the subject, there is often the possibility that it originated in a clause of its own with deleted dummy *it*:

(134) Ain't nobody know about no club. (William T., 25, Florida)

This could be based on either of the following:

(134') (It) ain't nobody (that) know about no club.

(134'') Nobody ain't know about no club.

This is a possible route for 130 and 131 as well. Note that these cases require deletion of relative pronoun *that* in subject position; such deletion seems to be more common in BE and in Southern dialects than elsewhere.³⁷ On the other hand, 135 can only be based on 135' and not on 135'':

(135) Ain't nothin' you can do about it.

(135') (It) ain't nothin' (that) you can do about it.

(135'') *Nothin' ain't that you can do about it.

We occasionally have sentences that are syntactically ambiguous, like 134, and also contain a negative in the second clause. One interpretation of such sentences is that they are not derived by negative inversion, but by *it* deletion, and therefore show NEGCONCORD to a verb in a following clause:

(136) Ain't no cop never beat me in my head. (Jesse H., 16, Jets)

7.3. EXPANSION OF NEGCONCORD TO OTHER QUANTIFIERS. There is one final way in which the use of emphatic negation has expanded in BE. Transformations which were originally limited to indeterminates *any*, *ever*, and *either* can occasionally apply in the presence of other quantifiers like *many* and *much*. In 1, 47, and 48, we see that the rule which extends NEGCONCORD to the verb in following clauses requires an indeterminate in the first clause; but in 50, this rule operates with a subject *much*. This extension should not be entirely unexpected; as Baker 1970 has pointed out, *much* has negative polarity: *He didn't say much* but **He said much*. The same cannot be said of *many*, however. We find negative inversion operating with subjects containing this adverb:

(137) It's against the rule; that's why don't so many people do it. (Willie J., 15, Chicago)

(138) Don't many of them live around here. (Hough area, Cleveland)

And in 49, the citation from 'The fall', the extension of NEGCONCORD to a following clause is triggered by an indefinite with *a*, which is not a part of the usual NEGCONCORD rule and does not incorporate the negative in the way that

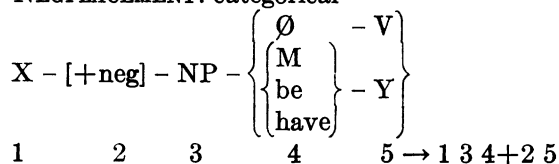
³⁷ E.g., *There is a lot of women wanna make you do more than just hit 'em* (Weldon Sorrell, 46, N.Car.); *An' tha's the rules mean* (Boot, 12, T-Birds); *I got a man to come out here Saturday. Is gon' paint* (Henry G., 60, E. Atlanta), *We have very few go to college* (Monnie O., 35, North Carolina).

any does: *For there wasn't a son of a gun who this whore couldn't shun*. We therefore see speakers of BE extending the scope of the NEGTRANSFER rules to environments beyond any formal rule that we can now write, since there is no reason to believe that these are productive patterns.

8. AN OVER-ALL VIEW OF NEGTRANSFER RULES. We now have an understanding of the operation of negative attraction, negative postposing, and NEGCONCORD in four different dialects: Standard English (SE); the non-standard white vernacular which does not transfer the negative to pre-verbal position, of which New York City may be taken as an example (WNS₁); the non-standard white vernacular which does show NEGCONCORD to the verb, of which Atlanta may be taken as an example (WNS₂); and Black English (BE), which is relatively uniform throughout the United States.

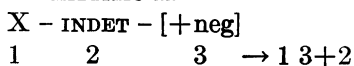
In §5, we considered the possibility of combining these rules into a single NEGTRANSFER rule. But §§6-8 show that there are two radically different kinds of rules involved with different conditions, directions, functions, and frequencies. Rather than use a single negative distribution rule like 16, we will first place the negative in its pre-verbal position with the tense marker, by the normal cyclical rule:

(139) NEGPLACEMENT: categorical



NEGATTRAC follows as a categorical leftward movement to a subject indeterminate, with the single condition summarized in §5. The abbreviation INDET now stands for the complex of features [+quantifier, -definite, -partitive, +distributive, -fact → ⟨pred⟩]. The general condition on 140 still appears as a set of three superficially unconnected conditions which must all hold if the transformation is to be obligatory. In §6 I put forward an explanation of this conjunction, depending upon the fact that, as its net result, only surface structures corresponding to the logical configuration (∀x) ~Fx were categorically prohibited. But in terms of current workable syntactic apparatus, the condition on 140 must still reflect the syntactic constraints of output condition 28.³⁸

(140) NEGATTRAC II



Condition: Obligatory if 1 ~ [+neg] or [-fact] commanding 2 and 4, and 2 is [-stress].

It may now be possible to combine negative postposing and NEGCONCORD into a single rightward transformation. But there is a great deal to be learned yet

³⁸ The presumption in showing INDET directly before NEG in 140 is that the features of Indeterminate are assigned to the entire noun phrase of the subject. Similarly, we see the plural feature in English assigned to the entire NP containing the plural head noun. Thus INDET in 140 extends over such phrases as *any red-blooded American who wants to do his duty*.

about the conditions governing negative postposing; on the whole, it is in complementary social distribution with NEGCONCORD, but there seem to be some cases where a speaker of any dialect will use negative postposing instead of negative concord. Since we do not know the conditions under which speakers will exercise this option, we will show the two transformations as separate rules pending further investigation:

(141) NEGPOSTPOSING: variable

X - [+neg] - Y - INDET
 1 2 3 4 → 1 3 2+4

- Conditions: (a) Y ~[INDET
 (b) 4 cannot be dominated by an S dominated by a lexical NP which does not dominate 2.
 (c) 4 cannot be dominated by an S adjoined to THAT and commanded by 2.

(142) NEGCONCORD III: variable

X - [+neg] - Y - $\left\{ \begin{matrix} \text{INDET} \\ \text{VB} \end{matrix} \right\}$
 1 2 3 4 → 1 2 3 2+4

- Conditions: (a) 4 cannot be directly dominated by a VP which is dominated by an S dominated by a lexical NP which does not dominate 2.
 (b) 4 = VB in WNS₂ and BE only; in WNS₂, 2 and 4 must be clause mates.

The three NEGTRANSFER rules are now stated in reasonably simple forms. The negative inversion rule would follow, which might be combined with other flip-flop rules. Negative raising also follows,³⁹ so that we have

(143) I don't think the other guy had no chance either. (Danny W., 16, Oscar Brothers)

(144) I told you, I DON'T believe there's no God. (Vaughn R., 16, Jets)

We will not explore further the conditions for negative inversion and negative raising, since our main concern is with NEGCONCORD. Of all the NEGTRANSFER rules, this shows the widest range of environment and dialect differentiation. Condition (b) of 142 does not provide us with all the information we need to characterize the uses of NEGCONCORD: this is best displayed in the matrix of Table 4, which then replaces that condition.⁴⁰

³⁹ Either ordering of negative raising can be made to work here. If negative raising occurs before NEGCONCORD, then the sub-case of NEGCONCORD governing transfer outside the clause will apply; otherwise the major case applies within the clause. Since NEGCONCORD seems to co-occur with negative raising with great consistency, the latter seems preferable; but the issue is still open.

⁴⁰ As we explore the relevant details of rules used by the speech community, it becomes apparent that many rules will require a matrix of two or more dimensions to describe their use. One dimension will be the various syntagmatic environments; the other will be the range of dialects or idiolects which differ in their assignment of categorical, variable, or prohibited status to a given environment. The ordering of the columns and rows of this matrix for maximum scalability on a Guttman scale of implications is of considerable significance in explaining the semantic, syntactic, or phonological motivation of the rule as it

	TO INDETERMINATES		TO THE VERB	
	WITHIN S	OUTSIDE S	WITHIN S	OUTSIDE S
SE	0	0	0	0
WNS ₁	X	X	0	0
WNS ₂	X	X	X	0
BE	1	X	X	X

0 < X < 1

TABLE 4. Use of negative concord in four English dialects.

This matrix shows the gradual expansion of NEGCONCORD through four environments and four dialects as we move from the standard language to BE. The symbol 0 indicates that the rule is not used at all; X that it is used variably; and 1 that it is used regularly, that is, semi-categorically. Since NEGCONCORD is not used at all in SE, there is a row of zeros across the top. In WNS₁ it is used in only two environments; in WNS₂ in three; and in BE, in all four. In BE, we observe the semi-categorical use of NEGCONCORD to indeterminates within the sentence, and a variable use in all three other environments.

Table 4 gives us the answer to the question asked in §1: what process of dialect divergence can lead to completely opposing interpretations of ex. 1, *It ain't no cat can't get in no coop?* In this matrix we see the coupling of two changes: (a) NEGCONCORD has lost its emphatic character in BE in the major environment, and (b) NEGCONCORD has spread into a new environment. We have seen the reinforcement of emphatic negation through a variety of grammatical devices: the introduction of more quantifiers (*She ain't in no seventh grade*), free-floating negatives (*But not my physical structure can't walk through that wall*), negative inversion (*Ain't nobody in the block go to school*), and involvement of concord with new quantifiers (*Don't so many people do it*). But the answer to our initial problem is in the pattern of Table 4: IT IS THE EXTENSION OF NEGCONCORD TO VERBS IN FOLLOWING CLAUSES WHICH BRINGS ABOUT THE DIALECT CONFLICT IN INTERPRETATION. White speakers are surprised by ex. 1 because they cannot envisage such a possibility. With the understanding provided by Table 4, our intuitions as speakers of other dialects begin to extend to an appreciation of the logic of ex. 1. There is no inherent reason why *can't* must refer to a separate deep-structure negative of its own; it is simply the arbitrary convention of the dialects we know that NEGCONCORD does not operate there.

The extension of NEGCONCORD in ex. 1 does not lead to any serious misunderstanding in ordinary conversation. Speakers of English are not unaccustomed to sudden inversions of positive and negative. *I couldn't care less* seems to mean the same as *I could care less*. In Maine and surrounding Eastern New England, young people say *So don't I* to mean the same thing as their parents' *So do I*. Even without NEGCONCORD, we have learned that not every negative means what it might.

On the other hand, there is no reason to fear that BE speakers have lost their

develops in more or less favorable environments. The ordering of the linguistic environments shows which linguistic features favor the rule, and the ordering of the non-linguistic features shows either the point of origin of the rule for change in progress, or the social significance of the rule for well-established variables.

grip on the distinction between positive and negative. The underlying semantic features of quantifiers and negatives seem to be the same in all dialects of English, which tend to differ in just the ways indicated here—by slight extensions and adjustments of conditions on the same set of rules. Speakers of BE are just as able as others to multiply or to cancel negatives, and just as able to operate with two or more negatives in their deep structure. Consider the following discussion from West Philadelphia:

(145) Huey: And he said, 'Nobody talks about my mother.'

Michael: Well I'm not nobody; I'm somebody. That's what he said, 'I'm not nobody; I'm somebody.'

Games that play on the ambiguity of negatives, originating in deep or surface structure, are popular among speakers of all dialects. In the same way, speakers of BE play games with indefinites:

(146) Poochie: Hold it, Tokay. Somebody shot.

Michael: That's tough. 'Cause ain't nobody down here name somebody.

Robby: You name somebody.

It is a reasonable assumption that speakers of all dialects of English have the same range of linguistic and metalinguistic abilities, and that the most striking differences in the surface forms of language represent the differential operation of principles found in all dialects: different ordering of the same rules, specifications and generalizations of conditions on a single rule, and different weightings of conditions within the rule. A careful consideration of the obligatory and variable properties of the rules involved will often throw a great deal of light upon their function. We do not say that transformational rules have 'meaning' in the strict sense of the term. But operations which shift, combine, delete, and multiply have the effect of focusing, emphasizing, subfocusing, and eliminating information. In the long run, most people find it necessary to emphasize, focus on, conceal, or mitigate the same kinds of things. It is reasonable to assume that speakers of any language will have a need for a wide range of more emphatic and less emphatic negatives; if the range is constricted in one area it must be expanded in another, and it is this kind of economy which we have been studying in NEGCONCORD.

Though Table 4 has answered our initial question, we have not exhausted its possibilities by any means. It is only a bare schema for NEGCONCORD, suggesting how this rule may actually be located in time and space. This table provides a grammatical model of the kind of matrices which Bailey has explored in phonological rules. The matrix is a realization of weightings assigned to the variable constraint on the rule. Such weights indicate the internal linguistic constraints which govern the rule, and predict in what environments it will first become active. As the rule develops, we frequently find that it becomes categorical in the original environments before it operates variably in more extended, less favorable environments. It is also possible for re-weighting of the environments to take place.⁴¹ As Tables 2 and 3 indicate, the variable symbol X in Table 4 actu-

⁴¹ I.e., the relative order of the variable constraints can be altered. The direction of each constraint is constant across dialects and age levels, but their relative strength can shift in the course of time or age (see Bailey).

ally stands for relations of 'greater than' and 'less than' in which each cell is greater than that above it and greater than that to the right. We have only begun a detailed examination of the use of NEGCONCORD, with the exploration of one dialect—BE. More detailed studies of the use of NEGCONCORD in a range of English dialects will allow us to organize the parameters of Table 4 with greater confidence and deepen our understanding of the semantic factors which underlie the organization of grammars.

The most general implication of our investigation is in the contrast between the categorical rule of NEGATTRAC and the variable rules of NEGCONCORD. While previous studies of dialect differences in rule systems have concentrated upon variability (Labov 1969, Carden, Bailey), here our primary focus has been upon the categorical character of NEGATTRAC, as opposed to the variable or semi-categorical treatment of NEGCONCORD in BE.

Rules such as NEGATTRAC which are uniform and invariant in all dialects of a language appear as resolutions of conflicts among abstract conceptual features of language. Whereas violations of many grammatical rules become more acceptable as they are repeated, violations constructed for such rules become, if anything, less acceptable. They are truly uninterpretable: the listener finds himself unable to construct a logical, social, or aesthetic rationale for the anomaly. We seem to encounter more than a contradiction in meaning; there is also a contradiction of intent. The listener is led on, and then perceives that the intention of the speaker was in an entirely different direction.

When a speaker begins with *Anyone ...*, we confidently expect some positive general prediction; when he continues with *... doesn't ...*, we are faced with an unaccountable reversal of polarity.⁴² There are practical jokes and puns which rely on this mechanism of leading the listeners up (or is it down?) the garden path. But a sentence like **Anyone doesn't sit there anymore* is not practical, sensible, nor even in good taste; and if there is a joke, it is not on anyone at all. If we have correctly understood this phenomenon, our investigation of NEGATTRAC and NEGCONCORD will have added considerably to our grasp of the nature of linguistic rules.

REFERENCES

- BAILEY, CHARLES-JAMES. 1971. Building rate into a dynamic theory of linguistic description. Working Papers in Linguistics, University of Hawaii, 2:9.161-34 [Revised as Variation and language theory, 1971.]
- BAKER, C. L. 1970. Double negatives. *Linguistic Inquiry* 1.169-86.
- BELLUGI, URSULA. 1967. The acquisition of negation. Harvard University dissertation.
- CARDEN, GUY. 1970. A note on conflicting idiolects. *Linguistic Inquiry* 1.281-90.
- FILLMORE, CHARLES J. 1967. On the syntax of preverbs. *Glossa* 1.91-125.

⁴² This effect of leading in two directions at once can be observed in some other constructed violations of categorical rules of discourse. Some of the same uninterpretable character clings to such violations as **Hello, I'm Bill Labov. How do you get to the Empire State Building?* Introductions are anomalous if the speech event is 'asking for directions'. But, as Erving Goffman has pointed out (personal communication), this violation is more striking than **Joan of Arc is dead. How do you get to the Empire State Building?* The latter is simply uninterpretable nonsense. The strong reaction against the introduction is that it begins with an appropriate series of moves for one type of speech event, then suddenly switches to another.

- JESPERSEN, OTTO. 1924. *Philosophy of grammar*. London: Allen & Unwin.
- KARTTUNEN, LAURI. 1971. Some observations on factivity. *Papers in Linguistics* 4.55-70.
- KEENAN, EDWARD. 1971. Quantifier structures in English. *Foundations of Linguistics* 7.255-84.
- KIPARSKY, PAUL, AND CAROL KIPARSKY. 1968. Fact. Recent advances in linguistics, ed. by M. Bierwisch and K. E. Heidolph, 143-73. The Hague: Mouton.
- KLIMA, EDWARD S. 1964. Negation in English. *The structure of language*, ed. by J. A. Fodor and J. J. Katz, 246-323. Englewood Cliffs, N.J.: Prentice-Hall.
- LABOV, WILLIAM. 1966. *The social stratification of English in New York City*. Washington, D.C.: Center for Applied Linguistics.
- . 1969. Contraction, deletion, and inherent variability of the English copula. *Lg.* 45.715-62.
- . 1970. The study of language in its social context. *Studium Generale* 23.30-87.
- . 1971a. The place of linguistic research in American society. *Linguistics in the 1970's* (pre-publication edition), 41-70. Washington, D.C.: Center for Applied Linguistics.
- . 1971b. On the adequacy of natural languages, I: the development of tense. Mimeographed.
- . 1971c. Methodology. A survey of linguistic science, ed. by W. O. Dingwall, 412-97. College Park: University of Maryland.
- ; PAUL COHEN; CLARENCE ROBINS; and JOHN LEWIS. 1968. A study of the non-standard English of Negro and Puerto Rican speakers, I-II. (Coöperative research report 3288.) New York: Columbia University. [Reprinted by U.S. Regional Survey, 3812 Walnut Street, Eisenlohr Hall 202, Philadelphia, Pa.]
- LAFFAL, JULIUS. 1965. *Pathological and normal language*. New York: Atherton Press.
- LAKOFF, GEORGE. 1971. *Introduction to linguistics and natural logic*. University of Michigan, mimeographed.
- LAKOFF, ROBIN. 1969. Some reasons why there can't be any *some-any* rule. *Lg.* 45.603-15.
- LANGACKER, RONALD W. 1969. On pronominalization and the chain of command. *Modern studies in English*, ed. by D. A. Reibel and S. A. Schane, 160-86. Englewood Cliffs, N.J.: Prentice-Hall.
- REICHENBACH, HANS. 1947. *Elements of symbolic logic*. New York: Macmillan.
- ROSS, JOHN R. 1967. *Constraints on variables in syntax*. MIT dissertation.
- SAVIN, HARRIS. 1971. Every *any* means *every*. To appear in *Proceedings of the Conference on Current Problems in Psycholinguistics*, ed. by J. Mehler and A. Bresson. Paris: Centre Nationale de la Recherche Scientifique.
- SHUY, ROGER; WALT WOLFRAM; and WILLIAM K. RILEY. 1967. *A study of social dialects in Detroit*. (Final Report, Project 6-1347.) Washington, D.C.: Office of Education.
- STOCKWELL, ROBERT; PAUL SCHACHTER; and BARBARA HALL PARTEE. 1968. *Integration of transformational theories of English syntax*. Los Angeles: University of California.
- WEINREICH, URIEL. 1966. Explorations in semantic theory. *Current trends in linguistics*, ed. by T. A. Sebeok, 3.395-477. The Hague: Mouton.
- WOLFRAM, WALT. 1969. Linguistic correlates of social stratification in the speech of Detroit Negroes. Washington, D.C.: Center for Applied Linguistics.

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