7

Where's English?

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1. BACKGROUND

Chomsky's original conception of a language (cf. Chomsky 1957) was that it was a set of strings of elements (for example, strings of words, morphemes, phonemes, or phonetic segments). Membership in the set was believed to be easy to determine: Grammatical sentences would be read and reacted to normally, while ungrammatical ones would be read with a special "list" intonation, and would elicit bizarreness reactions. A famous pair of examples from Chomsky is *Colorless green ideas sleep furiously* and *Furiously sleep ideas green colorless*. Chomsky held the first of these to be fully grammatical, though semantically anomalous, while claiming that the second, which is the same as the first except that the word order is reversed, was not only semantically anomalous, but also syntactically ill-formed.

As Chomsky's theory became more refined, the original assumption

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that it was the job of the grammar to separate the set of all possible strings of elements into only two sets—a set of fully grammatical sentences, and a set of non-sentences—was modified, and various schemes were devised for assigning degrees of grammaticality to some of the non-sentences, by comparing them to the set of sentences along various axes. I will not review these proposals here.

What was not realized for many years was the staggering extent of interspeaker variation on any given set of sentences. It was apparently believed that if one took a set of sentences and elicited judgments about them from some group of speakers, these speakers would agree among themselves as to the degrees of grammaticality of the test sentences. Occasionally, one found asides to the effect that "one dialect," or more accurately, "some speakers," liked (or disliked) one test sentence more than the rest of the subjects did, but for a long time, syntacticians were content to proceed on the assumption that this was a rare phenomenon, and could be disregarded, as a first approximation.

After all, it may have been felt, since all these subjects are unquestionably English (Turkish, Mohawk, etc.) speakers, and do not report that they are speakers of different geographical dialects, they have to accept and reject the same sets of sentences, don't they? Otherwise, what could it mean to say "Those people speak the same language"?

It is precisely this question that I hope to cast some light on in the course of this chapter. For somewhere around the mid 1960s, it began to seem to many scholars that the working assumption described above—that interspeaker variation could be disregarded—was too rough to proceed on further. If a teacher of a syntax class, in attempting to find out what "the facts" are for some range of sentences, asks those attending the class to vote on three sentences, the only votes being "yes" or "no", a typical voting pattern is 22–8 for the first sentence, 11–19 for the second, and 5–25 for the third. And it is rarely the case that the 3 successive groups of "yes" voters are neatly arranged in subsets—that is, that the 11 "yes" votes for the second sentence are among the 22 "yes" votes for the first sentence, or that the 5 yesses for the third sentence are a subset of the 11 for the second. Rather, if the sentences are at all complex, more controversial, say, than *Please pass the olive oil* or *The cat is on the mat*, to take two (presumably) universally acceptable strings, or *Boys yours this of and Carl or* or *Dopes I around cats these each*, to take two from the other end, the classroom voters will not align themselves into neat blocs.

I take it that this is a result that is hard to believe, for if it were easy to believe, it wouldn't have escaped notice in so many syntax classes. Syntax teachers, I imagine, wanted their job to be easier than it is, and did not call attention to the non-overlappingness of the successive votes for a number of years.

But the past decade has seen many more careful studies of syntactic variation than I can review here. A good starting place for readers interested in entering The Swamp is Carden's pithy and excellent review (Carden, 1976), written by someone whose first field of study—quantifiers—permitted no easy simplifications of the quilted array of dialects that present themselves in this area.

I will comment on only one previous study, which makes a point that is basic for understanding the complexities of variation in syntax.

In Hindle and Sag (1975), the distribution of the emergent "positive" *anymore* is studied. Speakers were asked to judge the following sentences, in which *anymore* can be roughly paraphrased as "nowadays." (*op. cit.* p. 92)

(1)
a. *We don't eat fish anymore.*
b. *Do you eat fish anymore?*
c. *We're reluctant to eat fish anymore.*
d. *I doubt that John eats fish anymore.*
e. *It's really hard for us to eat fish anymore.*
f. *I'm afraid to go out at night anymore.*
g. *It's impossible for John to eat fish anymore.*
h. *Fish is all we eat anymore.*
i. *It's amazing that John eats fish anymore.*
j. *We hate to eat fish anymore.*
k. *They've scared us out of eating fish anymore.*
l. *It's dangerous to eat fish anymore.*
m. *All we eat anymore is fish.*
n. *Any neighborhood is dangerous to walk in anymore.*
o. *We've stopped eating fish anymore.*
p. *All we eat is fish anymore.*
q. *We only eat fish anymore.*
r. *We eat a lot of fish anymore.*
s. *Anymore, we eat a lot of fish.*
t. *Anymore, I never go to the movies.*
u. *Anymore, we eat fish.*
v. *We eat fish anymore.*

Hindle and Sag had abandoned the first assumption discussed above, which we might dub Hypothesis I.

(2) HYPOTHESIS I: *For a given set of sentences, all speakers will agree on their grammaticality. English is that set of sentences which all speakers agree is grammatical.*

There is, of course, such a set, but most syntacticians would refuse to limit their investigations to it—it is too "small." Hindle and Sag, therefore,

were interested in studying a less restrictive theory as to the nature of English (or any other natural language). For reference, let us call this view Hypothesis II.

(3) HYPOTHESIS II: *The "small" set of Hypothesis I above constitutes the core of English. There is a monolinear continuum of acceptability, shared by all speakers, leading away from the core. Speakers are free to pick points anywhere along this continuum to fix the "edges" of their English. Speakers are consistently either liberal or conservative, their liberality being indexed by their distance from the core.*

If Hypothesis II were true, any group of speakers, when presented with the *anymore* sentences in (1), might disagree on their absolute rankings of sentences, but would agree relatively. That is, it would be possible to set up a partially ordered hierarchy of the sentences in (1) so that it would never be the case that one speaker would judge one sentence better than another, while a second speaker would have the opposite preference.

Unfortunately, this last contingency is just what turned out to be the case. Hindle and Sag found that no single invariant ordering of all the sentences in (1) was possible.

They did find, however, that there were subhierarchies contained within (1). These are shown in (4)–(6) (cf. Hindle and Sag (*op. cit.*), p. 100, 101, and 107, resp.)

(4) a. *We're reluctant to eat fish anymore.*
b. *I'm afraid to go out at night anymore.*
c. *We hate to eat fish anymore.*
d. *They've scared us out of eating fish anymore.*
e. *We've stopped eating fish anymore.*

(5) a. *Fish is all we eat anymore.*
b. *All we eat anymore is fish.*
c. *All we eat is fish anymore.*

(6) a. *It's really hard for us to eat fish anymore.*
b. *It's impossible for John to eat fish anymore.*
c. *It's amazing that John eats fish anymore.*
d. *It's dangerous to eat fish anymore.*
e. *Any neighborhood is dangerous to walk in anymore.*

For all the speakers they interviewed, it was the case that accepting a lower sentence in any of these three lists implied accepting any higher sentence *within the same list*. However, there were no implications that obtained between lists.

It seems, then, that we must retreat from Hypothesis II to the weaker Hypothesis III.

(7) HYPOTHESIS III: *The single continuum of Hypothesis II must be replaced by an indeterminate number of continua, each leading away from the core in orthogonally different directions. Speakers are free to pick different points on different continua. There are implicational laws regarding each one of these in isolation: A speaker who accepts a sentence at distance* ***x*** *from the core along any continuum must accept any more central string* ***on the same continuum.*** *No such implications are known to hold between continua.*

2. THE EXPERIMENT

Given Hypothesis III as a baseline, then, let us ask the following question: Do speakers of English know "where" the core is? That is, since the indeterminate number of ordered continua of Hypothesis III form a space, do speakers know their location in this space? If a positive *anymore*-user accepts (5c), does (s)he realize that this is more "liberal," so to speak, than speakers who only accept (5a) and (5b), or only (5a)? Conversely, does someone who accepts only (5a) realize that (s)he is more "conservative" than speakers who accept more of the sentences in (5)?

A second issue, possibly unrelated, which I wished to gather information on, was the problem of confidence. Subjectively, I have often noted that my judgements about sentences vary from cases in which I can assess a sentence as being either a 1 or a 4 without (much) hesitation or uncertainty, to other cases in which I am very dubious about the accuracy and repeatability of my assessments. I wanted, therefore, to study how judgements of confidence would interact with those of liberality and those of grammaticality.

To attempt to answer these questions, I elicited judgements from a small group of speakers, gathered at a seaside location which shall remain nameless. The questionnaire that I used, slightly rearranged for greater clarity, and minus some typos, appears in the Appendix. In the time between the initial elicitation and now, I also subjected various (former?) friends to this questionnaire. The results, in which the names of the respondents are partially cloaked in the anonymity of initials, are given in (8).

(8)

			The doctor is sure	Under no circumstances	Talked about	We don't believe	The fact Ø	The idea Ø	He touch	Nobody is here S_1 S_2	All the further	Nobody S_1 is here S_2	Writable down	And
SG	L	−2.83	2+L	1+M	1+L	2+L	2+L	3+L	1+L	2+L	4+L	3+L	4+M	3+L
JR	L	−2.42	1+M	1+L	10L	30C	3+M	20L	1−L	1+M	3+M	20L	20L	4+M
JS	L	−2.33	1+M	2+M	1+M	1+M	1+M	1+M	1+M	1+M	20L	20L	2+L	10L
MD	L	−2.25	1−L	1+L	2+M	1+M	3+M	30M	1+M	3+L	3+M	30M	40M	3+M
WL	M	−2.08	1+M	1+M	2/L	20M	2+M	20M	30M	3−M	2−M	20M	30L	4+M
DK	C	−2.00	1+M	1+M	1+M	1+M	2+C	3+M	1+M	2+M	10M	3+M	2+M	1+L
CF	M	−1.91	1+M	1+M	10M	10M	1/M	10M	2−C	30C	2−L	30C	2+L	4+M
CJF	M	−1.83	1+M	1+M	2+M	1+M	1+M	1+M	2+C	20M	2+M	3+M	4+C	4+M
PMP	C	−1.75	1+M	1+M	1+M	1+M	1+M	1+M	1+M	1+M	2+C	2+C	4+M	4+M
PF	L	−2.25	1+M	1+M	1+M	1+M	1+M	1+M	2+M	1+L	4−M	2+L	2.5−M	30L
LF	M	−2.00	1+M	1−M	1+M	1+M	2+C	2+M	1+M	2+M	2+M	1+L	2+M	4+M
JG	C	−1.75	1+C	1+M	3+C	3+M	2+M	30L	3+M	4+C	2+C	4+M	4+M	4+M
UQ	C?	−1.64	1+M	10L	2+C	1+M	30M	30M	2+C	20C	3+C	4+/	4/	4+M
MB			1+/	20/	30/	1+/	10/	30/	3+/	20/	4+/	4+/	3+/	4+/
EL			1+/	3−/	20/	1+/	2+/	3//−	3//	30/	4//	4+/	3//	3−/
RD	L	−2.42	1+L	1+L	1+L	3+C	1.5+M	1+L	2+M	2+L	3+C	2+L	1.5+L	1.5+M
RE	L (Sp) / C (W)	−2.42	1+L	20L	20L	30M	20L	2+L	20M	3+M	3+L	4+C	3+L	4+C
HG	L / M	−2.25	1+M	1+L	2+M	10M	2+L	20C	30L	3−L	30L	3+C	30C	3+L
JK	L(somewhat)	−2.25	20M	2+M	1+M	2+M	1+L	20M	3+C	3+L	3+M	3+L	3+L	4+M
CH	C	−2.17	10L	1+M	2+C	1+L	20L	3+C	2+L	3+M	3+C	3+L	4+L	3+C
MY	L	−2.08	1+L	1+L	2+M	1+L	2+M	2+L	20M	30C	2+M	30M	4+C	20C
HW	/	−2.00	1+M	1+M	10M	40C	1+M	1+M	1+L	3+M	2+M	3+M	3+M	4+M
JL	C	−1.92	1+M	1+M	20C	20C	10L	20M	1+L	20C	3+M	3+M	3+M	4+M
JC	C	−1.50	1+M	1+M	1+M	1+M	2+C	2+C	3+C	3+C	3+M	3+C	3+C	3+M
HJ	C	−1.50	1+M	1+M	2+C	10M	1+M	1+M	3+C	3+C	3+C	3+C	3+C	4+M
DS	C	−1.42	1+M	2+C	2+M	1+M	2+C	2+C	3+C	4+C	2+M	3+C	4+C	4+M
KP	C	−1.42	1+M	1+M	1+M	3+C	3+C	20C	1+M	4+C	2+C	2+C	30M	3+C
AG	L?	−1.25	1+/	1+/	20C	20/	1+/	20C	30C	3//	3+C	3+/	30C	20L
TG	L	−2.27	1+M	1+M	40L	20M	3+M	20L	1+C	4−C	4+L	3//	3−L	4+L
IJ	C	−1.67	1+M	1+M	20C	1+M	20C	2+M	4+M	3+C	4+M	3+C	4+M	4+M

(9)

		Rating	2a + b − c − 2d	Confidence	a − b − c	Liberality
CORE	10. *The doctor is sure*	28/2/0/0	+58	27/2/1	+24(90%)	6/20/1
	1. *under no circumstances*	24/5/1/0	+52	25/3/2	+20(83%)	7/19/1
	8. *talked about*	13/14/2/1	+36	19/10/0	+9(66%)	6/15/7
	3. *We don't believe*	18/6/5/1	+35	20/10/0	+10(67%)	3/19/5
	4. *the fact Ø*	11/14/5/0	+31	23/6/0	+17(79%)	6/13/7
	12. *the idea Ø*	7/15/8/0	+21	16/13/0	+3(59%)	7/15/6
	6. *he touch*	11/8/10/1	+18	22/5/2	+15(76%)	6/13/9
	9. *Nobody is here S_1 S_2*	4/8/14/4	− 6	19/7/3	+9(66%)	6/10/11
	7. *All the further*	1/11/12/6	−11	23/3/3	+17(79%)	6/14/8
	2. *Nobody S_1 is here S_2*	1/7/18/4	−17	23/6/0	+17(79%)	8/8/10
	13. *writable down*	1/6/13/10	−25	20/6/2	+12(71%)	9/11/7
FRINGE	5. *and*	3/2/8/17	−34	25/4/1	+20(84%)	7/17/4

The sentences are arranged in the matrix from left to right in order of decreasing average grammaticality. I have repeated this listing from the top down in (9), where the number preceding each sentence corresponds to its number on the questionnaire.

In the second column of (9) is indicated the number of 1s, 2s, 3s, and 4s that each sentence received from all 30 subjects. Thus the indication "18/6/5/1" in the fourth line of (9) indicates that the third sentence of the questionnaire, *We don't believe the claim that Jimson ever had any money*, was given eighteen 1s, six 2s, five 3s, and one 4. In order to rank the sentences, the formula in the third column was used, where a–d designate the number of 1s, 2s, 3s, and 4s. Thus for the third sentence, a = 18, b = 6, c = 5, and d = 1, yielding a rating 2(18) + 6 − 5 − 2(1) = 35.

The fourth column of (9) gives the sum of the confidence scores, with the first number giving the number of 'pretty sure' votes, the second giving the number of 'middling' votes and the third giving the number of 'pretty unsure' votes.

The fifth column of (9) gives two indices of overall confidence. The first is a simple subtraction of the middlings or pretty unsures from the number of pretty sures, and the parenthesized percentage to its right gives the ratio of 'pretty sure' judgements to all judgements, for a given sentence. Thus the ratio of 'pretty sure' respondents for the sixth questionnaire sentence, *I urge that anything he touch be burned*, is 22/29, or 76%.

The notation used in this matrix is as follows. In each cell of the matrix, there will usually be 3 symbols: a number, from 1 to 4, giving the perceived degree of acceptability,[1] a "+," a "0," or a "−," corresponding to the degree of confidence [pretty sure, middling, and pretty unsure, respectively], and one of L, M, or C, designating "liberal," "middle of the road," and "conservative," respectively. Some answers did not include indications of confidence or liberality; in such cases, I have written "/."

[1] In some cases, respondents used intermediate values of grammaticality, namely 1.5, and 2.5. For the purposes of this study, I have simplified by scoring both of these as 2s.

Finally, the rightmost column of (9) gives the total numbers of liberal/middle of the road/conservative responses for each of the tested sentences.

Returning again to the matrix in (8), I hope the rationale for ordering the columns has become clear.[2] Let us turn now to the ordering of the rows.

First of all, I have drawn three lines between the top 15 and the bottom 15 rows, to separate linguists from normal people. There are, as will become clear, significant differences between these two subgroups.[3] Second, I have divided, by means of heavy lines, each of these two subgroups up into native speakers of American English and non-native speakers.[4]

Thus the four groups are: 9 native linguists, 6 non-native linguists, 13 native normals, and 2 foreign normals.

Following each person's initials appears a capital L, M, or C, which indicates whether the person described himself or herself as basically liberal, middle of the road, or conservative.

Following this is a decimal which represents an index of liberality. This is arrived at by the formula shown in (10),

$$(10) \qquad \frac{3a + 2b + c}{N}$$

where a,b, and c are the number of Ls, Ms and Cs that an informant has marked on the questionnaire. For example, since the liberality score of CF is 2/6/3, the index computation is as shown in (11).

$$(11) \qquad \frac{3(2) + 2(6) + 1(3)}{11} = \frac{6 + 12 + 3}{11} = \frac{21}{11} = 1.91$$

To give some intuitive idea of what this index means, supposing that some subject had answered a test with 3 questions and had judged one response liberal, one middle-of-the-road, and one conservative. In such a case, the index would yield 2.00, as shown in (12).

[2]I have omitted from discussion the results of the eleventh questionnaire sentence, where some additional questions, of a semantic kind, were asked, because the variation among the respondents was so overwhelming as to defy analysis. As far as I have been able to ascertain, almost all speakers liked at least one version of one of the sentences, but all three meanings were ascribed to them—50%, approximately, were for meaning (i), with the other 50% splitting more or less evenly between meanings (ii) and (iii). With the exception of one pair of informants, whose answers were the same, and of one trio, whose answers were also identical among themselves, no others of the 24 respondents gave the same judgements.

[3]In some cases; my decision as to whom to call a linguist may have been erroneous, in one way or the other. Please do not be offended if you are a linguist and have been called a normal speaker, or *vice versa*. Whatever errors I have made here simply reflect my insufficient familiarity with the work of my informants. I would never knowingly accuse someone of being normal (or a linguist).

[4]The same apologies as in Footnote 3 apply here.

$$(12) \qquad \frac{3(1) + 2(1) + 1(1)}{3} = \frac{6}{3} = 2.00$$

If the subject had given 2 liberal responses, and one conservative one, the index would be 2.33, as shown in (13).

$$(13) \qquad \frac{3(2) + 2(0) + 1(1)}{3} = \frac{7}{3} = 2.33$$

And if the subject had given two conservative responses, and one liberal one, the index would be 1.67, as shown in (14)

$$(14) \qquad \frac{3(1) + 2(0) + 1(2)}{3} = 1.67$$

Thus indices of above 2 indicate a predominance of liberal responses, while indices below 2 indicate a predominance of conservative responses.

A final note about (8): In 7 instances, I have enclosed an L or a C in a box, which is an indication that I believe that the respondent has made a confused response. A score of 1 and C, for example, would mean "I rate this sentence perfect, but I am conservative, and most people rate it even more highly." Similarly, 4 and L would mean "while I find this string hopeless, impossible to understand, and word-salad, I am much more liberal than most of my fellow speakers of English, who find it even worse."

Such judgements were probably in error, and it is reassuring to note that with the exception of TG, who has four such uninterpretable judgements, the other 3 cases are few and far between. This suggests that most informants have probably been able to at least understand the task involved in assigning Ls, Ms, and Cs. Whether or not they have been able to carry out this task is a different story, to which I will return below.

3. THE RESULTS

Clearly (I would imagine), English does not exist independently of those who speak it. If, as Hypothesis III claims, a natural language is an n-space, defined by an indeterminate number of axes radiating outward from a core, then these axes are defined on the basis of the implicationally arranged responses of speakers, who are the points of the n-space. Thus the space and the people in it define each other, and it is hard to talk about either in isolation.

Nonetheless, we must begin somewhere, whether it be with chicken or with egg, so let me fairly arbitrarily pick the sentences to talk about first.

3.1. The Sentences

3.1.1. The Geography of Grammaticality

There are three reasons to see the sentences as falling into 3 broad groups: *a core*, represented by the leftmost two or three (or possibly four) columns of (8); *a fringe*, represented by the rightmost two, or possibly three, columns; and *a bog*, between the core and the fringe. The three reasons are confidence, variation, and lack of conservatism.

In each of these areas, we find that though the bog, the area receiving 2s and 3s, on the average, lies by grading *between* the core and the fringe, the bog does not intervene between them with respect to the three parameters of confidence, variation and lack of conservatism. For them, the ordering is not core-bog-fringe, but rather core-fringe-bog.

Let us look at the reasons in turn. Taking confidence first, we see that the topmost sentence in (9), Sentence 10, has the highest confidence rating—90%, followed by the lowest sentence, Sentence 5, at 84%, with the second core sentence, Sentence 1, being in third position with 83%. I would be happy if I could report a monotonic decline to the nadir of the bog, Sentence 12, at 59%, followed by a monotonic climb in confidence as one proceeds towards the fringe. However, the facts don't seem to be that way: There are lots of hills and valleys *en route*.

Let us turn next to variability. If there were total agreement on any sentence, all 30 informants would have given it a 1, or a 3, or whatever. Sentence 10 comes closest to this ideal, with Sentence 1 close behind. In other words, there is very little variation on the grading for the core: English speakers know a good sentence when they hear one.

But let us ask what a maximally disagreeing set of judgements would look like. It is easy to conceive of the result: Each grade would have an equal number of adherents, namely 7.5. Such a sentence would receive 7.5 1s, 7.5 2s, 7.5 3s, and 7.5 4s. No sentence attains this ideal (I had no half-informants among the test subjects in any case), but Sentence 6 comes closest, possibly, to it.

As a way of getting a handle on disagreement, consider the following measure: In the ideal case, any two adjoining grades (i.e., 1s and 2s, or 2s and 3s, or 3s and 4s) would receive 7.5 + 7.5 = 15 adherents. So *the lowest sums of adjoining grades* should be looked at, for each sentence. This I have done in (15).

Here again, we see the core with the lowest sum, that is, least variation, the fringe with the next largest amount of variation, and a more or less monotonic rise towards the center of the bog, and a monotonic fall towards the fringe.

If we take the sums of *any* 2 grades, not requiring that they be adjacent, the results are similar: cf. (16).

This latter measure is the one we are looking for, for the maximum

(15)

Sentence	Grade profile	Lowest adjoining grades	Sum
10. *doctor*	28/2/0/0	0 + 0	0
1. *circumstances*	24/5/1/0	1 + 0	1
8. *talked*	13/14/2/1	2 + 1	3
3. *believe*	18/6/5/1	5 + 1	6
4. *fact*	11/14/5/0	5 + 0	5
12. *idea*	7/15/8/0	8 + 0	8
6. *he touch*	11/8/10/1	10 + 1	11
9. *here* S_1 S_2	4/8/14/4	4 + 8	12
7. *further*	1/11/12/6	1 + 11	12
2. *here* S_2	1/7/18/4	1 + 7	8
13. *writable*	1/6/13/10	1 + 6	7
5. *and*	3/2/8/17	3 + 2	5

(16)

Sentence	Two lowest numbers of grades	Sum
10. *doctor*	0 + 0 =	0
1. *circumstances*	1 + 0 =	1
8. *talked*	2 + 1 =	3
3. *believe*	5 + 1 =	6
4. *fact*	5 + 0 =	5
12. *idea*	7 + 0 =	7
6. *he touch*	8 + 1 =	9
9. *here* S_1S_2	4 + 4 =	8
7. *further*	1 + 6 =	7
2. *here* S_2	1 + 4 =	5
13. *writable*	1 + 6 =	7
5. *and*	3 + 2 =	5

possible sum that the two lowest numbers could attain would be 15—that would be in the case of 7.5 7.5 7.5 7.5. So as the sum rises in (16), the amount of disagreement also rises, reaching a peak for sentence 6, the center of the bog. And again the sum is smallest at the core, intermediate at the fringe, and largest in the bog.

One other point remains to be made with respect to the distribution of the grades, an observation which is in a way the opposite of the distribution of variation among the sentences of the sample. Notice how the grades *clump*, that is, how it is almost always the case that the two most frequently assigned grades for a given sentence are adjacent. This can be seen in (17), where for each sentence, the two most frequent grades are in boldface type. The percentages under the slash marks indicate the proportion of the grades that is accounted for by the sum of the two numbers on both sides of the slash. Thus the notation

13/ 14 / 2 / 1
90%53%10%

after sentence 8 in (17) indicates that 13+14=27 is 90% of the 30 grades given, that 14+2=16 is 53%, and that 2+1=3 is 10%. Thus another way to see how variation increases in the bog is to observe how the highest percentage we find under any slash mark decreases, towards a theoretical minimum of 50%, towards the middle of (17).

(17)

Sentence	Grade profile
10. *doctor*	**28** / **2** / 0 / 0 100% 7% 0%
1. *circumstances*	**24** / **5** / **1** / 0 97% 20% 3%
8. *talked*	**13** / **14** / 2 / 1 90% 53% 10%
3. *believe*	**18** / **6** / 5/ 1 80% 37% 20%
4. *fact*	**11** / **14** / 5 / 0 83% 63% 16%
12. *idea*	7 / **15** / **8** / 0 74% 77% 27%
6. *he touch*	**11** / 8 / **10** / 1 64% 60% 37%
9. *here* S_1 S_2	4 / **8** / **14** / **4** 40% 70% 60%
7. *further*	1 / **11** / **12** / 6 40% 77% 60%
2. *here* S_2	1 / **7** / **18** / **4** 27% 83% 74%
13. *writable*	1 / 6 / **13** / **10** 23% 63% 77%
5. *and*	3 / 2 / **8** / **17** 16% 67% 83%

What interests me about the general adjacency of boldface numbers in the grade profiles of (17) is that there is only one (weak) counterexample to it—Sentence 6. I would have expected to see profiles like 15/0/0/15 (or in general, A/0/0/B, where A+B=30) showing up—these would be examples of dialect differences. I had thought that Sentence 7 would turn out to be a sentence that was either known to a respondent or hopeless, but this was not the case, as the 1/11/12/6 profile shows. Possibly a better example would be the Boston (and elsewhere?)-ese Invisible Negative, as seen in (18a)–(18c), which mean the same thing as (19a)–(19c), respectively.

(18) a. *You make good pizza, and so don't Ed's folks.*
b. *Fred's working right now, and so is Jane.*
c. *You could have helped me, and so couldn't he.*

(19) a. *You make good pizza, and so do Ed's folks.*
b. *Fred's working right now, and so is Jane.*
c. *You could have helped me, and so could he.*

These sentences usually occasion (sometimes polite) disbelief when they are mentioned to linguist acquaintances, and their meaning is mysterious to anyone who doesn't know the rule. Maybe this would be a true case of A/0/0/B [or A/0/B/0, or (less likely) 0/A/0/B]. At any rate, other sets of sentences should be tested, to find out whether the general adjacency of most frequent guesses which we observe in (17) is only due to a skew in the sentences that I chose to test, or whether it is in fact generally true, for any set of sentences. If it were to be true, the consequences for our understanding of the nature of speech communities would doubtless be profound, but unguessable at present. We had better speculate about that bridge when we get to it.

To recapitulate somewhat, for I have discursed, we have seen above how the ordering core-fringe-bog seems to be forced upon us by two factors: confidence, to some extent, and variability, to a greater extent. Let us now turn to the third factor, lack of conservatism.

As can be seen in the liberality column of (9), the "C" judgements (the numbers to the right of the second slash) start with a low of 1 in the core, rise (not quite monotonically) to a high of 11, in Sentence 9, and sink again (pretty close to monotonically) to 4 at the fringe. We of course expect there to be fewer Cs in the core than on the fringe (because of the uninterpretability of "1C" judgements, which was noted above), and we expect fewer Ls on the fringe than in the core (because of the uninterpretability of "4L" judgements). But note that a subject could easily give Sentence 10, the best sentence in (9), a "2," "3," or "4," and also, correctly perceiving himself or herself to be more conservative, a "C." Similarly for "1L," "2L," or "3L" judgements on the fringe. But note the asymmetry here between L and C judgements: At the core, there are 6 Ls for Sentence 10, and 7 for Sentence 1; at the fringe, there are 7 Ls for Sentence 5. The number of L judgements stays between 6 and 7 for most of the sentences checked—a strange result, in my opinion, but one which may not be statistically significant.

I have summarized the discussion above in the table in (20)

(20) The Regions of English

		The Core	The Bog	The Fringe
a.	Average grammaticality	Highest	Medium	Lowest
b.	Confidence	Highest	Lowest	Medium
c.	Variation between speakers	Lowest	Highest	Medium
d.	Incidence of conservative judgements	Lowest	Highest	Medium

I have no explanation for the contiguity of core and fringe that we have seen. It is reminiscent, however, of a commonly observed tendency, for a number of psychological tasks, for the extremes of a continuum to be more salient than the middle. For instance, if a subject is asked to repeat a sufficiently long sequence of numbers, the memory will be best at the beginning of the sequence, next best at the end, and worst in the middle. Similarly, in Brown and McNeill (1966), subjects who had a word "on the tip of their tongue(s)" were studied, to see what phonetic properties of the word in question were known (beginning sound, number of syllables, etc.). It was again found that the memory was most accurate for the beginning of a word, next best for the end, and worst for the middle. To quote from George Miller a *bon mot* that describes this general state of affairs,

(21) *The mind sags in the middle.*

Since it is unclear to me how to go about proving that (20) should be subsumed under (21), I must leave this issue unresolved for the moment.

3.1.2. *Covariations*

The next area that I wish to report on I know so little about that I might best pass over it in silence, were it not for its importance. I refer to the issue of covariation: How do the three factors of grammaticality, confidence and liberality correlate?

Though my ignorance of statistics is almost total, I do know that there are statistical measures of correlatedness. Unfortunately, I do not know how to apply them, and I have not been able to work with a statistical informant. Thus I will be using home-brew indices, groping for ways to indicate covariation. My hope is that if any of the correlations I have come across in this pilot study prove to be interesting, future studies, based on less haphazardly arrived at data, and treated with less statistical naiveté, can provide them with a solid statistical footing.

With this caveat, I will describe the procedure I followed to try to come to grips with the interactions of these three variables. First, I wanted to find the average distribution of the four indices of grammaticality, 1–4 (which I will sometimes refer to as grades), over all speakers. This distribution, broken down by groups, appears in the matrix in (22), where each cell gives the total number of occurrences of one grade for some group of subjects, with a percentage figure to its right giving the proportion of the total number of grades given by this group that the number of grades represents.

(22) The Distribution of Grammaticality Judgements

	1s	2s	3s	4s	Total number of grades
Linguistics					
Native	46 (43%)	32 (30%)	20 (19%)	10 (9%)	108
Foreign	23 (32%)	17 (24%)	19 (26%)	13 (18%)	72
Total linguists	69 (38%)	49 (27%)	39 (22%)	23 (13%)	180
Normals					
Native	44 (28%)	47 (30%)	52 (33%)	13 (8%)	156
Foreign	6 (25%)	5 (21%)	5 (21%)	8 (33%)	24
Total normals	50 (28%)	52 (29%)	57 (32%)	21 (12%)	180
Total all	119 (33%)	101 (28%)	96 (27%)	44 (12%)	360

In (23) and (24), I have given the same breakdown for the variables of confidence and liberality, respectively.

(23) The Distribution of Confidence Judgements

	Pretty sure ("+")	Middling ("0")	Pretty unsure ("−")	Blank ("/")	Total
Linguists					
Native	77 (73%)	23 (22%)	6 (6%)	2	108
Foreign	49 (73%)	13 (19%)	5 (7%)	5	72
Total linguists	126 (73%)	36 (21%)	11 (6%)	7	180
Normals					
Native	120 (77%)	34 (22%)	1 (1%)	1	156
Foreign	16 (70%)	5 (22%)	2 (9%)	1	24
Total normals	136 (76%)	39 (22%)	3 (2%)	2	180
Total all	262 (75%)	75 (21%)	14 (4%)	9	360

(24) The Distribution of Liberality Judgements

	Liberal ("L")	Middle of the road ("M")	Conservative ("C")	Blanks	Total
Linguists					
Native	28 (26%)	69 (64%)	10 (9%)	1	108
Foreign	6 (13%)	31 (66%)	10 (21%)	25	72
Total linguists	34 (22%)	100 (65%)	20 (13%)	26	180
Normals					
Native	38 (25%)	62 (41%)	50 (33%)	6	156
Foreign	5 (22%)	12 (52%)	6 (26%)	1	24
Total normals	43 (25%)	74 (53%)	56 (23%)	7	180
Total all	77 (24%)	174 (53%)	76 (23%)	33	360

I now focus on the following type of questions. Given that the overall distribution of grades is 33% | 28% | 27% | 12%, as we see in (21), is this distribution changed when we look only at sentences which received "L" judgements? Or "M" judgements? Or "C", or "+" or any other judgements we may wish to specify?

The answer to the questions involving liberality I have given in (25).

(25)

	Number of	Distribution of grades 1s 2s 3s 4s	
a.	L judgements = 77	27 /27 /18 / 5 35%/35%/23%/ 6% ∨ ⩓	= 77
	Overall distribution of grades:	33%/28%/27%/12%	
b.	M judgements = 174	81 /39 /31 /23 47%/22%/18%/13% ⩔ ∧ ∧	= 174
	Overall distribution of grades:	33%/28%/27%/12%	
c.	C judgements = 76	2 /30 /34 /10 3% 39% 45%13% ⩓ ∨ ∨	= 76
	Overall distribution of grades:	33%/28%/27%/12%	

In other words, the greatest difference between the overall grade distribution and the grade distribution among L-judged sentences is that the number of 4s is halved, from 12% overall to 6% with L, a result which we expect, given the abovementioned uninterpretability of "4L" judgements. The next greatest difference when we restrict our attention to L-judged sentences is the 35% versus 28% contrast in the distribution of 2s. For each comparison, I have indicated the greatest percent change with a doubled and rotated inequality sign, "⩓" or "⩔", and the next greatest with a single inequality sign, sometimes citing two, if they seem large.

Since the proportion of 2s increases with Ls, I will say that L *works for* 2; since the proportion of 4s decreases, I will say the L *works against* 4. And since the increase from 28% to 35% for 2s is an increase of 25%, while the decrease of 12% to 6% is a decrease of 50%, I will use these latter two percentages as an index of the amount of "work" that L does for/against 2. In (26), then, we see a reduced version of (25), with indications of the major influences of liberality on grades.

In (27) and (28), which parallel (25) and (26), I have tabulated the influence of confidence on grammaticality.

In the next two tables, I have charted the influence of liberality on confidence.

Before attempting to summarize the data below, we must, it seems to me, ask the reverse questions. That is, while we have seen, in (25a), that there are more 2s (and fewer 4s) among Ls than in the whole population, is

(26) The Influence of Liberality on Grammaticality

a.	i.	L *works for*	2 ↑ 25%	(28% versus 35%)
	ii.	L *works against*	4 ↓ 50%	(12% versus 6%)
b.	i.	M *works for*	1 ↑ 40%	(33% versus 47%)
	ii.	M *works against*	3 ↓ 33%	(27% versus 18%)
	iii.	M *also works against*	2 ↓ 21%	(28% versus 22%)
c.	i.	C *works for*	3 ↑ 66%	(27% versus 45%)
	ii.	C *also works for*	2 ↑ 39%	(28% versus 39%)
	iii.	C *works against*	1 ↓ 91%	(33% versus 3%)

(27)

	Number of	Distribution of grades 1s 2s 3s 4s	
a.	+ judgements = 262	102 /60 /63 /37 39%/23%/24%/14% ⩔ ∧	= 262
	Overall distribution of grades	33%/28%/27%/12%	
b.	0 judgements = 75	13 /36 /23 / 3 17%/48%/31%/ 4% ∧ ⩔ ∧	= 75
	Overall distribution of grades	33%/28%/27%/12%	
c.	− judgements = 14	3 / 4 / 5 / 2 21%/29%/36%/14% ⩓ ∨	= 14
	Overall distribution of grades	33%/28%/27%/12%	

(28) The Influence of Confidence on Grammaticality

a.	i.	+ *works for*	1 ↑ 18%	(33% versus 39%)
	ii.	+ *works against*	2 ↓ 18%	(28% versus 23%)
b.	i.	0 *works for*	2 ↑ 71%	(28% versus 48%)
	ii.	0 *works against*	4 ↓ 66%	(12% versus 4%)
	iii.	0 *also works against*	1 ↓ 48%	(33% versus 17%)
c.	i.	− *works for*	3 ↑ 33%	(27% versus 36%)
	ii.	− *works against*	1 ↓ 36%	(33% versus 21%)

it also true that among all 2s, there are more Ls? And that among all 4s, there are fewer Ls? That is, do L and 2 covary positively, and L and 4 negatively?

The last six tables, (25)–(30), investigated the influence in one direction; the next six contain corresponding information on the opposite implications.

In order to show the focus of the interaction of liberality and grammaticality, I have collapsed all of the influences shown in (26) and (32) in (37); braces group paired influences, and the sectioning into (37a)–(37c) groups all L interactions, then all M ones, then all C ones.

(29)

	Number of	Distribution of confidence judgements +'s 0's −'s	
a.	L judgements = 77	50 /22 / 5 64%/29%/ 6% ^ v ⩛	= 77
	Overall distribution of +/0/−	75%/21%/ 4%	
b.	M judgements = 174	143 /26 / 5 82%/15%/ 3% v ⩚ ^	= 174
	Overall distribution of +/0/−	75%/21%/ 4%	
c.	C judgements: 76	56 /18 / 2 74%/24%/ 3% v ⩚	= 76
	Overall distribution of +/0/−	75%/ 21% 4%	

(30) The Influence of Liberality on Confidence

a.	i. L *works for*	− ↑	50% (4% versus 6%)
	ii. L *also works for*	0 ↑	38% (21% versus 29%)
	iii. L *works against*	+ ↓	15% (75% versus 64%)
b.	i. M *works for*	+ ↑	9% (75% versus 82%)
	ii. M *works against*	0 ↓	29% (21% versus 15%)
	iii. M *also works against*	− ↓	25% (4% versus 3%)
c.	i. C *works for*	0 ↑	14% (21% versus 24%)
	ii. C *works against*	− ↓	25% (4% versus 3%)

(31)

	Number of	Distribution of liberality judgements L / M / C	Blank
a.	1s = 119	27 /81 / 2 25%/74%/ 2% v ⩚	9 = 119
	Overall distribution of L/M/C	24%/53%/23%	
b.	2s = 101	27 /39 /30 28%/41%/ 31% ^ v	5 = 101
	Overall distribution of L/M/C	24%/53%/23%	
c.	3s = 96	18 /31 /34 22%/37%/41% ^ v	13 = 96
	Overall distribution of L/M/C	24%/53%/23%	
d.	4s = 44	4 /25 / 9 11%/66%/24% ⩚ v	6 = 44
	Overall distribution of L/M/C	24%/53%/23%	

(32) The Influence of Grammaticality on Liberality

a.	i. 1 *works for*	M ↑	41% (53% versus 74%)
	ii. 1 *works against*	C ↓	91% (23% versus 2%)
b.	i. 2 *works for*	C ↑	34% (23% versus 31%)
	ii. 2 *works against*	M ↓	23% (53% versus 41%)
c.	i. 3 *works for*	C ↑	78% (23% versus 41%)
	ii. 3 *works against*	M ↓	30% (53% versus 37%)
d.	i. 4 *works for*	L ↑	25% (53% versus 66%)
	ii. 4 *works against*	M ↓	54% (24% versus 11%)

(33)

	Number of	Distribution of confidence judgements + /0 /−	Blank
a.	1s = 119	102 /13 / 3 86%/11%/ 3% v ⩚ ^	1 = 119
	Overall distribution of +/0/−	75%/21%/ 4%	
b.	2s = 101	60 /36 / 4 60%/36%/ 4% ^ v	1 = 101
	Overall distribution of +/0/−	75%/21%/ 4%	
c.	3s = 96	64 /22 / 5 70%/24%/ 5% ^ v ⩛	5 = 96
	Overall distribution of +/0/−	75%/21%/ 4%	
d.	4s = 44	37 / 3 / 2 88%/ 7%/5% v ⩚ v	2 = 44
	Overall distribution of +/0/−	75%/21%/ 4%	

(34) The influence of Grammaticality on confidence

a.	i. 1 *works for*	+ ↑	15% (75% versus 86%)
	ii. 1 *works against*	0 ↓	48% (21% versus 11%)
	iii. 1 *also works against*	− ↓	25% (4% versus 3%)
b.	i. 2 *works for*	0 ↑	71% (21% versus 36%)
	ii. 2 *works against*	+ ↓	20% (75% versus 60%)
c.	i. 3 *works for*	− ↑	25% (4% versus 5%)
	ii. 3 *also works for*	0 ↑	14% (21% versus 24%)
	iii. 3 *works against*	+ ↓	7% (75% versus 70%)
d.	i. 4 *works for*	− ↑	25% (4% versus 5%)
	ii. 4 *also works for*	+ ↑	17% (75% versus 88%)
	iii. 4 *works against*	0 ↓	67% (21% versus 7%)

(35)

Number of	Distribution of liberality judgements: L / M / C	Blank
a. + judgements = 262	49 /143 /55 20%/58%/22%/	15 = 262
Overall distribution of L/M/C	24%/53%/23%	
b. 0 judgements = 75	22 /26 /19 33%/39%/28%	8 = 75
Overall distribution of L/M/C	24%/53%/23%	
c. − judgements = 14	5 / 5 / 2 42%/42%/ 17%	2 = 14
Overall distribution of L/M/C	24%/53%/23%	

(36) The Influence of Confidence on Liberality

a.	i. + *works for*	M	↑ 9%	(53% versus 58%)
	ii. + *works against*	L	↓ 17%	(24% versus 20%)
b.	i. 0 *works for*	L	↑ 38%	(24% versus 33%)
	ii. 0 *also works for*	C	↑ 22%	(23% versus 28%)
	iii. 0 *works against*	M	↓ 26%	(53% versus 39%)
c.	i. − *works for*	L	↑ 75%	(24% versus 42%)
	ii. − *works against*	M	↓ 26%	(53% versus 42%)
	iii. − *also works against*	C	↓ 26%	(23% versus 17%)

(37) The Interaction of Liberality and Grammaticality

		For	Against
a.		L 2 ↑ 25%	{L 4 ↓ 50% 4 L ↓ 54%}
b.	i.	{M 1 ↑ 40% 1 M ↑ 41%}	{M 3 ↓ 33% 3 C ↓ 30%}
	ii.	4 M ↑ 25%	{M 2 ↓ 21% 2 M ↓ 23%}
c.	i	{C 3 ↑ 66% 3 C ↑ 78%}	{C 1 ↓ 91% 1 C ↓ 91%}
	ii.	{C 2 ↑ 39% 2 C ↑ 34%}	

In (38) and (39) appear tables like (37) which show how confidence and grammaticality interact, and how liberality and confidence interact, respectively.

(38) The Interaction of Confidence and Grammaticality

	For	Against
a.	{+ 1 ↑ 18% 1 + ↑ 15%}	{+ 2 ↓ 18% 2 + ↓ 20%}
	4 + ↑ 17%	3 + ↓ 7%
b.	{0 2 ↑ 71% 2 0 ↑ 71%}	{4 0 ↓ 66% 0 4 ↓ 67%}
	3 0 ↑ 14%	{1 0 ↓ 48% 0 1 ↓ 48%}
c.	{− 3 ↑ 33% 3 − ↑ 25%}	{1 − ↓ 36% − 1 ↓ 25%}
	4 − ↑ 25%	

(39) The Interaction of Liberality and Confidence

	For	Against
a.	{L − ↑50% − L ↑75%}	{L + ↓15% + L ↓17%}
	{L 0 ↑38% 0 L ↑38%}	
b.	{M + ↑ 9% + M ↑ 9%}	{M 0 ↓29% 0 M ↓26%}
		{M − ↓25% − M ↓26%}
c.	{C 0 ↑14% 0 C ↑22%}	{C − ↓25% − C ↓26%}

Finally, since it is still somewhat difficult to see the main outlines of (37)–(39), I have condensed these three into a single table, (40), in which only the stronger interactions are highlighted. To estimate the strength of a pair of interactions, I have given the average percentage to the right of each (unordered) pair in (40). Thus, since we see from (37c-i) that C works for 3 (↑ 66%), and also that 3 works for C (↑ 78%), in (40a), to the right of C,3 we find the average of 66% and 78%, namely 72%.

I have included in (40) two types of interactions: *strong* (average percentage > 35%), and *medium* (average percentage > 26%). The latter types are boxed, in (40). The two thresholds of 35% and 26% were chosen impressionistically, with an eye towards making (40) as perspicuous as possible.

(40) The Strongest Interactions among Liberality, Confidence and Grammaticality

		For		Against	
a.	i.	{ C, 3 }	↑ 72%	{ L, 4 }	↓ 52%
	ii.	{ M, 1 }	↑ 40.5%	{ C, 1 }	↓ 91%
	iii.			{ M, 3 }	↓ 31.5%
b.	i.	{ 0, 2 }	↑ 71%	{ 0, 4 }	↓ 66.5%
	ii.			{ 0, 1 }	↓ 48%
	iii.	{ −, 3 }	↑ 29%	{ −, 1 }	↓ 29.5%
c.	i.	{ L, − }	↑ 62.5%		
	ii.	{ L, 0 }	↑ 38%		
	iii.			{ M, 0 }	↓ 27.5%
	iv.			{ M, − }	↓ 26.5%

We have finally boiled down the data to a point where it seems possible to begin to interpret some of these patterns.

First of all, we expect the strong negative interaction in (40a-ii) between C and 1: As I have noted above, in Section 2, "1C" judgements are uninterpretable. We expect also that, since "4L" judgements are equally uninterpretable, there should be a negative correlation between L and 4, as we indeed find in (40a-i). The difference in size between these two negative interactions is surprising, to be sure: We would expect to find, with "perfect" informants, no cases of either "1C" or "4L" judgements. We note from (8) that one informant, TG, has contributed more of these uninterpretable judgements than all other speakers combined; if we disregard these four cases, we find in the rest of (8) 2 cases of 4L, and one of 1C, a difference that is probably due to chance.

The rest of the interactions in (40a) are harder to explain. It is, to be sure, understandable that C and 3 should work for each other, but why don't C and 4 also do so? And if C works for 3, why shouldn't we find L, the opposite of C, correlating with 2, which could be called "the opposite grade" from 3? In fact, there are no interactions between 2 and any liberality indicator, a puzzling fact, since such interactions do exist for all the other grades.

A related asymmetry is the fact that L turns up in only one interaction in (40a), while C and M turn up in two each (though one of the M ones is only of medium strength).

The correlation of 1 and M is interesting: One is tempted to say "speakers only tend to feel 'middle of the road' in the core." But this would be an incorrect interpretation of (40a-ii), which only means that speakers tend to feel "middle of the road" for *their* core, that is, when they rate a sentence perfect. The medium-strength negative correlation [in (40a-iii)] between M and 3 is puzzling: Why should speakers feel less "middle of the road" when they give a sentence a 3 than when they give it a 2 or a 4?

Turning now to the interactions in (40b), the negative correlations between 0 and 4 and between 0 and 1 are doubtless related (indirectly) to the facts summarized in (20b) above: Confidence is highest at the core, lowest in the bog. But it remains mysterious why the interactions between 0 and grades are stronger than those between − and grades. And why should 0 work so strongly for 2, and not at all for 3?

A final question about confidence: Why is there no strong correlation between + and 1? To press this last point further, why are there no correlations at all between − and any grade or any liberality score, for that matter? Is this related to the absence of correlation between L and grades that was noted above? That is, since L and + are both "positive," in some sense, does this impede correlations for some reason?

Passing on to (40c), the strong correlations are easy to interpret: The more liberally one judges a sentence, the less sure one is of one's judgement. The absence of a similar correlation for C and uncertainty suggests that speakers are aware of the existence of a core, a "region" of English in which the judgements of all speakers will be more in agreement than elsewhere, a region whose typical judgement is "1+M," the most frequent judgement in all of (8).

To sum up, some of the correlations that I have teased out of (8) seem to be related to the "geography" of English, to be in general agreement with the core-bog-fringe partitioning summed up in (20). However, many asymmetries have turned up, and if these should turn out to be statistically significant, they will require hypotheses of a presently unexplored sort for their unravelment.

3.2. The Subjects

3.2.0.

In this section, I will begin with the lengthy task of describing the differences that appear between groups of speakers. Since there are 15 linguists and 15 normals, this bifurcation will yield the best-supported conclusions. The native–foreign split is 22–8, which may be enough for statistical significance, but in the main, I will be concerned with differences that occur between linguists and normals.

I will attempt to document the four differences in (41), which I hope will turn out to be statistically significant.

(41) *As opposed to linguists,*
- a. *Normals are less unsure.*
- b. *Normals are more conservative.*
- c. *Normals are tougher graders.*
- d. *Normals make fewer distinctions between levels of grammaticality.*

A tabulation of the voting patterns of all the subjects appears in (42).

(42)

	Liberality	Liberality Index	Confidence	+ a − b − c	Grading Profiile	Grade Index 4a + 3b + 2c + d
SG	10/2/0	2.83 L	12/0/0	+12	3/4/3/2	32
JR	6/5/1	2.42 L	6/5/1	0	5/3/3/1	36
JS	4/8/0	2.33 L	9/3/0	+6	8/4/0/0	44
MD	3/9/0	2.25 L	8/3/1	+4	4/1/6/1	32
WL	2/10/0	2.08 M	4/5/2	−3	2/6/3/1	33
DK	1/10/1	2.00 C	11/1/0	+10	7/3/2/0	41
CF	2/6/3	1.91 M	4/5/2	−3	6/3/2/1	33
CJF	0/10/2	1.83 M	11/1/0	+10	5/4/1/2	37
PMP	0/9/3	1.75 C	12/0/0	+12	6/4/0/2	38
PF	3/9/0	2.25 L	9/1/2	+6	7/3/1/1	40
LF	1/10/1	2.00 M	11/0/1	+10	6/5/0/1	40
JG	1/7/4	1.75 C	11/1/0	+10	2/2/4/4	26
UQ	1/5/5	1.64 C?	7/4/0	+3	3/3/4/2	31
MB	——		7/5/0	+2	3/2/4/3	29
EL	——		4/2/2	0	2/2/6/2	28
RD	7/3/2	2.42 L	12/0/0	+12	4/6/2/0	38
RE	7/3/2	2.42 {L(Sp) C(W)}	7/5/0	+2	1/5/4/2	29
HG	6/3/3	2.25 L/M	6/5/1	0	3/3/6/0	33
JK	4/7/1	2.25 L (somewhat)	10/2/0	+8	2/4/5/1	31
CH	6/2/4	2.17 C	10/2/0	+8	3/3/5/1	32
MY	4/5/3	2.08 L	8/4/0	+4	3/6/2/1	35
HW	1/10/1	2.00 /	10/2/0	+8	6/1/3/2	35
JL	2/7/3	1.92 C	7/5/0	+2	4/4/3/1	35
JC	0/6/6	1.50 C	12/0/0	+12	4/2/6/0	34
HJ	0/6/6	1.50 C	11/1/0	+10	5/1/5/1	34
DS	0/5/7	1.42 C	12/0/0	+12	2/5/2/3	30
KP	0/5/7	1.42 C	10/2/0	+8	4/3/4/1	34
AG	1/0/5	1.25 L?	5/6/0	−1	3/4/5/0	34
TG	5/4/2	2.27 L	6/3/2	+1	3/2/3/4	28
IJ	0/8/4	1.67 C	10/2/0	+8	2/3/2/4	25

Note first of all that there is good agreement between the self-descriptions by the subjects, as to whether they are L, M, or C in general, and their indices of liberality. With the exception, among the linguists, of DK, whose index would put him among the self-styled Ms, but who styles himself a C, and among the normals, of CH, whose index is that of a liberal, but who styles himself a conservative, and of AG, who has the most conservative of all indices, yet who styles himself a liberal—with these exceptions, each of the four subgroups of (42) shows non-overlapping areas of self-stylings of L,M, and C.

I find this non-overlappingness a healthy sign, an indication that speakers do have a general notion of their own liberality, for in most cases, the overall judgement was given some time after the test had been taken, and in no case did the speakers seem to be reviewing their judgements on just these 12 sentences. Only linguists described themselves as being general middle-of-the-roaders, a surprising result, in my view. Possibly HW, a normal, whose questionnaire was incomplete, would have described himself as being in general M, since all informants whose number of Ms exceeded the sum of their Ls and Cs by 8, as his does, called themselves Ms. But if subsequent research should lead to the conclusion that normals, in fact, do not generally call themselves Ms, this may be part of the wider phenomenon of categorylessness, which I will discuss below.

3.2.1. *Confidence*

As can be seen in (23), normals voted "+" slightly more often than linguists (75% versus 73%), but voted "−" only one-third as often as linguists (2% versus 6%). There are very few −s in the whole sample, but I suspect this trend would hold up with larger data bases. The conclusion seems to be that thinking about language makes one realize how little one knows about it, and shatters one's confidence in one's own judgement. Or, to put it in the pithier words of John Lawler,

(43) *Doing syntax rots the brain.*

3.2.2. *Conservativeness*

As (24) shows, while linguists and normals are in rough agreement with respect to the percentage of liberal judgements, they differ with respect to middle-of-the-road judgements, which linguists show about 20% more of (65% versus 53%), and conservative judgements, which normals make almost twice as often as linguists (24% versus 13%).

In addition, if we inspect the liberality indices for the two groups, we see that the distribution of the Cs within subjects is different. There are 5 normals (JC, HJ, DS, KP and AG) whose indices are below the lowest index posted by a linguist, UQ's 1.64.

There is a further regularity among (almost) all subjects, a relation not visible in (40c).

(44) *All self-styled conservatives (except two: UQ and JL) are highly confident; none shows any −'s.*

That is, 80% of the self-styled conservatives had far more +'s than 0s or −'s. The reverse implication, (45),

(45) *All subjects who are highly confident style themselves as conservatives.*

has 3 exceptions: JK, whose confidence score is +8, and the two most firebrand radicals of the two groups, SG for the linguists, and RD for the normals. Is this an accident, or one of the many cases where "les extrèmes se touchent"? Without a larger sample, we can only guess.

3.2.3. *Grade Inflation*

This demon of academic life seems to have worked its tentacles even into the hallowed groves of grammaticality. We note from (22) that while linguists and normals used roughly the same number of 2s and 4s, the linguists used about 35% more 1s (38% versus 28%), and the normals used about 45% more 3s (57% versus 39%). That is, linguists tended to give sentences higher grades than normals.

The interested reader can verify that this is true not only globally, but also sentence by sentence in (8). For one sentence, *and*, the sum of linguist grades was equal to the sum of normal grades, and for 3 sentences—*circumstances*, *fact*, and *idea*—the linguists' sum was higher than the normals' sum (in the first 2 of these sentences, the difference between the sums was only one point). But for 8 of the 12 sentences, the linguists' sum was lower than the normals' sum.

Another way of seeing the average difference of grading patterns between groups of subjects is to convert the grading profile shown in (42) into a number, as shown in the rightmost column of (42), the Grade Index. This is computed from the Grading Profile by taking four times the number of 1s (a), adding to it three times the number of 2s (b), plus two times the number of 3s (c), plus one times the number of 4s (d). Thus this computation for SG yields 4(3) + 4(3) + 3(2) + 2 = 12 + 12 + 6 + 2 = 32. The highest possible score, which is almost attained by JS, would be 4(12) + 4(0) + 4(0) + 0 = 48; the lowest would be 0 + 2(0) + 3(0) + 12 = 12.

The average values of the grade Index for various groupings of subjects are shown in (46).

(46)

a.	*Average for all subjects* (30):	33.6
	i. *All native speakers* (22):	34.8
	ii. *All foreign speakers* (8):	30.1
b.	*Average for all linguists* (15):	34.7
	i. *Native linguists* (9):	36.2
	ii. *Foreign linguists* (6):	32.3
c.	*Average for all normals* (15):	32.5
	i. *Native normals* (13):	33.4
	ii. *Foreign normals* (2):	28.1

These figures show a surprising degree of regularity, and seem to be derivable from the following general hypothesis:

(47) *The more "contact" with American English, the higher will be the Grade Index.*

This accounts for the difference between all natives and all foreign speakers [(46a-i) versus (46a-ii)], the difference between native and foreign linguists [(46b-i) versus (46b-ii)], and for the difference between native and foreign normals [(46c-i) versus (46c-ii)]. Furthermore, if we assume that for someone to think metalinguistically, the stock in trade of all linguists, increases that person's "contact" with their own language (or even with all languages?), (47) can suggest an explanation for why native linguists graded higher than native normals [(46b-i) versus (46c-i)], and why foreign linguists graded higher than foreign normals [(46b-ii) versus (46c-ii)].

It begins to become obvious that "contact" is not such a clear term as might have been thought (which is why I have been enclosing it in quotes), but if we can assume that the four groups shown in (48) decrease monotonically in contact, then their average grading indices match this sequence exactly.

(48)

a.	*Native linguists*	(36.2) >
b.	*Native normals*	(33.4) >
c.	*Foreign linguists*	(32.3) >
d.	*Foreign normals*	(28.1) >

A further prediction, looking within groups, is that among the foreign linguists, PF, LF and JG, who all live within English-speaking communities, should have higher grade indices than UQ, MB, and EL, who live in Germany. This prediction is borne out:

(49)

a.	*Average Grade Index for PF, LF and JG:*	35.3 >
b.	*Average Grade Index for UQ, MB and EL:*	29.3

Furthermore, it may be significant that within the subgroups of (49), UQ has had more contact with American English than MB and EL, because she has lived in the United States for more than a year, while MB and EL have never visited the US. UQ's index is the highest of these three.

Among the subgroup in (49a), we would expect LF to have the highest index, for only she presently lives in America. While her score is not higher than those of PF and JG, at least it is not lower than either of these.

The only counterexample I can see to (47) is the fact that IJ lives in America, while TG does not, despite the fact that their indices would indicate the opposite.

I am aware, of course, that these facts can only be taken as suggestions for further checking—the numbers of subjects involved are too small for significance.

One final, intriguing, possibility suggests itself. If (47) is taken literally, it should imply that grade indices will rise with age. Since no such

hypothesis had ever occurred to me at the time I gathered the data, I did not gather age data. However, by a combination of guessing and prior acquaintanceship, I have tried to divide the two larger groups of subjects, native linguists (9) and native normals (13) into those under 35, and those over 35. There are three native linguists who I believe to be under 35 (namely SG, MD, and DK), and their average index is 35. The index of the six remaining native linguists is 36.8. Among native normals, the average index of the 6 (namely RD, CH, MY, JL, KP, and DS) who I believe to be under 35 is 34; that of the remaining 8 is 32.9. Disappointing, but it may be worthwhile to make a more detailed investigation in the future of a systematic correlation of age and grading.

3.2.4. *Categorylessness*

The last observation that I wish to make about the difference between linguists and normals is that the former seem to make fuller use of the four grades than the latter do. It would appear, if some informant returns a questionnaire which only uses grades 1, 2, and 4, that (s)he is fusing 2 categories (2 and 3? or 3 and 4?) to span the entire gamut of grammaticality. However, this may in fact be wrong—the informant may protest "I *do* make use of a category 3, but there were no examples of it among the test sentences."

I think the only way to decide this armchair dispute is to devise a sufficiently (whatever statistical sense can be made of this term) large test, so that we are sure, to reasonable confidence levels, that sentences of all grammatical types will appear on the test.

Pending the resolution of this possibly quite complex task of sampling, we should more correctly speak of "apparent categorylessness," but I will leave off the adjective, and hope that no confusion will be caused by this decision.

Before we look at the actual grading profiles, I want to suggest that we might distinguish between "having *n* categories" and "having *n* categories weakly." That is, we would all agree, I think, that an informant whose grading profile was 3/3/3/3 was fully using all four grades, and that one whose profile was 3/3/0/6 was categoryless. But what of a profile like 3/3/1/5? That is, cases where a category is used just once. Can we call this *partial*, or *near*, category loss? Of course, the same questions of data skew arise as we have discussed for category loss, but I will even-handedly disregard them in both instances.

The facts are these: There are somewhat more linguists who use a category at least twice than there are normals who do. The figures appear in (50).

(50) a. *Number of linguists who make "full use" of* 1–4: 5 (33%)

b. *Number of normals who do:* 3 (23%)

(51) Types of Categorylessness by Group

Subjects	Number of grades used: (A) All four grades used at least twice	(B) Three grades used at least twice, one used once	(C) Only three grades, all used at least twice	(D) Two grades used only once, two used at least twice	(E) One grade used at least twice	(F) Only two grades used
Linguists						
Native	1 (SG)	$2(DK_4, PMP_3)$	$4(JR_4, WL_4, CF_4, CJF_3)$	$1(MD_{2,4})$ $1(PF_{3,4})$	$1(LF_{4,3})$	$1(JS_{3,4})$
Foreign	4 (JG, UQ, MB, EL)					
Normals						
Native	1 (DS)	$4(RD_4, HG_4, AG_4, JC_4)$	$7(RE_1, JK_{4,1}, CH_4, MY_4, HW_2, JL_4, KP_4)$	$1(HJ_{2,4})$		
Foreign	2 (TG, IJ)					

When we look at the issue of partial category loss (or use), the facts are less clear. Possibly the table in (51) will help to display the data. When subscripts follow a subjects' initials, they indicate which grades are absent, or are present only once.

Surveying the subscripts, we see that it is predominantly the grade 4 that is omitted entirely (in Column C, 83% of the cases of one grade missing were 4s), or used only partially (in Column B, 73% of the "weak" grades were 4, and in all cases in which more than one grade is weak or missing, 4 is one of the two grades). 3 seems to be the next most frequently un(der)used grade, then 2, then 1. This overall asymmetry between 1 and 4 I have no explanation for.

In (50), I compared the 5 linguists who use all grades fully with the 3 normals who do, noting a small percentual difference, quite possibly a non-significant one. A much more revealing comparison, however, is that between natives and foreign speakers:

(52) *Number of subjects using all four grades at least twice:*

Natives (22)		
Linguists	1	(11%)
Normals	1	(8%)
Total	2	(9%)
Foreigners (8)		
Linguists	4	(66%)
Normals	2	(100%)
Total	6	(75%)

The obvious conclusion—that foreign speakers use the grades more fully than do natives—is given further support by the observation that among the foreign linguists, we see that the three German linguists (UQ, MB, and EL) have no category loss, while 2 of the English-speaking foreigners (PF and LF) do.

3.3. Summary

To sum up the most important points of the discussion in Sections 3.1 and 3.2, the sentences of a language seem to be viewed by speakers as falling into three groups: a core, a bog, and a fringe. Turning to the speakers, there are fairly clear differences between linguists and normals (the latter view themselves as more conservative than the former, and the latter reject more sentences, and with greater confidence, than the former do). There are also differences between native and foreign speakers, with the latter tending to reject more sentences than the former do, and also tending strongly to make fuller use of all four grades than the former do.

4. DOWNSHOT AND UPSHOT

What conclusions can be drawn from the investigations? First, let me say what can't be.

I have tried to say above, in many ways, that this research should be looked at as only a pilot study, but perhaps this point cannot be overemphasized enough. If I had the experiment to do over again, I would try to plug the following leaks:

1. I would get more speakers, enough in each group so that the variables of linguist versus normal, and native versus foreign could be studied satisfactorily. Also, I would gather data about the ages of the subjects, to check out the possibility that grade inflation might be a function of age.
2. I would include some simpler sentences, which hopefully all speakers could agree to judge as 1s—garden variety examples like *The carafe is on the giraffe* or *This furnace heats well*—as well as some more clearly hopeless strings, like *Than is* or *Either as Zonk along*, to try to rule out the possibility that there is no adequate baseline.
3. I would use sentences that differed minimally from one another in structure, or sentences whose implicational relationships had been established in previous studies, such as the hierarchically arranged sentences in (4)–(6). The present study suffers greatly from the sentences being such a motley gang.
4. I would replace the L/M/C task by another. I would instruct speakers to (try to) give two grades to each example—their grade and that grade that they believe most people would assign to it, if it was higher or lower than their grade. This would automatically prevent such confusions as the uninterpretable "1C" or "4L" judgements that I have pointed out above, and in addition, it would lay to rest a nagging suspicion I have that many "1L" or "4C" judgements (and both types occur rather frequently) do not mean what I asked the respondents to mean with them. For instance, "1L" is supposed to mean, "I give this sentence a top grade—it's perfect for me, but most people rate it lower." But when I see such judgements on core sentences, or "4C" judgements on the fringe, I fear that the respondent is meaning "This sentence is fine (alternately wretched) for me. By the way, I'm in general pretty liberal (alternately conservative)." I may be wrong here, but I cannot tell with the L/M/C way of posing the question.

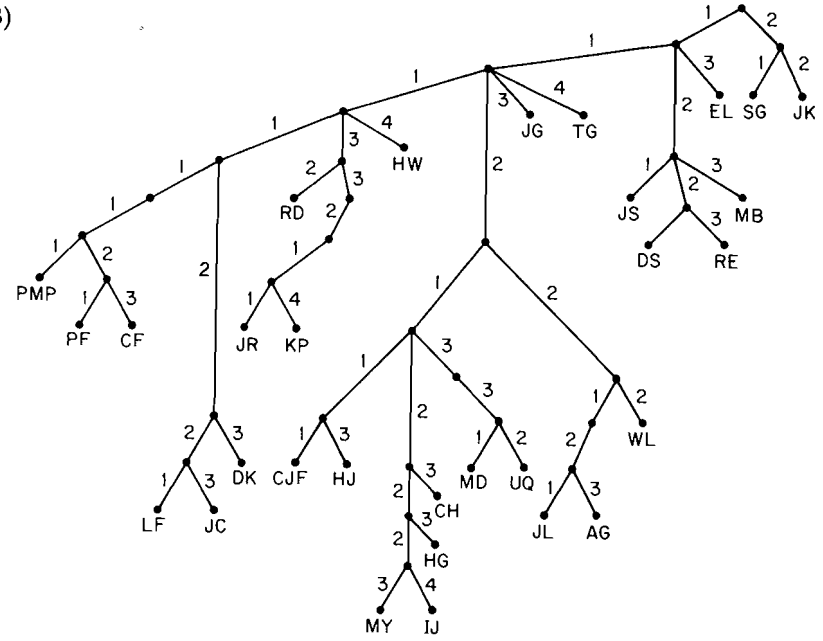
I hope that this last change in the form of the question would yield data which would bear on one of the original questions that I asked myself at the outset: Namely, do speakers know that their judgements are in agreement with or in disagreement with those of most speakers? Do they know

which way to the core? As things stand, I have not been able to find any evidence that they do.

What conclusions can be drawn?

One of some interest is that probably no one in the world has the same set of judgements for any large set of sentences. This can be seen in (53) below, in which I have constructed a decision tree for the matrix in (8), *using only grades*—confidence and liberality judgements have been excluded.

(53)



The notation used in this tree is the following: The topmost node represents the grade given by a speaker for the most popular sentence in (8), *doctor*. Most respondents gave the grade 1, so to "find" them in the tree, we follow the leftmost branch, labeled "1." The two speakers who rated this sentence 2 are found by following the rightmost branch, labeled "2," which descends from the topmost node.

The next node below the topmost one shows, similarly, how the speakers rated the second most popular sentence, *circumstances*. Each speaker's gradings are followed to uniqueness. That is, there is only one speaker (JK) who gave "best" two sentences the grade of 2, so the branch representing his decisions stops after two sentences. Similarly, only one speaker (EL) voted 1 on *doctor* and 3 on *circumstances*, so here again the branch stops after the top two sentences. However, both DS and RE gave identical grades to the first three sentences, namely 1-2-2, so their

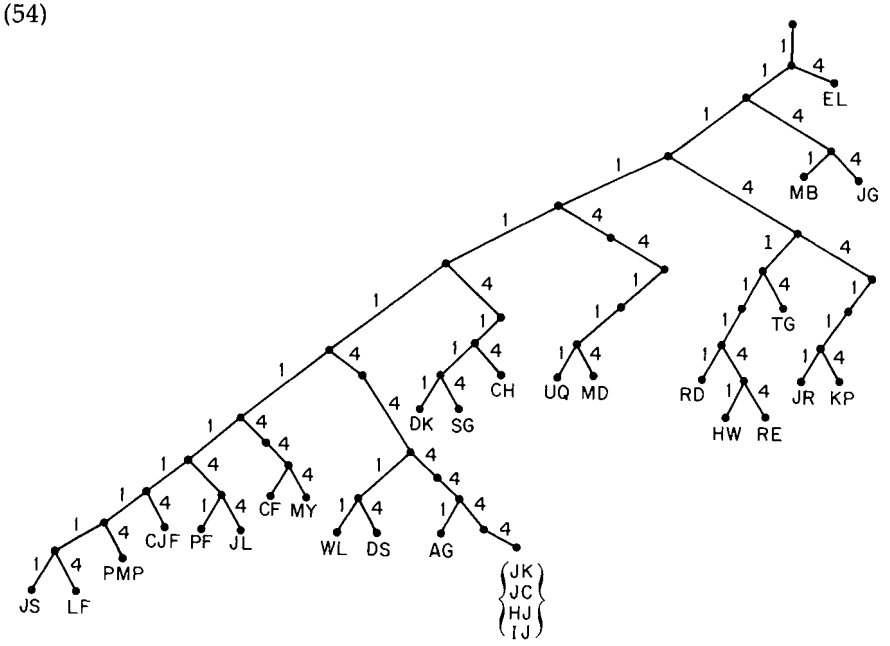
branches are pursued until the fourth sentence, where they differ, thus ending the need to continue to check their responses.

The longest shared branches are those which terminate in the following three groupings: {MY, IJ}, {JR, KP}, and {PF, CF}. Each member of these pairs of speakers voted the same as the other member of that pair for the first 7 sentences, then differed. So seven sentences are enough here to show all 30 subjects to be responding differently. Logically, of course, three sentences would have been enough, since with four grades to choose from, there are $4\times4\times4 = 64$ different ways of voting on the first three sentences.

It might be thought that the reason for all this variation is that speakers were asked to respond to too fine a category grid—that had they been asked to vote just "yes" or "no," things would have been neater.

Not much neater, I don't think. The subjects were not asked, but maybe we can estimate what their votings might have looked like by eliminating the middle grades in favor of the extremes, that is, by lumping 2s and 1s together as "yesses" (i.e., 1s), and 3s and 4s as "noes" (i.e., 4s). The results of such lumping appear in (54).

(54)



Here we find some grouping of speakers—the bracketed foursome in the middle of (54) are not distinct from one another in terms of our yes–no simulation. But all of the other 28 subjects are distinct, and it is pretty clear to me that as this foursome is asked a few more sentences in the (huge)

mid area, between humdrum (*My feet itch*) and salad (*Itch feet my*), they too will part company.

So where *is* English? If we restrict our attention to the native American subjects, and exclude those among that group who spoke a clearly identifiable regional dialect, we are left with a large group, a solid majority of the native American group, who would all describe themselves as "speaking the same way." The differences uncovered by this questionnaire do not rise to the conscious level, and rarely make trouble [although this can happen, if no surrounding context can be leaned on to find out what (55) means].

(55) *When you're writing checks, remember that we barely have $500 in our account.*

Retesting the subjects would doubtless show that the judgements recorded in (8) are as unreliable as those in the other studies that Carden reported on (Carden, 1976). It is certainly possible that repeated retesting, of this and other groups, would gradually lead to a set of clear, reliable data for these sentences which showed much less intersubject variation. That would certainly be nice.

But I confess that I am doubtful. The view of a language that seems most plausible to me is that the sentences of a language are points in an n-space, for some value of n certainly in the hundreds, probably in the thousands. The axes of this space are made up of such implicationally ordered sequences as those exemplified in (4)–(6) above. An idiolect is a vector in this n-space, giving at least the threshold values between grammaticality and ungrammaticality for every axis. I say "at least" here, because it seems more than likely that it will also be necessary to specify, for each axis and for each speaker, *how fast* the sentences along it proceed from grammaticality to ungrammaticality, as the threshold value (area?) is approached and left behind. And each speaker's vector, or path, through the space will, I expect, be as individual as his or her face—a linguistic fingerprint.

I should perhaps mention that the full picture will probably be orders of magnitude more complex than the above suggests. For we have been talking only about the grammaticality n-space—there may be other n-spaces pertaining to judgements of formality, of clarity, of slanginess, of floweriness, of sentences that one would use in speech but not in writing, of sentences with the opposite preference, of sentences that one would not use, but would accept. . . . And we do not know to what extent the hierarchies that define these many spaces remain constant under change of space. In the worst case, then, a speaker's competence would have to be represented by a set of vectors, one for each space. But could it be that the centers of all spaces coincide? Could it be that the core of the grammatical space is also the least formal, most clear, least slangy, least flowery, etc. of all sets of sentences? An intriguing possibility.

And if such attributes of judgements as confidence and liberality can be shown to have value in studying the grammaticality space, it is plausible to assume that this will also hold true for many of the other spaces.

It is to be hoped that improved methodologies will reveal that speakers know where they are in each space, which way the center is. Further studies may try to ascertain whether the correlation of grade inflation with "contact" with a language (in all ill-defined sense) is true only of the grammaticality space or is more generally valid.

The present study, a nudge at the lid on Pandora's Box, can only serve to provide a glimpse of how vast and little-understood a structure a human language is.

ACKNOWLEDGMENTS

This work was supported in part by a grant from the National Institute of Mental Health (Grant number MH 13390-12) and by a fellowship from the John Simon Guggeheim Memorial Foundation, which support I gratefully acknowledge.

I have been thinking (ineffectually) about grammaticality for about 15 years now, an interest that may have its roots in Zellig Harris's routinely distinguishing between 4 or 5 levels of grammaticality in his work on English. This framework gave me a space to think in; I've been roaming around in that space ever since.

More recently, my views have been shaped by the powerful work of Derek Bickerton, Guy Carden, Donald Hindle, Bill Labov, Terry Moore, and Ivan Sag; and John Schumann, more of all of whose insights, and in some cases advice and criticism, of this paper, and the thinking out of which it has grown, would have been better, had I made fuller use of.

Without the help of the 29 friends whose initials appear in the leftmost column of (8), of course, there would have been no data for me to cudgel my brains out on. So for their time and patience, and for these facts, which have taught me a lot, I thank them most sincerely.

I'd also like to thank Ed Walker for doing his best to raise a corner of the curtain of darkness which shields the laws of statistics from my comprehension.

Many errors remain, of course; just as the Navajo weavers purposely make one error in a rug, to let the soul out, so I cannily craft errors into all of my papers.

Lastly but not leastly, my thanks to Chuck Fillmore and Bill Wang for putting together a great conference at a seaside location which shall remain nameless, and to them and Dan Kempler for endless patience.

APPENDIX

Please rate the following sentences as to their grammaticality, using the following numerical prefixes:

1. The sentence sounds perfect. You would use it without hesitation.
2. The sentence is less than perfect—something in it just doesn't feel comfortable. Maybe lots of people could say it, but you never feel quite comfortable with it.
3. Worse than 2, but not completely impossible. Maybe somebody might use the sentence, but certainly not you. The sentence is almost beyond hope.
4. The sentence is absolutely out. Impossible to understand, nobody would say it. Un-English.

Place one number in the dash provided at the end of each sentence.

In addition, try to indicate how confident you are of your judgement [Example: I *think* the following sentence is OK (rates a 1) but I'm not sure: *I have scant reason to complain.* I don't think it's ungrammatical—it's just that I'm not sure of my judgement.] After each sentence, please indicate your confidence by circling the appropriate word: *Pretty sure/ Middling/ Pretty unsure*

Finally, one sometimes feels that one's own feelings about a sentence are unrepresentative. Some sentences which I accept many people reject: [an example of this: *We fear that these points the teacher may not cover in depth*], but the opposite happens also [for instance, in *Mildred depends on Sheila, and Sheila (on) Michael,* most people I have asked can omit the *on* before *Michael*: I can't]. Thus in this last case, I am *conservative* with respect to most speakers; in the former case, I am *liberal.* In case you feel that your reaction to any of the sentences below is either liberal or conservative, please indicate this by circling the appropriate word. Otherwise, circle *middle of the road.*

1. Under no circumstances would I accept that offer._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
2. Nobody who I get along with is here who I want to talk to._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
3. We don't believe the claim that Jimson ever had any money._____
   Pretty sure/Middling/ Pretty unsure Liberal/Middle of the road/Conservative
4. The fact he wasn't in the store shouldn't be forgotten._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
5. What will the grandfather clock stand between the bed and?_____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
6. I urge that anything he touch be burned._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
7. All the further we got was to Sudbury._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
8. That is a frequently talked about proposal._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
9. Nobody is here who I get along with who I want to talk to._____
   Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
10. The doctor is sure that there will be no problems._____
    Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative
11. a. We {have barely / barely have} $500 in our account._____ Pretty sure/ Middling/ Pretty unsure
    _____ Pretty sure/ Middling/ Pretty unsure

    b. We have {scarcely $500 / scarcely have $500} in our account___ Pretty sure/Middling/ Pretty unsure
    _____ Pretty sure/ Middling
    Pretty unsure

What do these sentences, if grammatical for you, mean? Check once—after (i), (ii), or (iii)—and indicate

(i) We have a little more than $500 [say $501 or $502]_____Liberal/Middle of the road/Conservative

(ii) We have a little less than $500 [say $499 or $498]_____Liberal/Middle of the road/ Conservative

(iii) We have around $500 [say $500 give or take $5]_____Liberal/Middle of the road/ Conservative

12. The idea he wasn't in the store is preposterous._____
    Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative

13. Such formulas should be writable down._____
    Pretty sure/ Middling/ Pretty unsure Liberal/Middle of the road/Conservative

Finally, would you feel that you are in general, not only with respect to these sentences, basically liberal, middle of the road, or conservative?

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