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New Ways of Analyzing
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A FAKE NP SQUISH

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1. Introduction .

A popular exam question in Syntax One, these days, is: what part of speech is the expletive there?　The answer is, 'Why it's an NP, of course! Just look at how, in (1), it has undergone RAISING, PASSIVE, NUMBER AGREEMENT, and TAG FORMATION, and at how the tensed auxiliary precedes it!

(1)　At no time were there believed to have been files in this cake, were there?

And since copperclad, brass-bottomed NP's like Harpo do exactly the same things (cf. (2), which exactly parallels (1)),

(2)　At no time was Harpo believed to have been a drill sergeant, was he?

there must be a constituent of the same type as Harpo, i.e. an NP. Q.E.D.'

In the past, I have asked such questions not only about there, but also about 'weather it' and such idiom chunks as we find in the derived subject positions of the sentences in (3),

(3a)　It is smoggy.
(3b)　Careful tabs were kept on all 24 variables.
(3c)　Headway was made on the Ellatization Project.
(3d)　The cat's got your tongue.

and I have always marked such answers as the one given above correct.

And indeed, they are correct, in some sense, and provide a good example of an important kind of syntactic argument.

However, in recent years, I have come across a larger body of evidence which leads to the opposite conclusion: that in many respects, there, it, tabs, etc. do not behave like such indisputable NP's as Harpo. This evidence will be presented in section 2.

So we find ourselves in a bind. There are good arguments that there and its cronies are NP's; but there are others of the same sort, which seem equally compelling, to the effect that they are not NP's. What to do?

The data to be given in section 2 suggest a possible avenue of escape. Roughly speaking, some of the problematic constituents seem to be more like Harpo than others: they 'pass' more of the NP tests than these others do. We can rank them on their 'noun-phrasiness', as is done for some of them in (4).

(4)　$\xleftarrow{\text{More noun-phrasy}}$
　　Harpo > headway > there > tabs

The inequality sign in (4) is to be interpreted as an implication. For any two items, A and B, if A > B, and if B 'passes' some test, then A will also pass it. In other words, I am asserting that the mystery items under discussion are 'fake' NP's: they only do a subset of what NP's like Harpo do. I know of no syntactic processes which are applicable to fake NP's, but not to standard-brand NP's like Harpo.

What is even more interesting is the fact that the tests for noun-phrasiness which will be the subject of section 2 can also be hierarchically ranked. An example of such a ranking is given in (5).[1,2]

(5)　$\xrightarrow{\hspace{3cm}\text{Choosier}\hspace{3cm}}$
　　TAG FORMATION > TOUGH MOVEMENT > LEFT DISLOCATION

Again, the inequality sign has an implication interpretation. For any two syntactic processes A and B, if A > B [read: 'B is choosier than A' or 'A is stronger than B'], then whenever B can apply to a given item, A will also be able to. The direction of the inequality sign is purposely chosen to be the same in (4) and (5): just as NP's like Harpo are found in a wider range of syntactic contexts than NP's like tabs, so TAG FORMATION is applicable to a wider class of structures than is LEFT DISLOCATION.

The two hierarchies above interact to mutually define each other. They form the type of matrix shown schematically in (6), which I will refer to as a 'squish'.

(6)
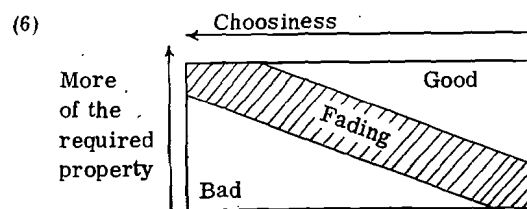
To give a concrete example, the hierarchies in (4) and (5) form the squish shown in (7).

(7)

	LEFT DISLOCATION	TOUGH MOVEMENT	TAG FORMATION
Harpo	OK	OK	OK
Headway	*	?	OK
There	*	*	OK
Tabs	*	*	?

To claim that fake NP's form a squish is to make a quite precise empirical claim. It is to claim that when all other fake NP's, such as those in (3), are 'blended into' (7), with as many rows being added as the facts necessitate, and when all other 'NP tests', i.e. syntactic processes involving NP's, are 'blended into' (7), with as many extra columns being added as there are processes that distinguish themselves, the resulting supermatrix will be 'well-behaved', as defined in (8).

(8) A matrix whose cells contain indications of degree of grammaticality is horizontally well-behaved if the degrees of grammaticality indicated in the cells of a row increase monotonically (i.e. without changes in direction of increment) or decrease monotonically. If one row has decreasing values, all must; if one row has increasing values, all must.

A matrix is vertically well-behaved if the degrees of grammaticality indicated in the cells of its columns increase or decrease monotonically in the manner specified above.

A matrix that is both horizontally and vertically well-behaved is well-behaved .

To claim that a body of data forms a squish is to claim that two varying parameters can be found whose pattern of interaction is given by a well-behaved matrix. We shall see in section 2 that while the data on fake NP's suggest that a squish may at sometime be demonstrable, at present, the associated matrix is not totally well-behaved.

2. The evidence

The data on which I base the claim that fake NP's form a squish for me are shown in (9).

Almost certainly, these judgments are true in their entirety for no other speaker than me. Even making them relative, rather than absolute, will attract few converts. I suspect that 'most' people's idiolects will support the claim that tack is generally more noun-phrasy than tabs is, and that the processes that form dislocated S's are more choosy than those which form tagged S's; but I would not flinch from data from speakers whose preferences were opposite to mine even at the extremes of the matrix in (9). Having heard the incredible variation among the reactions to matrices like (9) which I have presented in classes and other lectures convinces me that there is probably no significantly large submatrix of (9) which could be said to represent 'the standard dialect'. Essentially, what we are dealing with here is the degree to which the lexical idioms and idiomatic constructions under scrutiny are syntactically frozen; and it is to be expected, I fear, that no consensus will emerge in such shadowlands. In such a situation, a definite article in the title of this paper would be on the hybris side of chutzpah, I should think.

What I would hope is that every idiolect's matrix will be well-behaved. If so, we will have some basis for proceeding on the hope that other areas of language will in general turn out to be provably squishy, and some encouragement for an attempt to develop a quantitative theory of grammar which would be adequate to the task of explaining such relatively well-behaved matrices as (9).

If not--that is, if fake NP's should turn out to be squishy for some but not for others--then I would be completely baffled. The leap from the present discrete view implicit in generative grammar to a nondiscrete, squishy, theory of grammar is radical, but not bewildering. But a leap to something more radical than a theory of squishes is something which at present outstrips my conceptual apparatus.

	Animates	Forces of nature concretes	Events	Abstracts	TACK	HEADWAY	IT (BE MUGGY)	IT (S)	IT (rain)	THERE	TABS	HEED
TAG FORMATION	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	?.	?*
Head of relative clauses	OK	OK	OK	OK	OK	OK	DNA	DNA	DNA	DNA	[?*]	?.
Inside derived nominals	OK	OK	OK	OK	[?.]	?.	?.	?.	??	[?.]	??	?.
Get passives	OK	OK	OK	OK	OK	?.	[*]	?.	[.]	[?*]	??	??
TO BE DELETION	OK	OK	OK	OK	[?.]	[??]	?.	[OK]	??	??	?.	[.]
CONJUNCTION REDUCTION	OK	OK	OK	OK	OK	[OK]	?.	[*]	??	*	*	[?*]
Acc-Ing	OK	OK	OK	OK	OK	?.	??	??	?*	[OK]	[?*]	?.
. . .'s	OK	OK	OK	OK	?.	?.	??	??	?*	*	[.]	*
PRONOMINALIZATION	OK	OK	OK	OK	?.	?*	DNA	DNA	DNA	DNA	*	*
EQUI	OK	OK	[?]	OK	?.	?*	[?]	*	[??]	*	*	*
TOUGH MOVEMENT TOPICALIZATION AND SWOOPING	OK	OK	OK	OK	[OK]	[?]	*	*	*	*	*	*
NP SHIFT	OK	OK	OK	OK	??	?*	DNA	DNA	DNA	DNA	[?*]	*
RIGHT NODE RAISING	OK	OK	OK	OK	??	?*	DNA	DNA	DNA	DNA	*	*
LEFT and RIGHT DISLOCATION	OK	OK	OK	OK	?.	*	*	*	*	*	*	*
BEING DELETION	OK	OK	OK	?.	??	*	*	*	*	*	*	*
What's . . . doing X	OK	?.	??	??	??	[?*]	*	*	[?]	*	*	
Think of . . . as X	OK	?.	??	??	?*	[*]	[?*]	[??]	*	*	*	
Double RAISING	OK	?.	??	??	?*	*	*	[??]	*	[?*]	*	*
PROMOTION and subject of be prevented	OK	?.	?*	*	*	*	*	*	*	*	*	

NOTE: DNA = does not apply. Cells that interfere with horizontal good behavior contain parallel lines. Cells that interfere with vertical good behavior contain parallel lines.

(9)

2.1.   PROMOTION and passivization of prevent and allow

The processes which form the basis of the judgments in the first column of (9) are PROMOTION, a rule which I will assume converts (10a) into (10b) and (10c) to (10d) [note that the argument at issue here is not affected if I have chosen the wrong remote structure for (10b)] and the rule of PASSIVE.

(10a) Harpo's being willing to retune surprised me.

↓ PROMOTION

(10b) Harpo surprised me by being willing to retune.

(10c) Harpo's willingness to retune surprised me.

↓ PROMOTION

(10d) Harpo surprised me with his willingness to retune.

When PROMOTION applies to postpose complements whose subjects are fake NP's, we very soon find hash emerging. Cf. (11).

(11a)   My cat surprised me by knowing how to yodel.
(11b)   ?The heat surprised me by making the tar soft.
(11c)   ?*The concert surprised me by lasting two weeks.
(11d)   *This tack surprised me by being taken infrequently.
              etc.

Similarly, though PASSIVE is not normally subject to such restrictions, with the verbs prevent and allow, and possibly others, only items toward the top of the noun-phrasiness edge of (9) can become derived subjects. Thus the sentences in (12) are increasingly rotten, though their active sources are fine.

(12a)   McX was prevented from thinning out the chipmunks.

(12b)   ?The gale was prevented from causing any damage.

(12c)   ?*Your induction will be prevented from taking more than 2 minutes.

(12d)   *This tack will not be allowed to be taken on any subsequent problems.

2.2. Double RAISING

RAISING is the rule which converts the subject of a complement clause into a constituent of the matrix clause. Thus (13a) can become (13b).

(13a)   It will be shown that John has cheated.

↓ RAISING

(13b)   John will be shown to have cheated.

If (13b) is the complement of a predicate which allows RAISING, as in (14a), then RAISING can apply again, producing (14b).

(14a)   It is likely that John will be shown to have cheated.

(14b)   John is likely to be shown to have cheated.

However, while all NP's can undergo RAISING once (as in (13)), none but the finest NP's can be raised twice.[3] Cf. (15).

(15a)   John is likely to be shown to have cheated.

(15b)   ?The wind is likely to be shown to have cracked the glass.

(15c)   ??The performance is likely to be shown to have begun late.

(15d)   ??The superset is likely to be shown to be recursive.

(15e)   ?*This tack is likely to be shown to have been taken on that.

(15f)   *No headway is likely to be shown to have been made.

(15g)   *It is likely to be shown to have been muggy.

(15h)   ??It is likely be shown to be possible to be in 6 1/2 places at once.

(15i)   *It is likely to be shown to have rained cats, dogs, and pigs.

(15j)   ?*There is likely to be shown to be no way out of this shoe.

(15k)   *Close tabs are likely to be shown to have been kept on Muskie.

(15l)   *No heed is likely to be shown to have been paid to Cassandra.

The partial grammaticalities of (15h) and of (15j) are two places where (9) is not vertically well-behaved. I have no explanation for them.

2.3. Think of . . . as X

To the best of my knowledge, no one has argued for any particular source for the type of complement that is found after _think_ in such sentences as (16).

(16) I thought of
- a.   Freud as being wiggy
- b.   ?the rock as being too heavy
- c.   ??the show as being over-long
- d.   ??generalizations as being wily and hard to capture
- e.   ?*this tack as having been taken too often
- f.   *significant headway as having already been made
- g.   ?*it as being muggy
- h.   ?? it as being likely that you would accept
- i.   *it as { raining / having rained / etc. }

The bad behavior of (16f) is probably to be attributed to the fact that _headway_ must be existentially quantified (cf. (17)), while the post- _of_ NP in sentences like (16) seems to exclude quantitication with the nonspecific _some_ [sm] (cf. (18)).

(17) We made { some / a lot of / no / *that } headway.

$$(18) \quad \text{I thought of} \begin{Bmatrix} \text{*somebody} \\ \text{*sm people} \\ \underline{\text{some}} \text{ people} \\ \text{several people} \\ \text{??nobody} \\ \text{everybody} \end{Bmatrix} \text{ as interesting.}$$

(16h) is better than I would predict. I have no idea why.

2.4. What's . . . doing X?

This curious construction, unstudied in the literature I am familiar with, is synonymous with <u>why</u>-questions. Examples appear in (19).

$$(19) \quad \text{a.} \quad \text{What's} \begin{Bmatrix} \text{he} \\ \text{*someone} \end{Bmatrix} \text{doing (??not)} \begin{Bmatrix} \text{in jail} \\ \text{?charged with} \\ \text{decency} \\ \text{drunk/absent/} \\ \text{high/drunker} \\ \text{than Tom} \\ \text{?*the drunkest} \\ \text{of all} \\ \text{?*a law student} \\ \text{resembling a} \\ \text{donut} \end{Bmatrix}$$

b. *What's this proof doing $\begin{Bmatrix} \text{long} \\ \text{valid} \end{Bmatrix}$?

c. ??What's he seem to be doing in Boston?[4]

. Mysteries abound. Why can't negatives appear in this construction, while they can in <u>why</u>-questions like this one? What class of adjectives is possible in this construction? Is this construction somehow related to <u>there</u>- sentences? Cf. (20).

(20a) Several students were $\begin{Bmatrix} \text{absent} \\ \text{tall} \\ \text{members.} \end{Bmatrix}$.

(20b) There were several students $\begin{Bmatrix} \text{absent} \\ \text{*tall} \\ \text{*members} \end{Bmatrix}$.

At any rate, wherever these S's come from, and by whatever processes, their subjects can't be too fake. Cf. (21).

(21a)   What's the heat wave doing warping the love seat?

(21b)   ?What's the wind doing tipping over the canoe?

(21c) ??What's the first set doing lasting two hours?

(21d) ??What's his evasiveness doing becoming a campaign issue?

(21e) ??What's this outmoded tack doing being taken on a complex social issue like ureic deriboflavinization?

(21f)   ?*What's satisfactory headway doing being made only on <u>rearmament</u>?[5]

(21g)   *What's it doing being muggy on Tuesday?

(21h)   *What's it doing being probable that the Pats will only drop 9.

(21i)   ?What's it doing sleeting?

(21j)   *What's there doing being no mistrial?

(21k)   *What are these exasperatingly close tabs doing being kept on people even after November 7?

(21l)   *What's close heed doing being paid to <u>last</u> year's returns?

What's (21i) doing being vertically ill-behaved?

2.5. Being DELETION

I will assume the existence of a rule, which I will refer to as <u>Being</u> DELETION, which converts (obligatorily?) such S's as (22a) into (22b).

(22a) ?? $\begin{Bmatrix} \text{Me} \\ \text{You} \end{Bmatrix}$ being in the tub is a funny sight.

(22b) $\begin{Bmatrix} \text{Me} \\ \text{You} \end{Bmatrix}$ in the tub is a funny sight.

This is argued for by the fact that the first-person pronoun never occurs with a following restrictive modifier, the only other conceivable source for such postnominal phrases as those in (22b). Such phrases cannot be derived from appositives, either, for these exclude any.

(23a) You with any jewels on is a rare sight.

(23b) *You, who have any jewels on, is a rare sight.

Finally, this type of NP only shows up in a subset of cases where obvious complements can appear. Cf. (24).

(24) Him $\left\{\begin{array}{l}\text{drunk} \\ \text{having left} \\ \text{in jail}\end{array}\right\}$ $\left\{\begin{array}{l}\text{is a funny } \left\{\begin{array}{l}\text{sight} \\ \text{idea} \\ \text{notion}\end{array}\right\} \\ \text{scares me} \\ \text{*staggered around} \\ \text{*mocked Jasmine}\end{array}\right\}$.

All in all, then, it seems highly probable that some such rule as Being DELETION produces the subject of (22b) from some full complement like the subject of (22a). But this rule must be prevented from applying after subjects that are not sufficiently noun-phrasy. Cf. (25).

(25) $\left\{\begin{array}{l}\text{Hinswood in the tub} \\ \text{The salt flowing} \\ \text{Explosions happening before} \\ \quad\text{breakfast} \\ \text{?The existence of Las Vegas} \\ \quad\text{provable} \\ \text{??This tack taken on filibustering} \\ \text{*Sufficient headway made} \\ \quad\text{on halitosis} \\ \text{*It muggy} \\ \text{*It likely that this line} \\ \quad\text{is bugged} \\ \text{*It snowing tomorrow} \\ \text{*There no more Schlitz[6]} \\ \text{*Close tabs kept on} \\ \quad\text{Kissinger} \\ \text{*Little heed paid to public} \\ \quad\text{apathy}\end{array}\right\}$ is a funny thought.

Whether or not such absolute constructions as those that appear in (26) are produced by the same or by a different rule of Being DELETION, it is evident that this construction too dances to the drum of noun-phrasiness.

(26) $\left\{\begin{array}{l}\text{Jack in bed} \\ \text{The significance of your} \\ \quad\text{refusal clear} \\ \text{*This tack taken} \\ \text{*Significant headway made} \\ \text{*It muggy} \\ \text{*It possible that it would} \\ \quad\text{rain} \\ \text{*Close tabs kept on the} \\ \quad\text{barometer}\end{array}\right\}$, we settled back to wait for rain.

2.6. LEFT DISLOCATION and RIGHT DISLOCATION

In colloquial speech, such S's as (27) can be converted by rules that I will refer to as LEFT DISLOCATION and RIGHT DISLOCATION to the sentences in (28) and (29), respectively.[7]

(27) Those guys are smuggling my armadillo to Helen.

(28a) Those guys, they're smuggling my armadillo to Helen.

(28b) My armadillo, those guys are smuggling him to Helen.

(28c) Helen, those guys are smuggling my armadillo to her.

(29a) They're smuggling my armadillo to Helen, those guys.

(29b) Those guys are smuggling him to Helen, my armadillo.

(29c) ?Those guys are smuggling my armadillo to her, Helen.

That these rules are only viable with pretty genuine NP's is suggested by the sentences in (30).

(30a) Max, he's sharp.

(30b) It's strong here, the wind.

(30c) The openness you're looking for--it's unattainable.

(30d) That tack, $\left\{\begin{array}{l}\text{??you shouldn't take it on} \\ \quad\text{this problem.} \\ \text{?it shouldn't be taken on} \\ \quad\text{easy problems.}\end{array}\right\}$.[8]

(30e)   Appreciable headway, I doubt that you'll make *it/?any.[9]

(30f)   *It, I don't think it ever rains.[10]

(30g)   *Such annoyingly close tabs, I don't think you should
        ·keep them even on presidential candidates, Sir.

2.7. RIGHT NODE RAISING

This rule, in conjoined structures, each of whose conjuncts has
an identical right extremity, deletes all of these identical right ex-
tremities, Chomsky-adjoining one copy to the conjoined node. Thus
(31a) becomes (31b), with a copy of NP_a being Chomsky-adjoined to
S_0.

(31a)

RIGHT NODE RAISING

(31b)
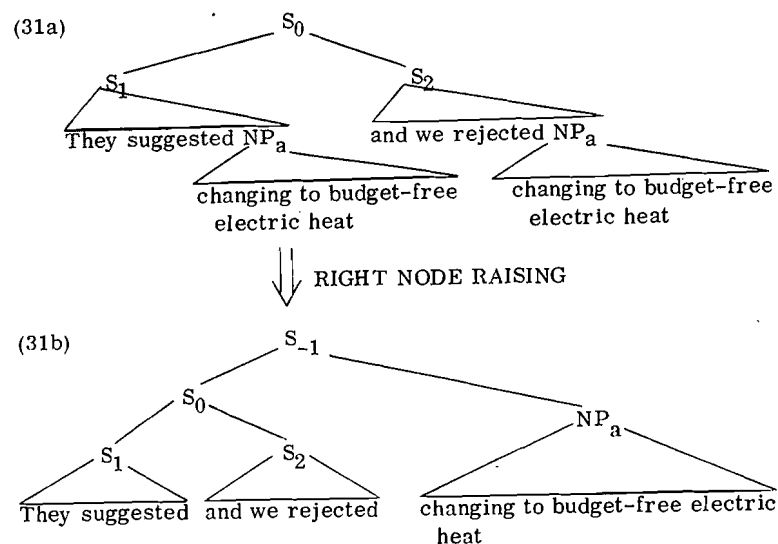
Of relevance for the present concern is the fact that this process
applies only to pretty bona-fide NP's. While prepositional phrases
can undergo this rule [cf. (32a)],[11] the precipitous but varying
putrescence of the remaining examples in (32) shows the influence
of fakeness on this rule.

(32a)   We talk to the students, and they talk to their pets,
        about ice.

(32b)   ??We have taken on this problem, and they will take on
        that one, a tack so kooky as to defy belief.

(32c)   ?*We made on the first problem, and you will probably
        make on the second, considerable headway.

(32d)   *They·kept on George, and we kept on Dick, such close
        tabs that now each of them knows the other's catsup
        brand.

(32e)   *She paid to Fotheringay, and he to her, so little heed
        that I thought they were zombies.

2.8. NP SHIFT

This rule moves to the right end of a sentence post-verbal NP's
that are complex and heavy enough that leaving them in their origi-
nal position would have made difficult to process the sentence in
question. Thus (33a) becomes (33b).

(33a)   ??I explained [that I was Irish]   to the guards.
                                            NP
                    NP SHIFT
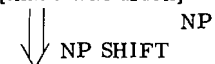
(33b)   I explained to the guards [that I was Irish]
                                                    NP

That fake NP's are poor candidates for this rule can be seen from
the sentences in (34).

(34a)   We elected to the presidency a man of great moral
        fiber (Acrilan).

(34b)   ??We have taken, on this problem, a tack so risky that
        I am sick.

(34c)   ?*We have made, on this problem, headway so funda-
        mental that a collapse of our theory is imminent.

(34d)   ?*Dick kept on Hubert close enough tabs to be able to
        know how often he had seen Patton.

(34e)   *I paid to Jane absolutely no heed whatever.

My reason for not narrowing the matrix in (9) by putting NP SHIFT into the same column as RIGHT NODE RAISING is my persistent, and unfortunate, (it makes the cell corresponding to (34d) in (9) horizontally ill-behaved) intuition that (34d) is a tad better than (32d). The two processes are also similar in refusing to apply to any expletive pronoun, like it and there, but unless this other difference can somehow be explained, they must be assigned different positions in the squish.

2.9. TOUGH MOVEMENT, TOPICALIZATION, AND SWOOPING

The effects of TOUGH MOVEMENT I have illustrated in footnote 1. TOPICALIZATION we can find used in the first two sentences of this paragraph. And (35) contains an example of SWOOPING, the rule which forms nonrestrictive relative clauses from conjoined sentences by adjoining the second of two adjacent clauses which both contain occurrences of the same NP to the occurrence of this NP in the first S.

(35a)   I gave [Sandra]   my zwieback, and [she]   didn't want
              NP   NP
any.

             ⇓ SWOOPING

(35b)   I gave   [Sandra],   and she didn't want any ,
             NP   NP
my zwieback.

Later rules convert (35b) to (36).

(36)   I gave Sandra, who didn't want any, my zwieback.

For me, these three processes seem equally loth to apply to fake NP's. Cf. (37)-(44).

(37a)   This tack on racism is tough to take.

(37b)   This tack on racism I don't want to take.

(37c)   He suggested taking this tack, which has never been taken before.

(38a)   ?Noticeable headway is tough to make on problems of this complexity.

(38b)   ?Significant headway I don't think we'll be able to make.

(38c)   ?We made dramatic headway, which we had been trying to make, on the problem of how many (n-5)-dimensional angels can dance on the head of an (2n-1)-dimensional pin.

(39a)   *It is very difficult to consider smoggy.

(39b)   *It I have never found too smoggy in LA. [12]

(39c)   *It, which is now smoggy in Denver, didn't use to be.

(40a)   *It is difficult to consider fair that they absconded. [13]

(40b)   *It I have never considered fair that they absconded.

(40c)   *It, which the police cannot prove, is obvious that they absconded.

(41a)   *It will be very difficult to prove likely to rain.

(41b)   *It I didn't think would rain.

(41c)   *It, which was raining, is now snowing.

(42a)   *There will be difficult to prove likely to be enough to eat.

(42b)   *There I don't consider to be enough booze in the eggnog.

(42c)   *I find there, which may have been previously, to be no grounds for contempt proceedings.

(43a)   *Close tabs are really impossible to keep on Kissinger.

(43b)   *Really close tabs we couldn't keep on any of them.

(43c)   *Close tabs, which we had previously tried to keep on
          Kissinger, were only intended to be kept on him while
          he was not actually on the Presidential Escalator.

(44a)   *Sufficient heed is not easy to pay to a real kvetsch.

(44b)   *Sufficient heed I think you have already paid to this
          kvetsch.[14]

(44c)   *We finally did pay heed, which you always said that
          someday we would have to pay, to the mice and
          lice in the rice.

As noted in (9), the relative well-formedness of (37) and (38)
produces two horizontally ill-behaved cells. I have no idea why.

2.10. EQUI

For the purposes of this paper, I will simply assume that the
optional process (es?) which may apply to the sentences in (45) to
convert them to those in (46) may be identified with the process
Postal refers to as EQUI (cf. Postal 1970). Whether or not this
identification will stand up under more detailed scrutiny is irrele-
vant to the point at hand, which is that EQUI is pretty choosy, pre-
ferring to delete only true-blue NP's. Cf. (47).

(45a) $\left\{\begin{matrix} \text{Before} \\ \text{After} \end{matrix}\right\}$ he laughed politely, Oliver wiped his moustache.

(45b)   Since I know what you're up to, I will sit this one out.

(45c)   Despite the fact that he had no open sores, Fred was
          insanely popular.

(46a) $\left\{\begin{matrix} \text{Before} \\ \text{After} \end{matrix}\right\}$ laughing politely, Oliver wiped his mustache.

(46b)   Knowing what you're up to, I will sit this one out.

(46c)   Despite (*the fact[15]) having no open sores, Fred w.
          insanely popular.

(47a)   Knowing the answer, Max piped up.

(47b)   Having totaled our farm, the hurricane moved off.

(47c)   ?Before starting, the concert seemed likely to last two
          days.

(47d)   Having no basis in fact, these generalizations should
          immediately be codified into a new linguistic theory.

(47e)   ?Never having been taken previously, this tack will be
          taken for the first time on pollution.

(47f)   ?*Before being made on the corollaries, significant head-
          way will have to be made on the main theorem.

(47g)   ?Being muggy, it isn't very chilly.

(47h)   *Seeming that you will be invited, it will be necessary
          for you to knit yourself a tux.

(47i)   ??Having snowed two feet, it began to hail.

(47j)   *After being a confrontation, there's always some good
          old-time head-busting.

(47k)   *Having been kept on Teddy, close tabs probably won't
          have to be kept on those other fascist peace-niks.

(47l)   *Having been paid to the king, little heed was also paid
          to my Weimaraner.

As indicated in (9), the cells of the matrix corresponding to
(47c), (47g), and (47i), are, for reasons unknown, both horizontally
and vertically ill-behaved.

2.10. PRONOMINALIZATION

To say that whatever process(es) is/are used to ensure the gener-
ation of only well-formed anaphoric linkages in English is/are merely
poorly understood would be to wildly understate the problem.

Whatever process(es) is/are involved, however, fake NP's do not all participate equally well in such linkages, as (48) shows.[16]

(48a) ?If George takes some tack on unemployment, inevitably Dick will take it soon thereafter.

(48b) If you want to make headway on this, you'd better make $\left\{ \begin{array}{l} \text{?*it} \\ \text{some} \end{array} \right\}$ on that too.

(48c) *Close tabs are always kept on left-wingers, but they never are on moderates like H. L. Hunt.

(48d) We paid heed to his pleas, but we didn't pay $\left\{ \begin{array}{l} \text{*it} \\ \text{??any} \end{array} \right\}$ to his knees.

2.12 Prepossessing

The possessive morpheme, 's, does not attach itself with equal alacrity to all fake NP's. For me, the facts are as shown in (49).

(49a) ?That tack's having been taken again is incredible.

(49b) ?Significant headway's being made on others is wonderful news.

(49c) ??Its being so hot was a real shame.

(49d) ??Its being possible that murther will out is causing unrest in high places.

(49e) ?*Its having rained is tragic.

(49f) *There's being no more rotten fruit surprised me.

(49g) **Tabs's even being kept on Dick Gregory indicates that they are worried.[17]

(49h) *No heed's being paid to her miffed Alice.

2.12 Acc-Ing

By this term, I refer to the accusative-gerund complement structures which are possible for me in the subjects of such sentences as (50).

(50a) John being arrested incited a riot.

(50b) The riot being televised caused a scandal.

(50c) His aggression running wild plunged the nation into a moral Dark Ages.

Such complements are somewhat choosy, though not so much as the Poss-Ing examples in (49), cf. (51).

(51a) $\left\{ \begin{array}{l} \text{This tack being taken on devaluation.} \\ \text{?No headway being made for ten years.} \\ \text{??It being humid} \\ \text{??It being likely that you'll be evicted} \end{array} \right\}$ is scandalous.

(51b) ?*It raining was a catastrophe.

(51c) There being no more stagnant water must break your heart.

(51d) ?*Accurate tabs being kept on state candidates too would deplete our secret slush fund too much, or we'd do it like a shot.

(51e) ?*Little heed being paid to Jane riled her up good.

There are many people who totally reject all such Acc-Ing complements when in subject position (except (51c), which seems to be generally well thought of), but who will accept them in object position. This is possibly due to the fact that Acc-Ing subjects are not popular among prescriptive grammarians, though I do not think that all the heart-felt boggling that these sentences arouse can be attributed to normative stigma. At any rate, it is clear that there is a huge improvement when Acc-Ing complements are in object position. All are totally well-formed, with the possible exception of the fakest NP. Cf. (52).

(52) ?I can't imagine little heed being paid to Jane.

The widely accepted (51c) is a very clear case of á totally ill-behaved cell. It is so universally beloved that one is forced to postulate a special rule obligatorily deleting 's just after there. Presumably, though here I have not checked to find what kind of intermediate dialects exist, this is the core of a rule of POSSESSIVE DELETION which spreads through Poss-Ing complements, producing

such arrays of data as that which obtain in my speech, the facts of
(51). But why should such a rule exist? And why should it start at
<u>there</u>?

If the sequence of events just suggested above is in fact what
happened, it is counterevidence of the most serious sort against the
theory I am advocating here, which holds that all such rule-spread-
ing must start with animate NP's and spread down (9) row by row.
Probably such a theory is wrong, but I do not know what to suggest
as a replacement.

2.13 CONJUNCTION REDUCTION

This is the rule or rules which converts sentences containing con-
joined clauses to sentences in which the coordinating conjunction is
attached to nonclausal elements. In its simplest form, it effects
such changes as those from (53) to (54).

(53a)   Manny wept and Sheila wept.

(53b)   We sighed and we cried.

(53c)   They ran into the houses and they ran out of the houses.

(54a)   Manny and Sheila wept.

(54b)   We sighed and cried.

(54c)   They ran into the houses and out of the houses.

Of relevance here is the fact that conversions that result in con-
joined 'verb phrases', [18] such as the change from (53b) to (54b), are,
in my speech, constrained in such a way as to be progressively less
grammatical as the subject NP's become less and less genuine. Cf.
(55).

(55a)   This tack has been taken in the past, and may be taken
         again.

(55b)   Such significant headway has been made in the past,
         and will be made again before long.

(55c)   ?It is smoggy and may get muggy.

(55d)   *It is likely that he'll enter, and must therefore be
         possible that he'll win.

(55e)   ??It has rained and may snow.

(55f)   *There were diplodocuses, are platypuses, and may
         well also be diplatocodypuses.

(55g)   *Close tabs were kept on me, and may later be kept
         on you.

(55h)   ?*No heed was paid to Giovanni, (n)or will be to Erdmute.

(55i)   ?*Heed was paid to the Chairman's fears, and will be
         paid to yours.

The horizontal ill-behavior of (55b) and (55d), and the vertical
ill-behavior of (55h, i) I cannot explain. Nor can I explain why it
is that I, who have an idiolect which in most respects properly in-
cludes the idiolects of other speakers I have checked, should have
such a choosy rule of CONJUNCTION REDUCTION, for there are
many speakers who report that all sentences in (55) are perfect for
them. [19]

2.14 <u>To Be</u> DELETION

It is clear that there exists a rule which, in the complements of
certain verbs, deletes <u>to be</u>. This is indicated by the fact that (56)
cannot be an underlying structure. (57) seems to be the most
probable immediate source for it.

(56a)   I want significant headway made on this by the time
         I return.

(56b)   I want close tabs kept on him.

(57a)   I want significant headway to be made on this by the
         time I return.

(57b)   I want close tabs to be kept on him.

The argument is of a familiar kind, since <u>headway</u> and <u>tabs</u>
occur in remote structures only as the objects of <u>make</u> and <u>keep</u>,
respectively, and since PASSIVE would normally apply to such

structures to produce the sentences in (57), the fact that we appear to find these fake NP's in unusual environments in (56) is simply explained by postulating the existence of a rule which obliterates the infinitivized form of the passive auxiliary.

With _want_ and _would like_, the rule is relatively unrestricted, cf. (58).

(58a) ·I want the boys hungry.

(58b) I want the anchors heavy enough to break the crust.

(58c) I want the retreat delayed.

(58d) I want the facts accurate.

(58e) I want this tack taken on the question of furze.

(58f) I want significant headway made by sundown.

(58g) ?I want it believed to be muggy in Death Valley.

(58h) ?I want it believed to be easy to get along with Spiro.

(58i) ?I want it believed to be raining very lightly.

(58j) ?*I want there believed to be no radishes.

(58k) I want close tabs kept on everybody, including you!

(58l) I want no heed paid to her denials.

It is likely that the varying unacceptabilities of (58g)-(58j) are due to the fact that all the derived objects of _want_ have undergone RAISING. Unless this rule has been applied, these NP's fail to meet the structural description of To Be DELETION, as the following sentences show.[20]

(59a) I want you *(to be) certain to bathe often.

(59b) I want it *(to be) certain to rain while the senator is visiting.

(59c) I want there *(to be) certain to be a dogfight during this movie.

Now contrast (59a) with (60), which derives from roughly the same source, and which differs from the former sentence only in not having undergone RAISING on the _certain_-cycle.

(60) I want it (to be) certain that you will bathe often.

The restriction which seems to be operative here is this: _to be_ cannot be deleted if its subject has been produced by a prior application of RAISING. This is, of course, a global rule.[21] I have not been able to devise any nonglobal formulation.

At any rate, the parallelism among the sentences in (59) indicates strongly that it is not the fakeness of the derived objects of _want_ in the starred versions of (59b) and (59c) that renders them ungrammatical, but rather the effect of the above-mentioned global rule.

This means that the only way to check whether the expletives _it_ and _there_ block the application of To Be DELETION is with such dubious sentences as (58g)-(58j). And that their dubiousness is not unambiguously attributable to the fakeness of the derived objects of _want_ can be seen from the awkwardness of the _to be_-less versions of (61).

(61a) I want Dick ?(to be) believed to be honest.

(61b) I want this donut ?(to be) believed to be magnetic.

Summing up the discussion so far, it appears clear that there exists a rule of To Be DELETION (this is obvious from (56)-(58)), that this rule is globally constrained, but that it is not constrained, except for (58j), by the fakeness of the NP after which _to be_ is deleted. In short, the rule seems to be relatively insensitive to fakeness when operating after _want_ (or _would like_).

However, the facts are not the same when this rule is applied after such verbs as _consider, think, find, seem,_ etc. Applying to the complements of such verbs, To Be DELETION can be seen to be conditioned by the degree of phoniness of the subject NP of the _to be_ that is being deleted, cf. (62).

(62a) I considered Herman unthinkable.

(62b) We found the soup delicious.

(62c) They found the retreat dangerous.

(62d) This proof seemed valid.

(62e)   ?We considered this tack unlikely to be taken. [22]

(62f)   ??We considered significant headway unlikely to be made.

(62g)   ?We considered it too muggy.

(62h)   We considered it possible that we would win.

(62i)   ??We considered it likely to rain enough to fill the tank.

(62j)   ??We considered there likely to be a riot.

(62k)   ?*We considered satisfactorily close tabs unlikely to be kept on him.

(62l)   *We considered heed unlikely to be paid to him.

It is the facts of (62) that I have entered in (9) and they are roughly in accord with what one would be led to predict from the hypothesis that (9) is a well-behaved matrix. However, as indicated in (9), (62e), (62f), and (62h), and (62l) are horizontally ill-behaved, with (62f) and (62h) being vertically ill-behaved. Needless to say, I have no explanation for this ill-behavior.

2.15 Get PASSIVE

Many types of passive sentences whose main verb is be can also occur with the main verb get. When get is not possible, the reason seems to depend in part on the fakeness of the NP which becomes the derived subject of get, cf. (63).

·(63a)   Jane got busted.

(63b)   My watch got stolen again.

(63c)   His promotion got televised.

(63d)   His industriousness got commented on within weeks.

(63e)   This tack gets taken too much these days.

(63f)   ?Usually, significant headway doesn't get made on arranging ceasefires until just before an election.

(63g)   *It got generally believed to be so humid in Moose Jaw that the Bear Relief Squad was put on stand-by alert.

(63h)   ?It got pointed out that outside agitators have rights too.

(63i)   *It got said to have rained torrentially.

(63j)   ?*There got rumored to be some jobs available in Hyannis.

(63k)   ??Really close tabs usually get kept only on candidates opposing an unresponsive and deceitful incumbent.

(63l)   ??Unfortunately, far too little heed got paid to Eisenhower's prophetic warning.

The vertical ill-behavior of (63g), (63i), (which is also horizontally ill-behaved), and (63j), all expletive pronouns, is especially puzzling in view of the fact that (63h), whose subject is also an expletive, is only mildly objectionable.

2.16 Inside Derived Nominals.

I am sorry to report that Acc-Ing complements following such nouns as likelihood, possibility, probability, chance, idea, etc., do not behave either like those in subject position, nor like those in the object of such verbs as imagine. Thus compare (51) and (52) with (64).

(64)   The likelihood of {
Dick Gregory winning
the table cracking
the meeting being long
grammaticality being preserved
?this tack being taken
?significant headway being made on this
?it being cloudy
?it being true that Kissinger is only on a vacation trip
??it raining
?there being enough water
??close tabs being kept on you
?*no heed being taken
} is too small to register on this portable Prob-ablometer-- we'll have to go back to the Giant Likelo-tron 360.

While sentences like (64) are clearly worse across the board than sentences like (52), and generally better than sentences like (51), there is one case, that of <u>there</u>, where this pattern is inexplicably reversed, and two cases, <u>headway</u> and <u>heed</u>, where I cannot hear the difference I would expect.

This state of affairs is frustrating, because it indicates that whatever mechanism will eventually be devised to grind out the acceptability judgments in such cases must have more parameters than merely those cited in (65).

(65a)   Animates > Concretes > . . . > <u>heed</u>.

(65b)   Objects > . . . > insided derived nominals > . . . > subjects.

(65c)   Acc-Ing requires subjects of degree of noun-phrasiness X, where X ranges over some at present unspecificable domain.

What the additional parameters might be is, not surprisingly, a mystery, as are the reasons for the horizontal ill-behavior of <u>tack</u> and the vertical ill-behavior of <u>there</u> in (64).

2.17 Heads of Relative Clauses

Most nonpronominal NP's can be followed by a relative clause, even idiom chunks, as (66) indicates.

(66a)   The tack that you're taking is futile.

(66b)   The headway that you have made on Chapter 57 of your term paper is promising.

(66c)   ?*The tabs that we kept on the Shadow were not of any help to the NRLB.

(66d)   ?The little heed that I paid to the Medusa angered her.

The cell corresponding to (66c) is unexpectedly weak: it is both horizontally and vertically ill-behaved, while (66d)'s cell is horizontally ill-behaved.

2.18 Tag Questions

Even whatever non-choosy process(es) is/are used to form tag sentences will balk at constructing tags whose NP is excessively fake. Cf. (67).

(67a)   This tack has been taken before, hasn't it?

(67b)   Some headway has been made, hasn't it?

(67c)   It's rotten out, ain't it?

(67d)   It isn't likely that you'll show, is it?

(67e)   It really poured, didn't it?

(67f)   There sure are a lot of mothballs in this soup, aren't there?

(67g)   ?Pretty close tabs are being kept on Willy, aren't they?

(67h)   ?*Little heed was paid to her, was it?

2.19 Modifiability and Inside vs. Outside Passives

There are two other processes which interact with the squishoid in (9), but not in a way that can be diagrammed easily in its cells. Let us refer, for expository purposes, to the three nonverbal elements in (68) as NP_1, NP_2, and NP_3, as indicated.

(68)   The bosses took advantage of the wage freeze.
        NP_1 NP_2 NP_3

The 'inside passive' of (68) is (69a); the 'outside passive' is (69b).

(69a)   Advantage was taken of the wage freeze by the bosses.

(69b)   The wage freeze was taken advantage of by the bosses.

The first fact to be noted about NP_2 is that when it is modified, outside passives become more awkward. Compare (69) and (70).

(70a)   Ruthless advantage was taken of the wage freeze by
the bosses.

(70b)   ??The wage freeze was taken ruthless advantage of by
the bosses.

It appears to be the case that the noun-phrasier the NP_2 of a
given idiom is--that is, the higher up NP_2 appears in (9)--the more
easily it can be modified. This can be seen from the sentences in
(71).[23]

(71a) He took
$$\left\{ \begin{array}{l} \text{this/that} \\ \text{the same (stupid)} \\ \text{Sam's} \\ a \left\{ \begin{array}{l} \text{radical} \\ \text{new} \\ \text{surprising} \\ \text{promising} \\ \text{daring} \end{array} \right\} \end{array} \right\}$$
tack on outlaws.

(71b) He made
$$\left\{ \begin{array}{l} \text{*Sam's} \\ \text{some/no} \\ \text{a little/lot of} \\ \text{significant} \\ \text{?important} \\ \text{?*radical} \\ \left\{ \begin{array}{l} \text{satisfactory} \\ \text{excessive} \\ \text{adequate} \\ \text{etc.} \end{array} \right\} \end{array} \right\}$$
headway on his
paper.

(71c) He kept
$$\left\{ \begin{array}{l} \text{painstaking} \\ \text{close} \\ \text{accurate} \\ \text{?exact} \\ \text{*satisfying} \\ \text{*diligent} \\ \text{*eager} \\ \text{*the same} \\ \text{*some/*no} \\ \text{*Sam's} \end{array} \right\}$$
tabs on Helene.

(71d) He paid
$$\left\{ \begin{array}{l} \text{no/?*some} \\ \text{little} \\ \text{?(in)sufficient} \\ \text{*inadequate} \\ \text{*unsatisfactory} \\ \text{*Sam's} \end{array} \right\}$$
heed to the dangers.

The second fact to note is that the less fake NP_2 is, the worse
outside passives are, cf. (72).

(72a)   *Desegregation was taken this tack on.

(72b)   ?*This area has been made headway on.

(73c)   ?*He's been kept tabs on ever since he left South Dakota.

(73d)   ?Your warning wasn't paid heed to.

The other side of this coin is the fact that while with very noun-
phrasy NP_2's, inside passives are possible with or without modifi-
cation, with fake NP_2's, inside passives are weak unless NP_2 is
modified. Cf. (73).

(73a)   This (innovative) tack was taken on individuals.

(73b)   (Significant) headway was made in the 479th talk.

(73c) $\left\{ \begin{array}{l} \text{Close tabs} \\ \text{?*Tabs} \end{array} \right\}$ are being kept on Maximilian.

(73d) $\left\{ \begin{array}{l} \left\{ \begin{array}{l} \text{Little} \\ \text{No} \end{array} \right\} \text{heed} \\ \text{?*Heed} \end{array} \right\}$ was paid to the Chief's lamentations.

Thus it appears that what is going on here is the following:
idioms of the form of (68) must be entered in the lexicon with some
indication of the degree of noun-phrasiness possessed by NP_2.
NP_2's headed by nouns like tack and headway will have high noun-
phrasiness scores, with NP_2's like tabs and heed having lower ones.
The rule of PASSIVE, as can be seen from (74)-(77), must be formu-
lated in such a way as to convert into a derived subject the first NP
to the right of the verb.

(74a)   We talked to Ron about Henry's plans.

⇓ PASSIVE

(74b)   Ron was talked to by us about Henry's plans.

(74c)   *Henry's plans were talked to Ron about.

(75a)   We talked about Henry's plans to Ron.

⇓ PASSIVE

(75b)   ?Henry's plans were talked about to Ron by us.

(75c)   *Ron was talked about Henry's plans to.

(76a)   Many contributed large sums to the Hopscotch Marathon.

⇓ PASSIVE

(76b)   Large sums were contributed by many to the
         Hopscotch Marathon.

(76c)   *The Hopscotch Marathon was contributed large
         sums to by many.

(77a)   Many contributed to the Hopscotch Marathon.

⇓ PASSIVE

(77b)   The Hopscotch Marathon was contributed to by many.

Thus when (74a) is converted to (75a) by the cyclic rule of PP
SHIFT, the NP which PASSIVE converts into a derived subject changed
from the object of to, as in (74b), to the object of about, in (75b).
The generalization remains: the closest NP becomes the subject.

And in (76), though the object of to cannot be fronted, because the
NP large sums intervenes, in (77a), where the cyclic rule of UN-
SPECIFIED NP DELETION has applied to delete some underlying
object like something, we find that it is possible to front the object
of to.

Given this general approach to PASSIVE, it remains to account
for contrasts like those in (70), and those in (73c) and (73d). The
explanation I would propose is the following: though advantage is
clearly noun-phrasy enough in its own right to be passivized, as
(69a) shows, it is also fake enough so that 'Passive' can 'overlook'
it when looking for the first NP to the right of the verb. However,
when the optional rule of ADVERB TO ADJECTIVE (AA), which con-
verts (78a) to (78b), has applied, [24]

(78a)   The bosses took advantage of the wage freeze ruthlessly.

⇓ AA

(78b)   The bosses took ruthless advantage of the wage freeze.

the prenominal modifier increases the noun-phrasiness of NP_2,
making it less possible for PASSIVE to overlook it to produce an
outside passive [cf. ? ?(70b)]. This same process of noun-phrasi-
ness increasing through an application of AA is what I would use to
explain the contrasts in (73c) and (73d): tabs and heed are lexically
so fake--that is, they have such a low degree of noun-phrasiness--
that PASSIVE prefers to overlook them. If AA applies, and they are
prenominally modified, then they become noun-phrasy enough to
meet the requirements for PASSIVE.

It would appear that AA itself must be sensitive to information
about degree of noun-phrasiness, for there are many idioms contain-
ing NP_2's of such low noun-phrasiness that they do not tolerate pre-
nominal modification. Cf. the sentences in (79).

(79a)   The Sureté has gotten (*frequent) wind of plots to
         burn down the Eiffel Tower.

(79b)   He let (*smooth) go of the trapeze.

(79c)   They got (*effortless) hold of their attorneys.

(79d)   We lost (*rapid) sight of Mt. Concavity.

The hypothesis that the applicability of AA is conditional upon
sufficient noun-phrasiness in the N to be adjoined to in it gains further
support from the fact that no nonmodifiable NP_2--such as those in
(79)--can ever be passivized, as far as I know.

To recapitulate: I have postulated that idioms must be entered
in the lexicon with some (presumably numerical) indication of how

noun-phrasy (= nonfake) NP_2 is. The rule of ADVERB TO ADJECTIVE
requires a minimum degree of noun-phrasiness to apply, and in-
creases the amount of noun-phrasiness of the NP_2 to which the ex-
adverb is attached. The rule of PASSIVE also has threshhold values.
If it overlooks a constituent with a high degree of noun-phrasiness,
bad sentences like (74c), (75c), and (76c) result. For constituents
of intermediate nouniness, like advantage, PASSIVE can produce
either inner passives or outer passives [cf. (69)], but if AA has upped
the nouniness of NP_2, outer passives are disfavored [cf. (70b)].
Finally, for pretty fake NP's like tabs and heed, passivization is
not possible unless AA applies to boost their noun-phrasiness. [25,26]

3. What It All Means

So where are we? Where do facts such as those in section 2
leave us?
One thing is clear: they leave us without a theory. Only the out-
lines of the quantitative theory that is suggested in the discussion of
PASSIVE and ADVERB TO ADJECTIVE can be seen at present. Even
if there were not seventeen vertically ill-behaved cells and twenty-
five horizontally ill-behaved cells in (9), cells whose ill-behavior we
can only hope will disappear when other factors we can ascribe their
perturbations to emerge (deus ex futura), it would seem premature to
attempt to quantify categories until a far wider range of squishes is
available for comparison.
And so much of (9) is unexplained. The ordering from top to
bottom is not such a problem: in Navaho, such hierarchies as that
among the first four rows of (9) are well documented, [27] and the fact
that some idioms are more frozen than others[28] is also well known. [29]
But why should the syntactic processes that head the columns be
arranged in just the way they are? Why, for example, should get-
passives be choosier than be-passives, rather than vice versa?
Why should the pronouns that appear in tags be less choosy about the
noun-phrasiness of their antecedents than other pronouns? Why
should Being DELETION be so much choosier than To Be DELETION,
when they often produce identical output sequences? And why should
PROMOTION be so much choosier than RAISING, when they seem to
be so similar in function?
A final point. Suppose future research does in fact reveal to be
correct the hunch that I voiced at the start of section 2, to the effect
that no other speaker will share all the judgments in (9), even rela-
tive ones; that it might even be the case that no two speakers will
have exactly the same matrix. Are we then to conclude that we are
dealing here with something peripheral? Or with something non-
linguistic, like performance?

To take up these questions in reverse order, if this is perfor-
mance, it is performance of a quite different nature than what has
been called performance in the past, when the attempt was made to
trace the unacceptability of certain types of constructions--center-
embeddings, to take an example--to certain properties of a hypothe-
sized general human processing algorithm. But in our case, the un-
acceptabilities are not invariant from speaker to speaker. What
would have to be assumed to account for the variation among speakers
is what we might term a 'performance idiolect'. Each speaker would
have his own way of performing linguistically, from which certain
inferences could be drawn, and which could be used as a basis for
explaining the observed variation. Note that descriptions of such
performance idiolects would necessarily have to refer to language-
particular rules, and even worse, to particular lexical items, like
pay heed to. Clearly, this is a far cry from a general processing
algorithm.
Assuming that some empirical basis could be found for distin-
guishing such speaker-specific performance from speaker-specific
competence--a very large assumption--then it would still be neces-
sary to study types of performance idiolect. What is an impossible
performance idiolect? Are there implications from one type of
idiolect to another? Can performance idiolects change through
time? And so on. To rename the serious problems raised by the
multitude of variants of (9) is not to remove them.
Now let me return to the question as to whether we are dealing
here with something peripheral. The answer that seems to me to be
most likely here is 'no'. I think that we must confront squarely, as
some investigators, most notably Guy Carden, have done, the fact
that variation is central. There are, to be sure, many sequences
which all speakers will star, and many others which all will accept
fully. But we linguists, as psychologists, cannot be influenced by
such a fact; for we are not interested in the sentences per se, but
rather in the processes which we hypothesize to be involved in their
use, and on the basis of which we seek to explain various features of
the sentences themselves. And while we may achieve some success
in isolating sentences from speakers, how can we do this with pro-
cesses? If our description of the processes is based only on infer-
ences drawn from the tests of clearly acceptable and clearly un-
acceptable sequences, we will have descriptions no single one of
which will probably be accurate for even one speaker.
For example, let us consider the process which forms passive
sentences. If the data on which we base our statement of this pro-
cess consists only of those sequences which rate, across idiolects,
a universal 'yes', or a universal 'no', how will this statement rule

in sentences like (69)-(73), where there is no universal agreement, as is shown compellingly in Coleman (1972)?

Suppose that such phenomena as 'increasing the noun-phrasiness of an NP_2' do exist, but that they are so weak that they cannot ever convert a universal 'yes' into a universal 'no', or vice versa? If this is ever the case, insisting that the grammar be based on clear cases, where the unclear cases are settled by 'letting the grammar decide', as Chomsky suggests (cf. Chomsky 1957:13-14), may have the effect of making such delicate phenomena invisible to our scrutiny. In other words, the research strategy of dealing with clear cases only, valuable though this may be heuristically, in the initial stages of studying a language, cannot be viewed as being a theoretically neutral strategy. For in effect, such a strategy makes an empirical claim: that such incremental, or delicate, processes do not exist.

My own feeling is that they do exist, and that they are of central importance in understanding how squishes arise and change. I fear that the hunt for clear cases which has characterized much of generative grammar in the past has had an unfortunate effect on what we view as being 'the facts'. For what typically happens, when syntax is being done, and a dispute arises as to the acceptability of some example? Too often, a majority of those present will scoff at, or urge to reconsider, speakers who maintain that some unpopular sentence is for them grammatical, or that some popular sentence is ungrammatical. Probably most readers will have participated in syntactic 'votes'--'How many of you get this?' But of what use are the results of such votes, where it is almost never the case that exactly the same partitioning results from votes on any two questions?[30]

In an extremely important and challenging paper, Jerry Morgan (Morgan 1972), in studying the process of VERB AGREEMENT, discusses, among other things, such examples as (80).

(80a)   Either Tom or the girls was responsible.

(80b)   Either Tom or the girls were responsible.

He reports that some speakers he has checked with accept only (80a), some only (80b), some both, and some neither, and that some are unsure. What to do?

Morgan's suggestion is the following: that we distinguish between a 'core' system of rules, and a system of 'patches'. The core system would contain a rule which correctly assigned the ungrammaticalities for simple sentences like (81),

(81a)   The dog $\left\{ \begin{array}{l} \text{is} \\ \text{*are} \end{array} \right\}$ barking.

(81b)   The dogs $\left\{ \begin{array}{l} \text{*is} \\ \text{are} \end{array} \right\}$ barking.

but it would not make any prediction about sentences with a disjunction in subject position, like (80). Such sentences would 'fall between the cracks of' the core system, which would simply not cover them, and speakers, when confronted with them, would invent some new rule to 'patch up' their grammar.[31]

What linguists would then have to do is to study the kinds of patches that particular speakers invent, as well as the cores that the patches are appended to. Of importance would be questions like these: Are there impossible patches? Impossible cores? Can cores be different for different speakers? Are there generalizations about the areas in which patches are necessary? And, most important of all, how can it be decided whether a particular fact bears on a core rule or a patch rule?

While it is too early to hope for answers to any of these questions, I think Morgan's proposal is the most promising line of research to follow in the immediate future. To see why, let me contrast it with the 'clear cases' approach, to show that it is not merely old wine in a new bottle. First of all, there is nothing in the proposal which would force the core system to be binary. Core rules would assign a variety of levels of grammaticality, and incremental processes and squishes would also be explicitly provided for. Secondly, the core system might make predictions about particular instances which are not universally valid, because they might be overridden by patch rules.

But most important, perhaps, is a difference in emphasis. In the 'clear cases' approach, votes will continue to be necessary, when the going gets sticky. The goal of research in this approach is the Standard Language, with individual variation being seen as incidental.

In the core-patch approach, however, attention will focus upon particular idiolects. No assumptions need to be made to the effect that a core will emerge which underlies every idiolect. Such a core may emerge, of course, but we should not let our methodology prejudge this important issue.

We are now faced with mounting evidence of deep-running syntactic variation everywhere. It is not at all evident that the fact which I take it such concepts as dialect were invented to cover, namely, the fact of mutual comprehensibility, is to be explained by postulating the existence of some 'same dialect' between every two

speakers who can in fact communicate. Possibly, if speaker cores (and maybe patches too) are <u>similar</u> enough, in some sense which will require vast amounts of research to make precise, mutual intelligibility will result.

While these remarks are problematic and speculative in the extreme, it is primarily for this last reason, the difference in emphasis, that I am in favor of Morgan's proposal. Much of recent work in syntax has been turning up staggering amounts of variation. I think it is time for syntacticians to take this variation far more seriously than has been the case, of late.

To return to squishes, and things that will hopefully one day become them, like (9). Are they part of the (Ultimately to Become Visible) Core, or are they just possible patches? Only time will tell. And maybe even <u>it</u> won't.

NOTES

All factual and theoretical claims have been checked on the Accutron to within a tolerance of 0.001 Microzetz. No errors remain.

[1] TAG FORMATION is a merely expository label for whatever process(es?) is (are?) responsible for such tags as <u>isn't it?</u>, <u>were they?</u> etc. (cf. 2.19, for further discussion).

TOUGH MOVEMENT converts (i) to (ii), and LEFT DISLOCATION converts (iii) to (iv).

(i)   It is $\begin{Bmatrix} \text{tough} \\ \text{fun} \\ \text{easy} \\ \text{etc.} \end{Bmatrix}$ for Bert to tease Harry.

(ii)   Harry is $\begin{Bmatrix} \text{tough} \\ \text{fun} \\ \text{easy} \\ \text{etc.} \end{Bmatrix}$ for Bert to tease.

(iii)   You can't buy this kind of shells anymore.

(iv)   This kind of shells, you can't buy them anymore.

[2] I will not attempt to justify here my contention that either of the rankings in (4) or (5) is even roughly correct--this I will undertake in section 2. My present concern is to illustrate a more general point.

[3] This fact was first pointed out by William Cantrall.

[4] This sentence is only weak on the reading suggested by the bracketing in (i)

(i)   It seems [that he was in Boston for that reason].

[5] It is quite likely that a contributing factor in this example's badness is the fact that <u>headway</u> must be indefinite, while these <u>what . . . doing</u> S's seem to favor, if not require, definite subjects, cf. (19a).

[6] This sentence is presumably converted to (i)

(i)   No more Schlitz is a funny thought.

by an independent rule which deletes <u>there</u> under some conditions. This has interesting consequences, if true, for it would mean that <u>Being</u> DELETION should not be constrained in such a way as to prohibit the derivation of such NP's as <u>there no more Schlitz</u>. It would seem that such NP's are only to be excluded at the level of surface structure, presumably by an output condition.

[7] While there is little evidence in English which argues that the S's in (28) and (29) cannot be basic, and must be derived by a copying rule, as I have proposed, a strong argument can be imported from German, via universal grammar.

The facts are these: in German, the dislocated NP takes along its case. Thus we find (ii) paralleling (i), and (iv) paralleling (iii).

(i)   Sie lobten $\begin{Bmatrix} \text{den} \\ \text{*dem} \end{Bmatrix}$ Professor.

They praised $\begin{Bmatrix} \text{the (acc.)} \\ \text{*the (dat.)} \end{Bmatrix}$ professor.

(ii) $\left\{\begin{matrix} \text{Den} \\ \text{*Dem} \end{matrix}\right\}$ Professor, sie lobten ihn.

The professor, they praised him (acc.).

(iii) Sie schmeichelten $\left\{\begin{matrix} \text{*den} \\ \text{dem} \end{matrix}\right\}$ Professor.

They flattered the professor.

(iv) $\left\{\begin{matrix} \text{*Den} \\ \text{Dem} \end{matrix}\right\}$ Professor, sie schmeichelten ihn.

Since idiosyncratically assigned case must accompany the dislocated NP, a copying rule seems necessary.

[8]Apparently, passivizing this tack lessens its fakeness, at least in this case. If this is so, it is a phenomenon of the utmost importance, for it suggests that no mere lexical marking of idiom chunks for their noun-phrasiness will suffice: rather, noun-phrasiness would have to be in part a derivational property. Cf. section 2.20 for a similar case.

I have not yet had the time to give this matter the serious study it merits.

[9]It is possible that the any-version of (30e) should be produced by LEFT DISLOCATION. If so, its high degree of grammaticality would make it an unexplained ill-behaved cell. I do not doubt, however, that this problem is connected with the abovementioned requirement that headway be indefinite. The idiom make inroads on, another idiom with this requirement, seems to be located in the squish of (9) at about the same height as make headway on. I have not yet found evidence that would indicate whether or not this dual parallelism is accidental.

[10]The badness of this sentence cannot be attributed to the fact that it is a pronoun that has been dislocated, for (i) and (ii) are grammatical.

(i) Him, he's loopy.

(ii) ?It, I couldn't find another like it in 10 years.

Probably, dislocation requires that the NP to be copied must be a possible locus of contrastive stress, a condition that seems to be only formulable as a transderivational constraint.

[11]RIGHT NODE RAISING thus provides one more argument in the growing body of evidence pointing toward the conclusion that prepositional phrases and NP's are not deeply different. Another argument, unreported in the literature, to the best of my knowledge, is the fact that there are some circumstances under which prepositional phrases can actually undergo RAISING.

To see this, consider first the effects of the very general rule I will refer to as COPULA SWITCH, which permutes the two NP's of a pseudo-cleft sentence around the intervening copula.

(i) $\left\{\begin{matrix} \text{What he found was a banana.} \\ \text{Where she slept was under the bed.} \end{matrix}\right\}$

$\Downarrow$ COPULA SWITCH

(ii) $\left\{\begin{matrix} \text{A banana was what he found.} \\ \text{Under the bed was where she slept.} \end{matrix}\right\}$

This permutation must be effected in the cycle, for if such structures as those in (ii) appear in the complement of a verb which allows RAISING [cf. (iii)], this rule will raise their initial constituents to become the derived objects of the matrix verb.

(iii) It seems that $\left\{\begin{matrix} \text{a banana was what he found} \\ \text{under the bed was where she slept} \end{matrix}\right\}$.

$\Downarrow$ RAISING

(iv) $\left\{\begin{matrix} \text{A banana} \\ \text{Under the bed} \end{matrix}\right\}_1$ seems to be $\left\{\begin{matrix} \text{what he found} \\ \text{where she slept} \end{matrix}\right\}_1$.

Thus both RAISING and RIGHT NODE RAISING support the identification of NP and PP.

[12]It is, admittedly, difficult to topicalize the pronoun it even when it is a nonexpletive definite pronoun--that is generally preferred (and it has often been suggested, though never proved, that it is merely the stressless form of that). However, though the sentence ?? It I detest, in which this has happened, is weak, it is nowhere near as weak as the sentences in (39b), (40b), and (41b), which I would attribute to the fakeness of the it's in these examples.

[13]I am starring this example only when the it which is the superficial subject has become one through TOUGH MOVEMENT, i.e. when this sentence has arisen from (i).

(i) It_1 is difficult to consider it_2 fair that they absconded.

Unfortunately, the remote structure of (i) can also produce (ii), which by To Be DELETION (cf. section 2.15) and NP SHIFT could result in (40a).

(ii)   It$_1$ is difficult to consider [that they absconded]$_{NP}$ to be fair.

In order to 'hear' the star on (40a), it is necessary to mentally try to apply TOUGH MOVEMENT to the it$_2$ of (i) and replace it$_1$ with it.

In order to construct an example which paralleled (40a), but in which the conversion from (i) via TOUGH MOVEMENT was the only source, it would be necessary to find some other predicate for which EXTRAPOSITION was possible, but not NP SHIFT. Since NP SHIFT cannot be lexically governed, and appears to be subject only to structural conditions, I am dubious that such an example can be found.

[14]I have indicated, both in (9) and by the prefix on (44b), that I believe that TOPICALIZATION cannot apply to the idiom pay heed to at all. What then of such sentences as (i)?

(i)   No heed did he pay to my imprecations.

My present inclination is to hypothesize that some other, at present totally unknown, fronting rule produces such sentences. Though this rule does (hélas!) exactly duplicate the function of TOPICALIZATION, it does seem to be restricted so that it can only move NP's to the front of the first S up. That is, while TOPICALIZATION is unbounded [cf. (ii)], even with negative constituents [cf. (iii)], this rule seems to be bounded.

(ii)   Jack I think that everybody must realize that Billy thinks that we should get rid of.

(iii)   No one do I think you should invite who doesn't know how to play Rackmaster.

(iv)   ?*No heed do I think we should pay to his importunings.

If I am wrong in my conjecture that there are two different rules involved here, the column discussed as one in section 2.9 in the text will have split into two, and the bottom cell of the resulting TOPICALIZATION columns, which will contain 'OK's' will be both horizontally and vertically ill-behaved.

I will leave this problem for future research.

[15]I assume that some other process obliterates the fact here.

[16]Since PROMINALIZATION concerns only the constraints linkages between full and pronominal NP's, I have marked 'DN.' those cells of (9) which correspond to the expletive pronouns it and there, which obviously cannot serve as nonpronominal anaphors.

[17]The splendid ungrammaticality of this sentence is probably attributable to some more general morphological condition—cf. (i)-(iv).

(i)   *Oats's nutritional value is unquestioned.

(ii)   ?Hobbs's inability to write postcards is legion.

(iii)   ?Bubs's house is really nice.

(iv)   Tums's taste is wall-to-wall Yucksville.

If so, it will not be necessary to designate the corresponding cell of (9) as horizontally and vertically ill-behaved.

[18]I use this traditional term here solely as an expository device. I believe that the correct way to regard the conjoined elements of (54b) is as sentence partials, whose subjects have been lost by the operation of SUBJECT FORMATION. Cf. McCawley (1970) and Postal (in press) for details.

[19]Even such hardy souls, however, are unlikely to find respectively-constructions palatable. These are unspeakably vile when they involve idiom chunks and expletives, as in (i)-(iv).

(i)   This tack would be taken on Case 1, and your suggestion would apply in Case 2.

$$\Downarrow \text{ Respectively FORMATION}$$

(ii)   **This tack and your suggestion would be taken on Case 1 and apply in Case 2, respectively.

(iii)   **It and there rained and $\begin{Bmatrix} was \\ were \end{Bmatrix}$ puddles, respectively.

(iv)   **Significant headway and accurate tabs were made on resurfacing and kept on the legislators, respectively.

[20]The notation A(*B)C means: AC is grammatical, and ABC ungrammatical. The notation A*(B)C means: ABC is grammatical, and AC ungrammatical. Thus the first means that the parenthesized

element cannot be added, and the second, that it cannot be omitted.

[21]Cf. Lakoff (1970) for discussion of this type of rule.

[22]For some reason, though the rule of To Be DELETION is happy to apply to the passive be after want and would like (cf. They wanted this checked into), the class of verbs in (62) blocks the deletion of this be. Cf. (i)-(iii).

(i)   ?*I considered the matter checked into adequately.

(ii)   *Francine seems arrested every day.

(iii)   *I judged Mort believed to be a Venusian.

It is for this reason that more complicated examples such as those in (62e), (62f), (62k), and (62l) must be checked to see in what way fakeness interacts with To Be DELETION in this class of verbs.

[23]There are no sentences corresponding to the expletives in (71), for pronouns can no more be prenominally modified than they can have a relative clause modifying them.

[24]Patrick Brogan (personal communication) has pointed out to me a compelling argument for the correctness of this rule. The verb dress requires an adverb, cf. (i).

(i)   He is one who dresses *(snazzily).

And when (i) is nominalized to form the agentive noun dresser in (ii), we find that this noun requires an adjective.

(ii)   He is a *(snazzy) dresser.

[25]As mentioned in note 8, it appears that application of PASSIVE can also have the effect of increasing noun-phrasiness.

[26]This account provides no explanation for the weakness of outside passives with keep tabs on and pay heed to. [Cf. ?*(72c) and ?(72d)]. I do not understand this phenomena.

For a detailed and insightful treatment of other problems pertaining to inner and outer passives, and to various dialects based on these, cf. Coleman (1972).

[27]Cf. Hale (to appear) and also Wall (1968).

[28]Cf. Fraser (1970) for an important study of the way a discrete theory of grammar might attempt to describe this fact.

[29]Mysteries do remain, of course. Why, for instance, should weather-it with copular predicates be more noun-phrasy than weather-it with true verbs?

[30]Notice that we cannot escape this bind by retreating to describing only the clear cases of a particular idiolect. For in my idiolect, (70b) is an unclear case. The only evidence that I can imagine having any bearing on it is the grammaticality of (69b), and the ungrammaticality of (72a), (74c), (75c), and (76c), where my judgments are clear. But what do they allow us to conclude about (70b)? That it is fully grammatical? Fully ungrammatical? Either of these runs afoul of my intuition, and if the clear cases are somehow to serve as input to some algorithm that will compute the intuitively correct valence, namely '??', then some advocate of the clear cases approach must spell out in detail some of the properties of this algorithm.

[31]Fillmore makes essentially the same suggestion, in a broader context (cf. Fillmore 1972) which is very relevant to the issues I am discussing here.

REFERENCES

Chomsky, Noam. 1957. Syntactic structures. The Hague, Mouton and Company.

Coleman, Linda. 1972. Keeping track of the tabs we are keeping on our ability to take advantage of the use we are making of various tests we are taking charge of in order to lay claim to the discovery of four syntactic dialects on the construction V + NP + PP. Unpublished paper. Ann Arbor, University of Michigan.

Fillmore, Charles. 1972. On generativity. In: Goals of linguistic theory. Ed. by Stanley Peters. Englewood Cliffs, New Jersey, Prentice-Hall. 1-19.

Fraser, Bruce. 1970. Idioms within a transformational grammar. Foundations of Language. 6(1).22-42.

Hale, Kenneth. A note on subject-object inversion in Navaho. (To appear.)

Lakoff, George. 1970. Global rules. Language. 46(3).627-39.

McCawley, James. 1970. English as a VSO language. Language. 46(2).286-99.

Morgan, Jerry. 1972. Verb agreement as a rule of English. In: Papers from the Eighth Regional Meeting of the Chicago Linguistic Society. Ed. by Paul Peranteau et al. Chicago, Linguistic Department, University of Chicago. 278-86.

Postal, Paul. 1970. On coreferential complement subject deletions. Linguistic Inquiry. 1(4).439-500.

_____. (In press) On raising. Cambridge, MIT Press.

Wall, Robert. 1968. Selectional restrictions on subjects and objects of transitive verbs. Unpublished paper. Bloomington, Indiana University Linguistics Club.

Wodehouse, P. G. (n. d.) Something squishy. In: Mr. Mulliner Speaking. London, Herbert Jenkins. 208-44.

WHAT DO IMPLICATIONAL SCALES IMPLY?

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In this paper I will develop two hypotheses about implications which, if validated, would remove the two most cogent objections which critics have raised against implicational analysis of language variation.[1] I will report how I have already tentatively verified the empirical claims of the first hypothesis by means of experimental data, and how I propose to test the claims of the second.

The first objection to implicational scales is that they cut across established categories of linguistics (i.e. phonological, syntactic, and lexical variables are all mixed together along the scale), and so the scales seem only peripheral or irrelevant to the study of formal linguistics. The second objection is that in addition to the inter-informant variation for which Guttmann scaling was originally designed, there is often also a residue of intra-informant variation which cannot be factored out in terms of linguistic contexts or style shifts, so that an informant whose usage varies unpredictably even within one sentence, can hardly be assigned the clear-cut value of 1 or 0 which implicational analysis seems to call for. Until now I have not had convincing answers to either objection.

Labov and others have demanded that implicational scales be more than an empirical accident. This is not a charge that they are only coincidental. The possibility of obtaining by random chance a reasonably clear-cut scale for an adequate sample of speakers is remote. Labov's objection, as I understand it, is far more cogent than that. If the results of scaling are incommensurable with those of formal linguistics, how then can a scale be meaningful to a linguist? For example, in a study of formality of usage among university undergraduates, I found that the choice between the modals can and may,

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