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**Tilburg papers in language and literature**

Notes on a Possible Metric which  
Provides for a 'Standard Maximum'  
Silence of Approximately  
One Second in Conversation

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With an appended glossary of transcript symbols

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Preliminary Notes on a Possible Metric  
which Provides for a 'Standard Maximum' Silence  
of Approximately One Second in Conversation

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0. Introduction

For most of the eighteen years that I have been producing transcripts for the analysis of naturally-occurring conversation, I have been timing silences by tenths of seconds. While I try to be accurate, I have not given particular attention to the phenomenon of silence, per se, and have been content with rough timings. (So, for example, I started out using a stopwatch but sometime in 1968 it broke and instead of replacing it I switched over to the method favored by amateur photographers, simply mumbling "no one thousand, one one thousand, two one thousand," etcetera.) And while many regularities have emerged from more or less unmotivated scanning of the materials, over the years I haven't noticed any of particular interest by reference to the silences.

One possible reason that unmotivated scanning did not turn up any silence-relevant regularities is that silences in conversation occur in such a range of sizes. For example, in the following array of Intra-Utterance silences following an "UH", there are silences of from approximately two-tenths second to approximately two and seven-



(7) ctd.

Nancy: → A::nd uhm (1.8) ˈtch I can't remember one: (.) one of the f:↓kids had said in his thin:g u-something about:t . . .

(8) [SF:II:22:S0] ((telephone))

Mark: Well who's gonna be at this party Friday night. So I can get excited about coming.

Bob: Well the old crew hopefully, °°uh°°  
(0.3)

( ): ˈkhhhˈhhhhh

Bob: → Uh:::: let's see. hYou know:: basic uh:: (2.0) uh:::oh:,hh  
(2.2) cre:w,

(9) [MDE:60-1:1:17:S0] ((telephone))

Sheila: How's the movie I mean is this something that you: uh  
→ (2.5) you know y-ih-ih-ee- eh are- ih you feel you're f:-  
you've been free::: enough< (0.8) in in with movie? (0.2)  
wor- material, type things?

(10) [Goodwin:AD:7:R:14-15:S0] ((face-to-face))

Bart: → Keegan used to race uhruh- uhr it was uh:m (0.4) used  
→ → to run uh::m. (3.4) oh:::: sh::it. (0.3) uh::m, (0.4)  
Fisher's ca:r.

Let me note a potentially problematic feature of my silence-timings. In two of the above fragments, (6) and (7), the silences are counted, not from speech-object to speech-object, e.g., from "uh" to a word as in (1), (2), (4), (9) and (10), or from "uh" to "uh" as in (0.3) and (0.8), but from "uh" to, either an inbreath, as in (6), "Dennis and I were talking a:nd uh (1.3) ˈhh", or a tongue-against-teeth click, as in (6), "becau:se, u:m, (1.3) ˈtch!", and (7), "A::nd uhm (1.8) ˈtch".

I have been timing the silences that way, without thinking about it. Now that there is reason to think about it, I would want to continue this way of timing. Specifically, what can be seen is some sort of shift in activity, whether it be from silence to an utterance's

next word, or from silence to another 'pause filler', or from silence to some non-speech (or pre-speech) sound such as an inbreath or click.

There are yet longer intra-utterance silences. I do not happen to have any which fit into the above array; i.e., immediately preceded by "uh". Here are two of the longer intra-utterance silences, occurring in mid-sentence.

(11) [SBL:2:2:3:R:23:S0] ((telephone))

- Chloe: I told you he went to a little slam and didn't have the ace king quee:n.  
(.)
- Chloe: 't'hhhhh Now ho:w in the na:me of all that's holy.  
(1.3)
- Chloe: could anyo:ne, in their right mi↓\*:nd.  
→ (3.0)
- Chloe: figure (0.5) that (.) that his partner (.) 'hhhh when I just u-answered him u-once. which I had a (.) 'hh (.)  
ah:::: three.
- Claire: Ye::h,

(12) [SBL:2:1:8:R:7:S0] ((telephone))

- Nora: You know who: I thought it wa:s?  
Bea: N[o:,  
Nora: Uh i:t I thought it was uh:m  
(0.3)
- Nora: 'tch  
→ (5.0)
- Nora: oh::-: ↓gee: uhm u-one of the women who's eh: ex president  
of the woman's clu:b . . .

These two intra-sentence silences, of three and five seconds respectively, are the longest I have come across so far in materials I am comfortable about calling 'conversations'. There are yet longer intra-utterance silences in materials which I would not comfortably call 'conversations'. For example, in the following fragment, taken from a staff meeting at a medical center, during which the physician in charge of a team of nurses is reading from an agenda, we find an intra-utterance silence of sixteen seconds.

(13) [Agorio:67-68:S0]

Barragan: And here i:s (1.0) the department meetings, which is- will be for instance social service and nursing, 'hhh who have the separate meetings, the::: social service care with (.) 'hh Velma?  
(0.4)

Barragan: The nurses will probably be ( ) .  
(0.3) The nurses with (.) Aurora.  
(0.4)

Barragan: And then he:re is, (0.8) total staff ( ) service meeting.  
(1.0)

Barragan: Hm?  
(6.5)

Barragan: → I know this is not interesting but (16.0) this interesting thing he:re, (4.0) tha:t (3.0) that ih-involve the internal team organization and management. (2.4) And what it said is they're going to, (.) reaffirm that the team physician is the responsible and accountable person for the wo::rk? 'hh and overall operation of the team.  
  
((Some of the rather odd constructions may be accounted for by the fact that Dr. Barragan had just recently arrived from South America.))

I have shown the foregoing array to provide a glimpse of the range of silences which occur in the materials I've been transcribing over the years; materials in which no silence-relevant phenomena emerged to motivate further investigation and thus greater accuracy in the timings. The following report essentially consists of arrays of data which, it seems to me, provide glimpses of a silence-relevant phenomenon.

#### I. Biography of the Phenomenon

In February 1983 I was reading and making comments on an exercise in conversation analysis by my colleague in the Subfaculteit Letteren, Hanneke Houtkoop. She was working with some problematic interactional bits, and in commenting on her analyses, I would occasionally add a fragment from my own materials. Thus, a little corpus of a certain 'type' of interaction began to build up. And it was in this little corpus that a possible silence-relevant phenomenon emerged. Here is the pertinent comment, in its entirety (English translations added).

14. Page 3, re. "...and after the 1.3 second pause..."

Something a bit eerie is beginning to crop up in these materials:

[M-F]

F: hai Maar(t), kom je ook?

→ (1.3)

M: da:g Frank. ((glimlachen))

[M-F:Translation]

F: Hi Maar(t), are you coming too?

→ (1.3)

M: Hello: Frank. ((smiling))

[M-S]

S: we:ll van Noort. vertel het es.

M: dag Sjoerd.

→ (1.2)

M: he: hoe was je feestje gisteren?

[M-S:Translation]

S: We:ll van Noort. What's up.

M: Hello Sjoerd.

→ (1.2)

M: Hey how was your party last night?

[M-P]

P: je bent de eerste die belt in 't nieuwe huis joh.

M: ja.

(0.7)

M: oh ja?

P: ja.

→ (1.3)

P: maar ik roep Sjoerd even.

[M-P:Translation]

P: You're the first one to ring at the new house!

M: Yeah.

(0.7)

M: Oh yeah?

P: Yeah.

→ (1.3)

P: Well I'll call Sjoerd.

[DA:2:3-4:S0]

J: She's going to pick me up Thursday morning.

→ (1.2)

J: 'hh't'hhhhhhh=

G: =Uh how early is she gonna pick you up.

Most roughly, these four fragments are pointing to the possibility that the 'tolerance interval' for some problematic interactional bit is just over one second, whereupon one of the participants starts to do some resolutorial activity. At this point it's just a 'curio'.

So went the comment. I began to wonder if this 'curio', this 'tolerance interval' of approximately one second, could conceivably be a real phenomenon. So I undertook a data run, going through my transcripts and pulling out interactional bits in which intervals of more or less one second occurred; bits which struck me as, in various ways, 'problematic' for the participants, where I got a sense that some next action ought to happen 'now'. I ended up with some 320 cases. And those cases strongly increased my sense that there might indeed be something systematic going on with this [+/-] one second silence.

Roughly, it now seemed to me that there is some sort of interactional 'metric' in which 'approximately one second' operates, where that metric has as one artifact a 'standard maximum tolerance' for silence of more or less one second.

It also seemed that there might be an alternative available metric; a 'gearing down' to a pacing which provided for silences at approximately one second intervals; at about two seconds, three seconds, etcetera.

As I was going through the materials, focussed on this [+/-] one second silence, it occurred to me that the candidate phenomenon was so easy to see, then if it is indeed a systematic feature of interaction, surely the many people working with the phenomenon of silence in interaction must have come across it and written it up. On the other hand, if it was just a fluke, and I was doing selective observation, noticing the 320 cases of problematic interaction in which the silence



just happened to be more or less one second, among the myriad similar cases in which the silence was longer, then some of the work done on silence must show that to be the case. That is, it seemed to me that I was launching on some work which would be either redundant or wrong.

So I sent out a request for references to a literature on silences/pauses. An array of instances from the Sample Collection of [+/-] One-Second Silences attached to the request-letter follows (the letter itself and the full Sample Collection can be seen in Appendix One).

Selections from the Sample Collection: 'Standard Maximum' Silence:  
[+/-] One Second

(1.1) [JG:IV:1:1-2:S0]

Ronald: I'll get a Ninety Niner. ((a fast-food meal))  
Maggie: Oh no honey no no no no.  
Ronald: Eeyeh-  
Maggie: No I have to go to the store anyway and get stuff for your lunch and all.  
Ronald: ((shouting)) NO! We have stuff.  
Maggie: No we don't Ronald, that's why I didn't have anything to take for my own lunch.  
Ronald: → So what did you eat.  
\*→ (1.0)  
Maggie: → ((edgily)) I ate a sandwich Ronald there was nothing in the hou:se.  
\*→ (1.0)  
Ronald: → OH.

(1.2) [SBL:2:2:3:R:30-31:S0]

Claire: if I say one club and they say one diamond  
[what do you d<sub>o</sub>  
Chloe: [T h a t 's a ]BU:S:T. isn't it.  
Claire: → Ye:h then what do you ↓do:.  
\*→ (1.2)  
Chloe: → We'll to me: they haven't explained it to me and I: don't kno:w . . .

(1.3) [SBL:1:1:12:R:15-16:S0]

- Maude: I says well it's funny: Missi:z uh: †Schmidt ih you'd think she'd help< °hhh Well (.) Missiz Schmidt was the one she: (0.2) assumed the respo:nsibility for the three specials.  
(0.6)
- Bea: Oh†\*::: °°M-hm, °°=  
Maude: =Maybe:lle †told me this.  
Bea: Ah †hah,  
(1.2)
- Bea: °Uh-hah, ° °hh Isn't ther name jus:t plain Smi:th?  
(0.7)
- Maude: → Schmidt.h  
\*→ (1.2)
- Bea: → Oh I thought it was just S-m-i-t-h:.  
Maude: No I think it's S-c-h m-i-d-t, something like that it's just Sch†mi†dt.  
(0.3)
- Bea: Ah hah.

(1.4) [Fr:USI:2:R:2:S0]

- Carol: Victor  
Vic: Ye:h?  
Carol: → Come here for a minute.  
\*→ (1.0)
- Vic: → You come he[ : r e . ] please?  
Carol: †[You can come b] a:ck=  
Vic: =I †have to go to the ba:th†room.=  
Carol: =°Oh:..°

(1.5) [SPC:IV:6:13-14:S0]

- Mr K: °hhhhh Well somebody thought that you were in danger of killing yourse:lf.=  
Mrs B: =WELL SUPPOSE I WA:S I: (WEN: WITH) MY: SISTER AND MY SISTER'S (WITHUH VIBBINUB anybody).  
Mr K: I'm sorry I didn't understand you.  
Mrs B: SUPPOSE I WA:S. MY SISTER'S IN HEAVEN AND EVERYTHING IS BEAUTIFUL IN HEAVEN, (.) AND I DON'T HAVE TO WORRY ABOUT  
→ MONEY OR ANYTHING E:LSE.  
\*→ (1.2)
- Mrs B: → HELLO:?  
Mr K: Yes.  
(0.2)
- Mr K: °hhhhh I'm:: I'm still here. I'm trying to figure this situation ou:t.

(1.6) [W:PC:III:1:1]

Sue: → Hello:?h  
 \*→ (1.0)  
 Sue: → Hello::,hh  
 (3.0)  
 Sue: H'llo?h

(1.7) [GTS:I:2:38-39:PR:SO]

Roger: You don't have to tell me what it is, just is there  
 → anything wrong with you mentally.  
 \*→ (1.0)  
 Dan: → ↓Uh:::::,  
 (0.2)  
 Ken: In other words y-are y- are you a dope addict,  
 (0.4)  
 Ken: whh!  
 Dan: No↑:::  
 Louise: That's not mental,  
 Ken: [hhh heh heh  
 (1.5)  
 Ken: It's not?  
 Roger: Can't you analyze yourself? or-  
 Louise: [( ),  
 Louise: ( [°( ) )°  
 ( ): [°( ) )°  
 Roger: → ih You're perfectly normal.  
 \*→ (1.2)  
 Dan: → †We↓:ll th:†at word perfectly normal is a wi::[de  
 Roger: [acc] ORding  
 to your psychiatry †books.  
 (0.5)  
 (Dan): hhheh [hh h  
 Louise: [°i [h hih †h ih°=  
 (Roger): [°hih-ih°]  
 Roger: =°u [huh [huh huh huh huh hu [h °↓hu° °hhh]=  
 Dan: [ ( ) ]  
 Louise: = [ ( ) ]  
 Louise: = [ ( ) ]  
 Dan: = [ ( ) ]  
 NO::: I'm not perfectly normal according to m(h)y  
 psych(h)iatry books.

(1.8) [Owen:8B15(A):43-44:SO]

Andrea: By the way do you †want any lettuces little lettuces?  
 because they've come ou:t very well  
 Bette: [†Have they,  
 Andrea: †Yeh  
 (0.4)  
 Bette: †Oh:.  
 Andrea: → °If you're interested°  
 \*→ (1.0)  
 Bette: → u:Uh:::m I'm just(tr)- thinking.

The request-letter received several responses; people sent me bibliographies, articles, and occasionally some encouragement. Houtkoop came up with another nice fragment from her own materials:

(1.9) [R-M]

R: met Rie van der Linde.  
M: hallo:.  
R: hallo:. is jouw moeder thuis?  
M: nee. die is op 't werk.  
R: die is op d'r werk.  
(.)  
R: jeetje dat mens werkt ook wat af.  
→ (0.9)  
R: goeie:da:g.  
→ (1.2)  
R: hé: e:::h luister even.  
→ (1.2)  
R: ben je d'r nog?  
M: ja::.  
R: oh. ('k denk) ik hoor helemaal niks meer.

(1.9.a) [R-M:Houtkoop Translation]

R: here's Rie van der Linden.  
M: hallo:.  
R: hallo:. is your mother home?  
M: no, she is out working.  
R: she is out working.  
(.)  
R: gosh that woman is always working.  
→ (0.9)  
R: my god.  
→ (1.2)  
R: he:y u:::h listen.  
→ (1.2)  
R: are you still there?  
M: yea:h.  
R: oh. (I thought) I don't hear anything anymore.

Glancing through the few articles that had been sent me, I found two pieces which in some way addressed the [+/-] one-second silence. The first is from Robert E. Kraut, "Verbal and nonverbal cues in the perception of lying", in Journal of Personality and Social Psychology, 1978, Volume 36, Number 4, pages 380-391. Here are the relevant segments.

Seventy four subjects listened to a 5-minute excerpt from a simulated interview in which a female applicant applied for a job as a dormitory counselor. When the male interviewer asked if the candidate smoked marijuana, he gave the impression that he either strongly opposed its use or supported its use. The job candidate answered either that she did not smoke it and found its use distasteful or that she smoked it recreationally several times a week. Her answer was preceded by either a 7-second pause or a 1-second pause.

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The paralinguistic cue was manipulated by inserting a 7-second partially filled pause between the interviewer's marijuana question and the candidate's answer. Four seconds of blank tape, an "uh" spoken by the candidate and taken from another of her answers, and 3 seconds of blank tape were spliced into the interview, starting at the last sounds of the question. This length of silence seems to be at the limits of those that appear in normal conversation . . . Thus, the silence . . . was noticed by virtually all subjects but did not appear unnaturally long to them. In the other version, no silence was inserted between the question and answer, and the naturally occurring hesitation of approximately 1 second was retained.

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The most interesting results involve the pause. . . . The 7-second pause increased subjects' suspicion of the candidate when they were already suspicious. Compared to subjects who heard only the candidate's denial of marijuana, the subjects who heard a long pause and then the denial thought the candidate had been less candid and lied more in the interview . . . Compared to subjects who only heard the candidate admit to smoking marijuana, subjects who heard a long pause and the admission thought she had been more candid.

((emphasis added))

In the first place I found it interesting that in a simulated interview, the "naturally occurring hesitation" after a problematic question was "approximately 1 second". In effect, another datum for my collection, from an altogether different type of talk.

Secondly, there is some evidence that at least this author did not find anything of particular interest in silences of that length. Over the course of the article the [+/-] one-second silence is relegated from "a 1-second pause" to "the naturally occurring

hesitation of approximately 1 second", to nothing worth mentioning; i.e., the relevant materials are thereafter described in terms of the subjects hearing "only the candidate's denial" or admission, in contrast to those "who heard a long pause".

The second piece comes from Brian Butterworth's article, "Evidence from pauses in speech", Chapter 7 of Language Production, Volume 1, Speech and Talk, edited by Brian Butterworth, Academic Press, 1980, pages 143-154. In it he refers to Freida Goldman-Eisler's article, "Pauses, clauses, sentences", in Language and Speech, 1972, volume 15, pages 103-113.

Moreover, between-sentence pauses in reading tend to be roughly of the same length, 1.0 - 1.24 seconds, whereas in spontaneous speech they vary considerably, with many over 2.50 seconds, reflecting varying cognitive demands of speech as compared with reading (Goldman-Eisler, 1972).  
 ((emphasis added))

This statement strongly raises the possibility that I had been engaged in selective observation, and was just not attending the many longer silences in the "spontaneous" materials with which I work. On the other hand, it was yet possible that I had been focussing upon one or several particular sorts of "cognitive demands", those which can be and recurrently are satisfied within approximately one second. It was certainly interesting that approximately the same silence which I was treating as a possible 'standard maximum' for conversation constituted the standard for "between-sentence pauses in reading."

At that point I put the matter aside, marking it as something to be pursued one of these days.

## II. A Possible Complementary Approach to the Candidate Phenomenon

In August 1983 I started typing up the several hundred pages of

retranscriptions I had done when I first arrived at the Hogeschool in preparation for the project on the organization of overlapping talk. As I was typing up these materials, these several hundred pages passing before my eyes in a concentrated batch, it seemed to me that the longer silences tended to fall into a cluster of about nine-tenths of a second to one and two- or three-tenths seconds, independent of any specification of the activities in the course of which the silences were occurring.

Given the obvious "considerable variation" of silences in conversation (cf. Fragments (1)-(12) and Butterworth/Goldman-Eisler above), it had not occurred to me that 'statistical' procedures would be a fruitful way to develop the possibility of a 'standard maximum' silence. But now I wondered if a simple counting procedure might not, after all, yield something. So I did another run, collecting and counting all silences of nine-tenths of a second and longer (i.e., starting the 'approximately one second' a moment early). I went through some 168 transcripts, altogether some 1,860 pages.

The results of that data run are described in a communication to the "Gang of 2½", a little workgroup which meets once every two weeks (myself, Hanneke Houtkoop, and Judith Stalpers of SLE, and Harrie Mazeland who is now at the University of Düsseldorf). I reported the results to them because Stalpers had been trying to work with the silences in one of the conversations we had been examining. I had glanced at her work and thought it looked like a 'statistical' approach which I warned her against. It seemed only fair to confess that now I was trying something of the sort.

The full report is attached as Appendix Two. Following is a

brief summary.

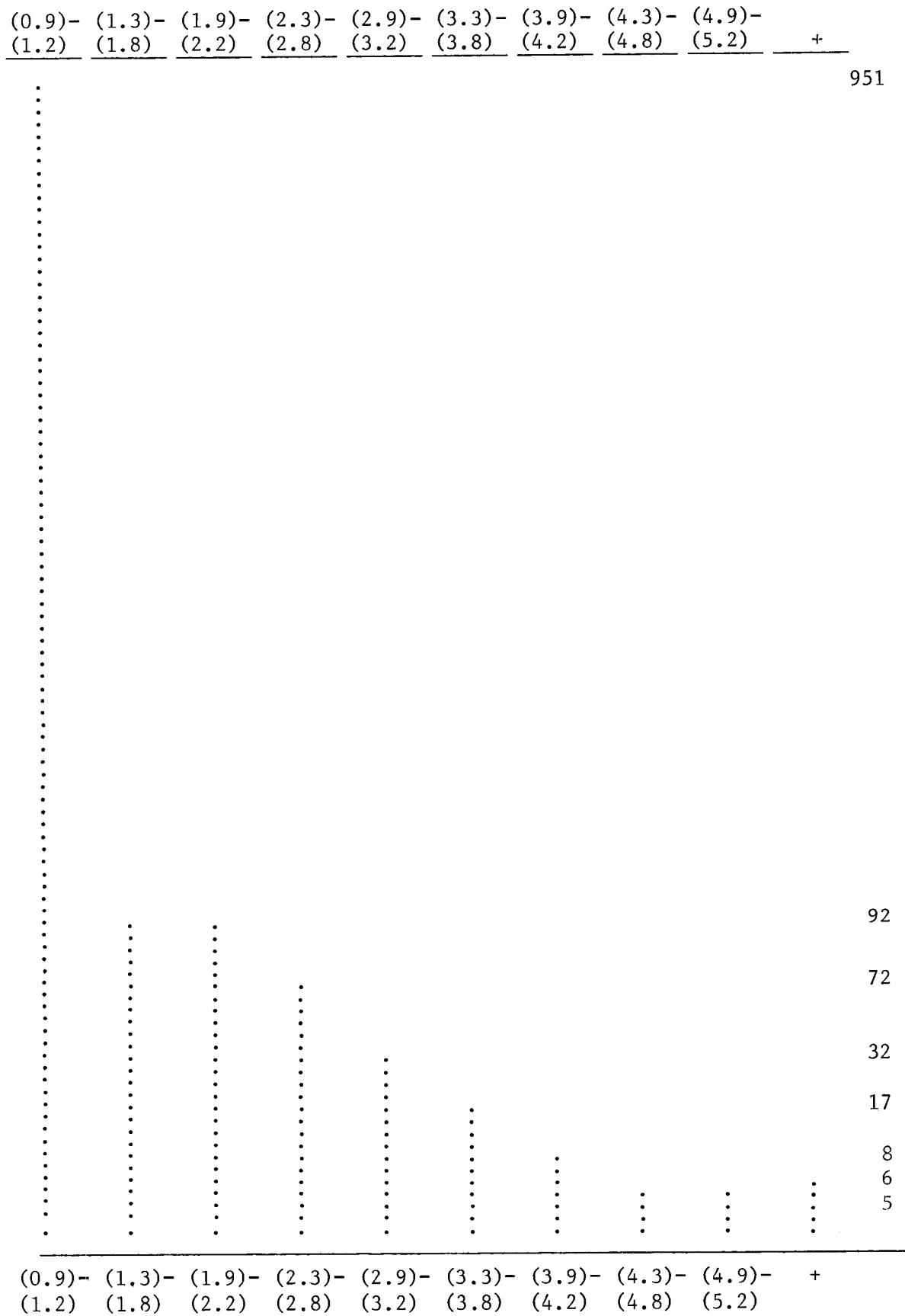
The data run, counting all silences of nine-tenths of a second and longer, yielded a couple of striking results. For one, there are some 951 occurrences of silence in a cluster of (0.9)-(1.2); i.e., of 'approximately one second', compared to some 329 cases of all longer silences. About a 3-to-1 ratio.

Secondly, if the candidate 'standard maximum' cluster of (0.9)-(1.2) is compared to the next longest cluster, (1.3)-(1.8), there is a tremendous dropoff. The 951 silences of (0.9)-(1.2) are followed by some 92 occurrences of silence from (1.3)-(1.8).

Following is a graph displaying the relative frequencies of all silences of nine-tenths seconds and above. Even with the distortion necessary to exhibit 951 units and 5 units on the same page, the drop-off is dramatically evident. The graph appears on page 16. The 6 silences of longer than (4.9)-(5.2) are not specified in the graph, but are only represented by dots. On page 17 they are specified, and four of them are shown in their sequential environments. The remaining two can be found in Appendix Two.



Graph 1: [(0.9)+] Silences by Clusters



The six longest silences are: (5.8), (6.2), (6.5), (6.5), (7.3) and (16.4). Three of them, the two (6.5)s and the (16.4), occur in close proximity, in a conversation between two secretaries on a coffee break, looking at a train schedule.

(2.1) [Owen:8B15(A):29-30:S0]

Andrea: I think I'm gonna have to get up the night before  
(1.2)

Bette: 't'hh Check with the station and (.) ask them what the  
first train that goes on Good Friday is and-

Andrea: 'hh Wonder if I could advertize in the grad center for  
anyone who's going up.  
(1.9)

Andrea: Be worth trying,  
(1.0)

Bette: Hmm:.  
\*\*→ (6.5)

Andrea: If it was an ordinary day.hh  
(1.2)

Andrea: They've got really early (.) trains:: (0.2) um other  
da↑:ys=

Bette: =If it was an ordinary day you'd be alri:ght.=

Bette: =There's plenty Five forty three :.  
Andrea: [Ye:ah. Five forty three :.  
Bette: [Ye:h,  
(1.0)

Andrea: Well the- (1.3) the fi:ve forty three:, (1.4) Well it  
would- be- it would be the only matter of- the only  
possible one in fact.  
(0.7)

Andrea: But I mean ih- agai:n if I got up at (0.3) four o'clock  
to get a train at five forty three I may just as well  
stay at Heathrow overnight anyway [in fa]: [ct.  
Bette: [We:ll] [Ye:s::  
(.)

Bette: Ye:s

Andrea: It's not gonna make that much (.) difference to the  
amount of sleep I get,  
(1.9)

( ): °Mm:, °  
\*\*→ (16.4)

Andrea: It's the weekend after °next°

Bette: °Oh:, °  
(1.0)

Andrea: ↓'kGu:h (Ihh ho(h)pe), hhhuh [huh huh-uh-↑huh-n  
Bette: hmh-hmh

Andrea: 'uh'ih ↑hnh [huh huh 'hhhh ↑heh 'he::h  
Bette: ehh-heh-heh  
\*\*→ (6.5)

Andrea: °The latest trai:n down on (.) Thursday, °

The (7.3) silence occurs in a conversation between two young women sitting in a sunny corner at a neighborhood block party.

(2.2) [Goodwin:50:Clacia:7-8:S0]

Donna: It- was pretty ni:ce. It really wa: s, [°(Yeh)°=  
 Tanzi: =°(it [ w a : s. Y e h.)°  
 Tanzi: =°(it [ w a : s. Y e h.)°  
 Donna: [It was nice and it was ] clean: ,=  
 Tanzi: = [Right. ]  
 Donna: = [it was ] new: and they (h a : d) [°Right.° ] <you know like made the=  
 Tanzi: = [it was ] new: and they (h a : d) [°Right.° ]  
 Donna: =be:ds and, (0.5) °fu rniture (and stuff.)  
 Tanzi: = [Right. Well we had that over in our p- uh, (0.8) u-They  
 Tanzi: had bought that for our house. °When they furnished the  
 house.°  
 (2.5)  
 Tanzi: °(But it was different) there's no dou:bt about it.°  
 \*\*→ (7.3)  
 Donna: Whose car is that down there ( ).  
 Tanzi: [BYE BYE ENJOY YOUR  
BRO::CCOLI PIE::,  
 (0.4)  
 Donna: Broccoli pie::,  
 (0.6)  
 Tanzi: She's going to her sister's house.

In the Coffee Break materials, the long silences may well be 'occupied' by one of the women looking through the train schedule. In the Block Party materials there is good reason to suppose that the (7.3) silence is 'occupied' by both women scanning the surrounding scene. Each thereafter speaks by reference to things they noticed in the scan; Donna asking about a car, Tanzi calling to someone.

The silences in these two fragments occur in radically different sequential environments than those in which the candidate 'standard maximum' silences tend to occur (cf. Fragments (1.1)-(1.9) and Appendix One).

The segments of talk in which the two remaining longest silences occur are shown in Appendix Two; the (5.8) silence on page

16, the (6.2) silence on page 12. Several other fragments in which long silences occur can be seen in Appendix Two, pages 11-16.

The 'statistical' data run also yielded some possible evidence for the phenomenon of an 'alternative metric', a 'gearing down' to a slower pace with silence parsed second-by-second rather than in smaller units culminating at [+/-] one second (see, e.g., Fragment 1.6, the third "hello" occurring after a (3.0) silence). So, for example, a small group of transcripts showed an interesting pattern of silences. In 16 conversations ranging in length from 3 to 65 pages (see the Key to Transcripts, below), there are very few silences above the candidate 'standard maximum' of (0.9)-(1.2), none at all from (1.5) to just approaching two seconds; i.e., to (1.8), and then a flurry of silences in the cluster (1.8)-(2.2).<sup>‡</sup>

Table 1: A Pattern of Silences in a Small Sub-Set of Conversations

Transcript:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	<u>Total</u>
<u>Silence</u>																	
(0.9)- (1.2)	-	1	2	2	2	3	3	4	19	11	9	7	3	5	2	33	107
(1.3)	-	-	-	-	1	4	1	-	2	-	-	-	-	2	-	2	12
(1.4)	-	-	-	-	-	-	1	-	2	-	1	-	2	-	2	2	10
(1.5)	-	-	-	-	-	-	-	1	1	-	1	-	-	-	1	3	7
(1.6)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
(1.7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
(1.8)- (2.2)	1	1	1	1	1	1	1	1	2	2	2	2	4	4	4	6	34

- - -

<sup>‡</sup> The pattern in these materials suggests that perhaps I should in the future, treat the 'target cluster' as starting at (0.8) rather than the arbitrarily-chosen (0.9).

<u>Key to Transcripts:</u>	<u>Pages</u>	<u>Key to Transcripts:</u>	<u>Pages</u>
1. [Her:III:1:14]	6	9. [NB:IV:10:R]	65
2. [NB:II:4:R]	27	10. [NB:II:2:R]	29
3. [Kamunsky:II]	7	11. [Her:I:5]	6
4. [NB:I:2]	3	12. [Trio:III]	9
5. [NB:III:1]	15	13. [FD:(Finger)]	6
6. [Labov:TA]	13	14. [Campbell:7]	12
7. [SBL:3:3:R]	7	15. [SPC:X:3]	10
8. [SBL:3:5:R]	12	16. [SBL:2:2:3:R]	61

And in Transcript 16 there is another gap from the six [+/-] 2-second silences, until (2.8)-(3.2), where another two silences occur.

Given such results, I am currently treating this sort of 'statistical' approach to the candidate phenomenon as potentially useful.

### III. Continuing Exploration

Since August I have been working both 'interactionally' and 'statistically' with the candidate phenomenon; i.e., (1) selecting instances of various activities and/or interactional/sequential environments in which there appears to be a 'standard maximum' silence of approximately one second, and (2) going through materials and simply counting up the silences of nine-tenths of a second and over.

I am, at the moment, collecting instances of 'innocuous' occurrences of the 'standard maximum'; i.e., activities which did not recommend themselves as interactionally problematic, and thus were not collected in the primary data run. One such phenomenon is that of Intra-Sentence Silences. For example:

(3.1) [Owen:8B15(A):34:S0] ((face-to-face))

Andrea: → The biggest check I ever wrote out was: (1.0) 'k two hundred and thirty fi:ve (.) pounds

(3.2) [SBL:2:1:6:R:1:S0] ((telephone))

Bea:            'hhh I'm jus:t servin:g um  
                  (0.7)

Bea:            'tlk' hhh, hh

Tess:            Dessert [(I imagine),]

Bea:            → a bowl of ice cream and some:::

                  → b-little: home made<(1.0) cake cookies or something

(3.3) [Goodwin:DP:38:R:S0] ((face-to-face))

Beth:            you know what I mean?

Jan:            True. True.

Beth:            → We were much younger and, (1.0) lots of stuff you know,  
                  like a lot less settled in a lot of wa:ys?  
                  (0.6)

Beth:            \*→ And uh, (1.7) whereas no:w, you know even with the  
                  → → second one, 'hh it's it was mo:re, (0.9) u-uh::-uh (1.2)  
                  like deliberately. You sort of know what you're doing

(3.4) [NB:IV:10:R:14:S0] ((telephone))

Emma:            M [m h m ?]

Lottie:          A:nd he c'ame in about< (1.0) °let's see° fi:ve thirty,

(3.5) [Her:I:5:3:S0] ((telephone))

Evelyn:          Uh::m it's only that uh I: faw- I °fah-° 'hh I °fah-°  
                  found it, h 'h uh very expensive uh ten: pou:nds a(m)  
                  a da:†:y, h

Heath:            Yes=

Evelyn:          → =But (0.4) uh::m:: (0.9) uh-:: i-i- (.) if:: 'h'h uhw  
                  he won't do what you want him to do: t- 'h twice a  
                  week with you and twice a wee:k with me.

Heath:            We:ll . . .

(3.6) [PB:3-4:16:S0] ((face-to-face))

Merle:            JoLee's kind of cranky toni:ght.  
                  (0.4)

Merle:            Probably 'cause we didn't put her to bed until ten=

Paul:            =|| hh

Merle:          → || last night hhh But uh:m (1.2) I know JoLee used to get  
                  kwan- cranky, you know really bad.

(3.7) [CDHQ:II:100:R:4:S0] ((telephone))

Opal:            Yah I know but they said tha(0.2)t uh::\*u:-:-: some  
                  \*→ way that (0.3) they would know ho:w uh (2.5) that they  
                  were getting in touch with him >you know what I mean?<

Josh:            >Mhm?<







upholstery shop where several men are drinking beer, one of them occasionally working, occasionally joining in the conversation.

For each of the three I am showing two discrete graphs. The first graph for each of the first two conversations is taken from a 'settling down' or 'getting started' section of the conversation, the second, about a half hour sample of the talk thereafter. The first graph for the third conversation is taken from a section in which one relevant activity is 'waiting for' the arrival of someone to whom some big news will be delivered. The second graph is taken from the point of that one's arrival.

Graph 3.a.: GTS:I:2:A: [(0.9)+] Silences

Pages 1-9 [00:00-06:15]

<u>(0.9)-</u>	<u>(1.3)-</u>	<u>(1.9)-</u>	<u>(2.3)-</u>	<u>(2.9)-</u>	<u>(3.3)-</u>	<u>(3.9)-</u>	
<u>(1.2)</u>	<u>(1.8)</u>	<u>(2.2)</u>	<u>(2.8)</u>	<u>(3.2)</u>	<u>(3.8)</u>	<u>(4.2)</u>	<u>+</u>
⋮							23
⋮							
⋮							
⋮							
⋮							
⋮							
⋮							
⋮							
⋮							
⋮	⋮						8
⋮	⋮						5
⋮	⋮	⋮					(5.1) 2
⋮	⋮	⋮					(6.9) 1
⋮	⋮	⋮	.				

The two longer silences occur within approximately 30 seconds of each other, at [05:30] and [06:00].

[GTS:I:2:8-9:R:S0] [ca 05:25ff]

Roger: It's that stage they're going through.  
 Ken: Bunch of prudes,  
 (2.0)  
 Ken: Won't drink, they won't- smoke(h),  
 (.)  
 (Dan): (Is that right?)  
 Ken: They won't even go out in a car.  
 \*\*→ (6.9)  
 Roger: Have they started taping us?

(0.9)

Dan: Hm?

Al: 'k Yah they're smoking in there too.  
(0.4)

( ): ((sniff))

Ken: Hey don't you know cigarettes aren't good for you?  
(1.2)

Ken: whhhh 'hhh  
(1.2)

Ken: hhh hh hh hhhh

Al: This is T(h)alent Scouts.

Ken: hhh hh

Roger: Now don't carry on like that. (1.0)

Ken: Ta(hh)le(hh)nt Sc(hh)ou(hh)ts [°hhh hh hhhh°]

Roger: They'll think poorly of us.hnh

Dan: eh::-:::-:::

(Ken): heh [heh heh!

Dan: heh heh heh

Al: eh! eh!

(Roger): hhhh!

Ken: How much worse could they think of u(h)s.

Roger: nu(h)ts. hehheh hh heh hh [hh hh hhh hehh  
Other than that, what.

Ken: (.)

Ken: What could they think of us.  
(.)

Roger: I mean just 'cause we're here doesn't mean we have to prove we're nuts, hh

Ken: heh heh  
(2.5)

\*\*→ (5.1) ((drinking noises))  
(1.0)

Al: What time is it,

((Note: The longitudinal brackets indicate a timing across a series of utterances or activities. In this case, from Ken's laugh, "heh heh", to Al's "What time is it?", a 'silence' of five and one-tenth seconds.))

Here, the 'getting started' character of the session is invoked in the talk following the longer silences; i.e., the two questions, "Have they started taping us?" and "What time is it?", after the silences of (6.9) and (5.1) respectively.

Following is a graph of the relative frequency of silences in the half hour sample of the 'interaction proper'.

Graph 3.b.: GTS:I:2:B: [(0.9)+] Silences

Pages 10-66 [06:15-36:15]

<u>(0.9)-</u> <u>(1.2)</u>	<u>(1.3)-</u> <u>(1.8)</u>	<u>(1.9)-</u> <u>(2.2)</u>	<u>(2.3)-</u> <u>(2.8)</u>	<u>(2.9)-</u> <u>(3.2)</u>	<u>(3.3)-</u> <u>(3.8)</u>	<u>(3.9)-</u> <u>(4.2)</u>	<u>+</u>	
⋮	⋮	⋮	⋮	.	.	.		88
⋮	⋮	⋮	⋮	.	.	.		20
⋮	⋮	⋮	⋮	.	.	.		18
⋮	⋮	⋮	⋮	.	.	.		3
⋮	⋮	⋮	⋮	.	.	.		1
(0.9)-	(1.3)-	(1.9)-	(2.3)-	(2.9)-	(3.3)-	(3.9)-	+	
(1.2)	(1.8)	(2.2)	(2.8)	(3.2)	(3.8)	(4.2)		

The three longest silences in this half hour sample occur in the following sequential environments.

[GTS:I:2:20:R:S0] [ca 12:15-12:25]

Ken: Hey. (0.2)  
 Ken: Are you gonna speak to me, (.)  
 Ken: Would you like one of these? (1.2)  
 Ken: You ↓no goo<sub>[d sl\*o::b</sub> uhh huh heh  
 Al: 't'hh (0.4)  
 Ken: 'kh'hhh'hhe::hh khh<sub>[o:( )]?</sub>  
 Al: ( ): 'hhhh hhh  
 Ken: 'hhi:hh ↓two::[three  
 Roger: °( )° I already ( ).  
 Dan: °( )°  
 Louise: I'm missing something. (0.2)  
 Ken: 'hhe:hh huh<sub>[e-heh</sub>  
 Roger: They're at wa:r.  
 Ken: He's in a ↓jolly good mood this morning  
 Louise: °Ye:h° (3.8)  
 Dan: He was in a jolly good mood ↑last week. (1.0)  
 Louise: B u t t h a t w a s ]  
 Roger: I think we ought to<sub>[stone</sub> him for these uh heh heh 'hhh  
 ( ): ( ).  
 Roger: app(h)ear(h)ances 'hnhh 't'hu-uh

[GTS:I:2:23:R:S0] [ca 13:50-14:15]

Ken: Hey (.) wait. I've got a (.) 'hh I've got a ↓joke.'hh  
 What's bla:ck and white and hides in caves, (.)  
 Roger: Alright I give up=  
 Roger: =What's black and [white and hi]des in<sub>[caves°</sub>  
 Al: A n e w s ] p a p e ] r.  
 ( ): hhhh  
 Ken: No: (.) pregnant nun:, (3.9)  
 Ken: uhh °heh° (0.4)  
 Ken: 'uhh 'hh (0.3)  
 Roger: 'kh >Why don't you run across the street and get me some  
 more coffee.< (0.4)  
 Ken: °( )° Why don't you drop dea::d.

[GTS:I:2:56-57:TR:SO] [ca 32:10-32:40]

Al: I think the best joke I saw in Playboy was the one where  
the little girl was standing there,  
(0.7)

Al: in the doctor's office, she didn't have anything on,  
she's standing there,  
(.)

Al: Her mother's standing right by her  
Louise: And she's got the ears, and the uhm,  
Al: tail,  
Louise: 'h and the tai(h)l?  
(.)

Roger: hhh hh!  
Al: M\_o\_mmy had an accident.  
Roger: Yeah! I saw tha(hh)t  
Al: heh! heh  
Roger: hh! hehh hh! hh hh  
(1.4)

Roger: ehhh hhh!  
(1.2)

Al: As Mister Sheitzak put it so eloquently once, 'tch'h  
sex is here to stay.  
(0.7)

Louise: heh heh  
(Ken): hhhheh  
Dan: hmh hmh 'hh And that I'm convinced about.  
(1.1)

(Dan): hmh hmh hmh.  
Louise: Or is that that you-you just hope it.  
Roger: Why fight it it's bigger than the both of u(hh)s  
Ken: heh heh heh heh  
Roger: hhhh! hhh  
Al: hhhheh hh! hh! hh!  
Ken: heh  
\*\*→ (3.2)

Ken: I'm gonna be a grub from now on,  
(0.5)

Louise: W h y : . ]  
Roger: Do you have to ]\_be\_ in front of my: v\_iew

In the 'getting started' section shown in Graph 3.a., the configurations are much weaker than those of Graphs 1 and 2. There is only about a 3-to-2 ratio of the 23 cases of the target cluster to the 16 cases of all longer silences, and a dropoff of only 23 to 8 as between the target cluster and the next cluster of (1.3)-(1.8).

In the half hour sample of the 'interaction proper' the configurations are stronger. Akin to the Intra-Sentence silences of Graph 2



Bill: nYe:h,  
(4.1) ((Beth returns))

Rod: \*\*→(5.9) °Yeh you could check. I'm gonna (keep uh) stick with it.°  
Beth: [°Okay°

Beth: Woah::: There's yours Bi:ll, ]  
Jan: [°heh heh heh heh!°  
(0.2)

Jan: °hu h!°  
Bill: hnnnn.  
Beth: He:re's your shrimpies. ]=  
Josh: [What are these! ]=  
Beth: =°Here's your shrimpies Bi:ll,°  
Josh: Oh I don't like them  
Hal: [Those are shrimp ]s= ((Hal returning to the table))  
Beth: =That's shrimps.  
Rod: YEH.  
(0.7)

Rod: ‡ (4.2) OKAY JOHN, GOOD TO HEAR FROM YOU MAN.  
(0.6)

Rod: RIGHT. TALK TO Y[OU WEDN[ESDAY.  
( )]: ( )  
Hal: [I guess I'll sit over here  
( )]: ( )  
Bill: [( ) ]  
Hal: [There's always a ce rtain margin of error. ]  
(0.7) ((Rod hangs up the phone))  
(0.7) ((Beth leaves))

Hal: ((Sits)) ( ) there and all th[at.  
Jan: [That's a won ton.  
Hal: Hey that [bean sprout-  
Josh: [(What is a won ton!)]  
Hal: That bean curd thing looks pretty good,  
Jan: Mmm.  
(4.4) ((Fred and Beth return))

Rod: \*\*→ (5.0) ((whistling)) la ti la [ti la ti ]↑do  
Beth: [O:kay.]  
Beth: Okay why don't you sit-  
Rod: [↓do  
( )]: [(Hey )]=  
Beth: =(down) and help yourself,  
\*\*→ (6.7) ((Several moving around the table))  
Beth: °Here's the duck sauce.°  
(1.0) ((Beth sits, then Fred sits))

- - -

‡ Although Rod is on the telephone and not part of the conversational group, his talk here is very loud (indicated by UPPER CASE), and given the placement of talk by an unidentified member of the group, and then of Hal; i.e., just as Rod's Closing utterance is reaching completion, it appears that his talk has intruded, and is being monitored by the group. For these reasons I am not counting the (4.2) interval as a 'silence'.

Beth: And here's the mustard.  
(0.9)

Beth: Oh::: there's one more thing.  
(0.3)

Fred: hnh!

Beth: And that i:s, here kitty, hh!  
(1.4) ((Beth leaving, carrying the kitten))

Josh: °( )°

Hal: Mm:.

Josh: °( )°

Fred: How are you folks doing?

Jan: °Oka:y?°  
(1.0)

Hal: Okay,  
\*\*→ (3.0) ((Fred tasting the food))

Fred: Mmm.  
(1.4)

Fred: Mm!  
\*\*→ (2.4)

( ): ( )- (0.4) (Good?)  
\*\*→ (1.8)

Fred: °Ninety five points.°  
(1.2)

Beth: ((Sitting down)) hhhehhhhhhh.  
(1.0)

Hal: Do they have any:, (0.8) uhm, (0.3) duck, (0.3) what do they call it duck (sauce).

Beth: Duck sauce? Y ah (it's right here).

Jan: There's that sauce,  
(0.3)

Jan: (It's ).

Beth: Uh:m, here's the-

Hal: Well give me the duck sau ce.

Beth: Here's the regular  
du ck sauce ( )

Hal: (Let me have a little of it.) Great.  
(1.0)

Hal: What a very big- Wo:w.

Beth: And here's a little mustard.

Jan: Y(h)eh they give you m ore than you get in the sto:re.

Hal: Mm hm

Beth: mYeah.

Hal: This'll do it,  
\*\*→ (2.9) ((Beth tapping top of mustard container))

Beth: I can't-

Fred: Mm ( )=

Beth: =qu-m-quite manage the mus tart.

Fred: These egg rolls are very good.

Jan: ((mouth full)) You don't want mustard you mean?

Beth: No ::.

Hal: They've [chang]ed-

Beth: No.

Beth: I ca n't get it open either, hh!

Hal: t h e C h i n a City.





[Goodwin:DP:8:R:SO] [05:30ff]

Beth: They didn't have all the colors, 'hh The orange is really nice but they only had it in, 'hh these bowls, and uhm, (0.5) the coffee mugs.

Hal: Mmh=  
Jan: =Which is orange.  
(0.9)

Hal: The reddy orange.  
Beth: This one.  
Jan: °Oh::.  
Beth: The reddish,  
(2.3)

Jan: Mmmm.  
\*\*→ (6.0)

Josh: Mommmy?  
Jan: Well- ((clears throat))  
(0.3)

Josh: Uh do y o u k n o w e v e r y (single color)  
Jan: We could have used a little, marijuana. to get through the weekend.  
Beth: What happened.  
Jan: Norma has this new hou:se. and . . .

[Goodwin:DP:22:R:SO] [15:25-15:35]

Fred: It's sort of like you know you get into a very like=  
Josh: Mummy could I have some milk,  
Fred: =maniacal like,  
Hal: It must really-  
Bill: Gi:ve me:: the:se  
Hal: throw y o u completely like-  
Fred: ( )-  
Jan: Here-  
(0.2)

Jan: mhhhh  
Fred: It's really nice.  
Hal: But even if you're used to playing (it people who are)=  
Jan: I c(h)an't reach ( ),  
Hal: =really used to it,  
Beth: Mm-mm,  
Hal: m- m- ( just thinks that's crazy.)  
Fred: I'm not so used to it.  
(1.0)

Fred: True.  
\*\*→ (4.0)

Fred: It's really wi:ld.  
( )°: °( ),°  
Hal: ha:hhhhhh hhh  
Fred: hmh!  
(2.0)

Josh: Mo:re Mommy?

[Goodwin:DP:30:R:S0] [22:15ff]

((Josh has just whispered a joke into Beth's ear))

Hal: I didn't get that joke.  
(.)

Hal: I hope the c[amera did.  
Josh: [maMo:::m,  
(0.2)

Fred: What?  
(0.2)

Hal: I didn't get that joke I hope the came[ra ( )  
Josh: [No:w[we go=  
Fred: [Oh:,  
Josh: =upstai:rs and do: the bo:w[ling ba(h)al[1  
Fred: [ ( ) ]=  
Beth: [No we're not ]=  
Fred: = [ ( ) ]  
Beth: = [ready (yet).  
(.)

Josh: And this is a [big bo:wling ( )  
Hal: [Do you- Can you can you (back) it up and  
[monitor it you know <or do you:  
( )]: [ (Mm:.) [ (bo:wling )  
Josh: (.)

Hal: You=  
Fred: =Yes [:.  
Hal: [ (You have two channels.)  
Josh: Bo[: w l i n g b a : l l ] ) .  
Fred: [No:, (just one ) .  
Josh: 'hh Bo[:wling bo:::=  
Bill: [ ( ) ]  
Fred: =We got a [moni[tor upstairs.]  
Bill: [ ( ) ]  
Josh: [ U s g o : e : s .

\*\*→ (5.6)

Hal: (I'm very full.)  
(0.5)

Beth:            Do the people at your  
(1.1) ((phone rings xxxxxx[xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx]))  
Beth:            [place of work know about] your  
condition yet?  
(1.2)

Jan: Mm..

Neither of the Dinner Party samples provide for a strong display of the candidate 'standard maximum' silence. In the 'settling down' segment there is a 1-to-1 ratio as between the 10 cases of the target cluster and the 10 longer silences, and a dropoff of 10 to 4



The ten longest silences, by cluster, are: two (4.3)-(4.8), one (4.9)-(5.2), one (5.3)-(5.8), two (5.9)-(6.2), three (6.3)-(6.8), and one (6.9)-(7.2). Following is a sample of the talk in which some of the longer silences occur.

[Fr:USI:18-20:TR:SO]

- Vic: 'hh But I told her I says you ca:n't kill me with  
cockroach poison you go:t to u:se rat poison o:n me:.
- ( ): °Mm hm,°  
(0.3)
- Vic: But sometimes she (.) pass me by the poi:nt=
- Vic: =o:nce I h i,t her w ith a cha\_i : : : r , ]
- Joe: Don't wise her up 's he 's ]liable to do ]it.
- Vic: 'h Once I hit her with a chai::r and busted her a:rm  
open  
(.)
- ( ): °ihh°  
(0.6)
- Vic: Took the ten stitches to sew the a:rm up.  
(1.3)
- Vic: But.  
(0.8)
- Vic: She had to pass me to- s::- so fa:r, I'm not saying so  
far beyond a- 'hh average individual. But so far that I  
couldn't took- I, [couldn't took no more.
- George: ((cough))  
\*-> (1.7)
- Vic: And I keep trying to tell her where I i:s, (0.5) not me:  
you know where I i:s, (0.2) Don't want to hear it. She  
just keep telling me where me is suppo:sed to be.  
(0.6)
- Joe: hee-hee 'hh
- Vic: Don't want to hear about I.  
\*\*-> (6.7)
- Vic: She's got a, she's got a magazine there she's reading  
this morning. She says o:ld men::, no. She says uh, uh,  
(1.3) I forget how the phrase was in the magazine. Says  
\*-> something uh-uh, 'hh uh, (1.5) old men know how to  
treat a woman or some shit like that.  
\*\*-> (2.2)
- Vic: And I says oh you're reading a magazine she says you  
look at that. and I says yeh I believe it.  
(0.7)
- Vic: And she says well then why can't you::, why can't you do  
what an old man does. You're young,  
(0.8)
- Vic: A stupid question like that I said a old man got his mind  
set. 'hhhh  
(0.3)

- Vic: eh-Shit- my ol::d luh:lady went out- My wife. went out with guys fifty something years old, 'hh if they wanted to say I'm going away I got business to take care of for three days they went!  
(0.8)
- Vic: They did their business for three days and they came back and, took care of her they gi- 'hh showered her with, whatever kind of gifts they wanted.  
(Mike): [((cough))  
Vic: 'hh In her mind stuck the showering of gifts.  
(0.9)
- Vic: And my mi:nd says to me, if I want to go away for two=  
(Mike): [hhhh  
Vic: =hours man I want to go awa:y.Shit. She wants t(h)o kno(h)w, 'hh She don't want me to go:.  
\*\*→ (6.5)
- Vic: °And I'm chicken.°  
(.)
- Vic: And when I tell her about I, you could lead, same, old fashioned shit, you could lead a-a old horse to water but you can't make him drink, I'm thirty fi:ve. My wife's twenty:: six. Twenty seven. You know, 'hh I'm not saying I'm older than her, maybe she learned mo:re, than what I know.  
(1.3)
- Vic: But where is she:in, ih-ih-i:: where is anybody into telling, (0.9) I, I. (0.8) what to do.  
\*\*→ (3.0)
- Vic: You know,

The longest silence, (7.2), occurs between two 'topics', after a remark by a participant in the currently central interactional group to someone working in another part of the room.

[Fr:USI:29-30:TR:SO]

- Mike: Whatever those things °are called.°  
(1.0)
- Mike: °Half man half horse°  
(1.0)
- Mike: efff name is on [the tip of my]°( )°  
George: [I'll think of]it.  
Vic: [Monitor?  
(1.2)
- Mike: Minataur no: that's not that's no:,  
(1.0)
- Mike: °Uhm°  
\*\*→ (4.3)
- Vic: i-Yeh but that's (.) th:e m: the m- (.) I don't know,  
Mike: °tshh!°  
(Vic): (Ih)  
(0.5)

Vic: °Doesn't matter, °hh  
(2.5) ((bad stretch of tape, no sound))

Mike: It's not a unico:rn but it s:(h) [ure(h) is 'hhh

Vic: [°Yeh°  
(0.4)

Vic: °He:re Joseph. °  
\*\*→ (7.2)

Vic: You got it?

Joe: I got it, yeah.  
\*\*→ (0.6)

Mike: ((cough cough)) whhhhh  
\*\*→ (5.1)

Mike: What did you do. You left all the glass right in the  
hallway there.

Vic: I'm up there, I'm up there, fixing the windows::  
(0.7)

Vic: This- eh this is a, lift, you know for you. You know? if  
you want to take it as a lift.  
(1.0)

Vic: I'm up there fixing the windows, and . . .

The talk which occurs upon the arrival of the awaited participant has a very different character, clearly visible in a comparison of the two graphs. In the 26 minute sample of talk prior to the arrival, there are 142 silences of nine-tenths second and over, 8 of them of five seconds and over. In the 26 minute sample taken from the point of arrival, there are only 34 silences of nine-tenths second and over, 1 of them over five seconds.

Graph 5.b.: Fr:USI:B: [(0.9)+] Silences

Pages 31-69 [ca 34:40-1:00:40]

<u>(0.9)-</u>	<u>(1.3)-</u>	<u>(1.9)-</u>	<u>(2.3)-</u>	<u>(2.9)-</u>	<u>(3.3)-</u>	<u>(3.9)-</u>	
<u>(1.2)</u>	<u>(1.8)</u>	<u>(2.2)</u>	<u>(2.8)</u>	<u>(3.2)</u>	<u>(3.8)</u>	<u>(4.2)</u>	<u>+</u>
⋮							23
⋮	⋮						7
⋮	⋮	⋮					2
⋮	⋮	⋮	⋮				(8.0) 1

In its way, the eight-second silence may be akin to the four and two-tenths seconds interval in the Dinner Party conversation, which I decline to treat as a 'silence' (see page 30). After the news delivery and several minutes of talk on other matters it appears that the participants break up into two groups, with Vic talking to George, the others talking softly to each other. Whereas in the Dinner Party materials the talk in that interval is loud and intrusive, the talk which fills the eight-second interval in the Vic-George conversation is very quiet, and may by its very quietness be problematic, motivating an attempt to hear it.

[Fr:USI:55-56:TR:S0]

Vic: He says well how come you paid the rent such and  
 (James): such ti:me.  
 (Mike): (1.4) [°( )°  
 Vic: [°(I tell you. I'm gonna get sma<sub>[shed.]</sub>)°  
 (Joe): [to:ld me that I don't have<sub>[to pay rent til the twenty=</sub>  
 (James): [°( )°  
 Vic: =fifth.  
 (Mike): [°(Yeh that's really [°( )°  
 (James): [°Want to<sub>[explain to you</sub>]°  
 (Joe): [°( )°  
 James: °I realize it.°  
 (Joe): °Yeh I know.°  
 James: (8.0) [°You know what I mean?°  
 (Joe): °Yeh,°  
 James: °(Well<sub>[just,]</sub>)°  
 Mike: [°It's just- It's just that it wasn't<sub>[( )°</sub>  
 James: [°You got  
 (differences<sub>[( )°</sub>  
 Vic: [°So I say,°  
 Joe: °You got<sub>[several hangups</sub>]°  
 Vic: [Tchuu. [°( )°  
 George: [°Later for that.°  
 Vic: So I says<sub>[wo::w.</sub>  
 James: [°Is it okay?°  
 Mike: °Ye:h.°

The next-longest silence, of three seconds, occurs when the 'key' matter is returned to; the news-deliverer making a significant



discovery in the course of a second round of the telling.

[Fr:USI:62-64:TR:S0]

Vic: It didn't break.=  
 James: =You don't knock the glass out like that. eghh  
 Vic: And it got rubber,  
           (0.3)  
 Vic: Wai:t. It's not setting in a-°ih-it has what you got°=  
 James:                   [eghh  
 Vic: =eh n::no. (.) It's a metal door.  
           (1.2)  
 Vic: It's r:rubber::, sea:med, insi:de.  
       \*\*→                   (3.0)  
 George:            Never be able to break that.  
 Vic:                It's got rubber in the sea:m.  
 James:            Yeh.

None of the materials counted for silences of nine-tenths second and over shows as strong a preponderance of the candidate 'standard maximum' silence as does the primary run. The ratios of (0.9)-(1.2) to all longer silences vary substantially.

<u>Graph 1</u>	(Primary Run)
951 to 329	(ca 3 to 1)
<u>Graph 2</u>	(Intra-Sentence Silences)
261 to 109	(ca 2.5 to 1)
<u>Graph 3.a.</u>	(Group Therapy: 'getting started')
23 to 16	(ca 1.6 to 1)
<u>Graph 3.b.</u>	(Group Therapy: 'session proper')
88 to 42	(ca 2 to 1)
<u>Graph 4.a.</u>	(Dinner Party: 'settling down')
10 to 10	(1 to 1)
<u>Graph 4.b.</u>	(Dinner Party: 'dinner proper')
36 to 34	(ca 1 to 1)
<u>Graph 5.a.</u>	(Upholstery Shop: 'waiting')
65 to 57	(ca 1 to 1)
<u>Graph 5.b.</u>	(Upholstery Shop: 'arrival')
23 to 10	(ca 2 to 1)

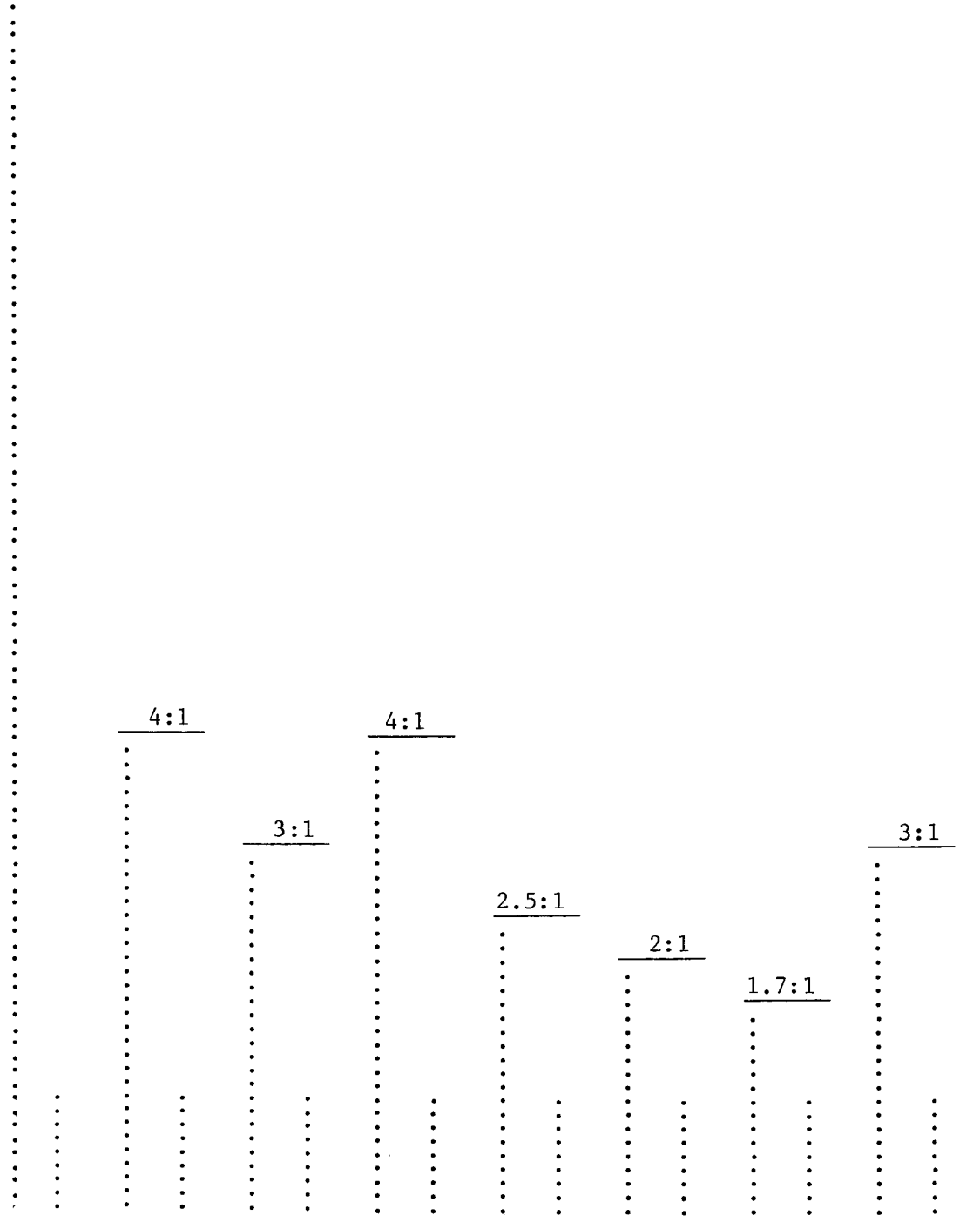
The materials are rather more consistent, although again much weaker than the primary run, when it comes to the dropoff from the

target cluster (0.9)-(1.2) to the next cluster (1.3)-(1.8).

Graph 6: Ratios of Cluster 1 (0.9)-(1.2) to Cluster 2 (1.3)-(1.8)

<u>G.1.</u>	<u>G.2.</u>	<u>G.3.a.</u>	<u>G.3.b.</u>	<u>G.4.a.</u>	<u>G.4.b.</u>	<u>G.5.a.</u>	<u>G.5.b.</u>
<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>	<u>C<sup>1</sup> C<sup>2</sup></u>

10:1



It may be that the phenomenon is most dramatically present in Inter-Utterance silences (see Graph 6; compare G.1., an aggregate of inter- and intra-utterance silences, with G.2., consisting exclusively of intra-utterance silences), and in that 'type' (or those 'types') of interaction which tend to occur more consistently in telephone calls; i.e., by which telephone calls are almost exclusively constituted, but which, in face-to-face environments occur in combination with other 'types' of interaction (see Graph 6; compare G.1., taken mostly from telephone material, with G.3.a.-b., G.4.a.-b., and G.5.a.-b., taken exclusively from face-to-face material).

#### IV. Further Possible Manifestations of the Candidate Metric

I have begun to look into another two areas in which an interval of approximately one second recurs. One is Storytelling. The other is Intra-Sentence Inbreaths. There are some preliminary indications that inbreaths are, massively, shorter than one second, and/but rarely longer. I will show examples of each phenomenon.

Following are two storytellings with recurrent [+/-] 1-second silences. They are both from face-to-face conversations; the first from multi-party, the second from two-party conversations.

(4.1) [Merritt:Egg:4-5:S0]

Halda: she says can I move in today.  
 Jean: °uhh!°  
 Halda: Uh I said uh,  
 \*→ (1.3)  
 Halda: well I just don't know if you can get a- uh:: w-what  
 uh-uh are you gonna- have you-  
 → (1.0)  
 Halda: What are you gonna do about your furniture. and she said  
 I haven't got a stick of furniture!  
 → (1.0)  
 Halda: And ah- a:nd uh I [says well-  
 Jean: hhh!  
 Jean: hhh!

- Halda: h(ha)how can you move i:n then. 'hh She said,  
→ (1.0)
- Halda: oh haven't you got a little bed. or uh haven't you got a  
bed- I- you're not gonna use or a chest of drawers or  
something.  
(0.5)
- Halda: or a little, uh, card table or, something? and she said  
this- oh it doesn't matter, 'hh she says, oh::: she says  
I don't want to- I'm, I'm through (h)looking, I'm just  
through looking and I want to ( )- right here.  
→ (1.0)
- Halda: A:nd she says I intend to furnish this house, in antique  
furniture.  
→ (1.2)
- Halda: And so uh,  
(0.7)
- Halda: We:ll? huh, huh-huh! 'hhhh I was so swept off my feet,  
and so was Ira, we were just both aghast. that,  
Jean: uhh!
- Halda: A:nd uh, [so finally-  
Jean: ( ),  
→ (1.0)
- Halda: uh::m, I said ye::s, I,  
→ (1.0)
- Halda: I have a chest of drawer:s, that I wasn't gonna use,  
(and uh, and uh-uh),  
(0.7)
- Halda: guess we could bring them up with a- 'hh  
\*→ (1.3)
- Halda: a bed? mattress and spring,  
→ (1.0)
- Halda: Well uh and I said I do have a card table, ye:s, and uhm  
and I said you can, probably use a couple chairs  
(couldn't you), and so uh. Well, they set up housekeeping  
\*→ (1.3)
- Halda: A:nd uh  
→ (1.0)
- Halda: thrilled to death.  
→ (1.0)
- Halda: Well what I started to say. Talking about your boiled  
eggs. One day . . .

(4.2) [O'Hare:A:2-4:S0]

- Mab: and she said 'hh I feel u-tellibee (.) terribly  
worrie:d.  
(0.4)
- Mab: about Celia that's: the daughter's na::me,  
(0.6)
- Mab: She said she- she isn't at all well these last few  
mornings she said?
- Gwen: °Mm hm,°

- Mab: She said she's ↑vomiting all the time.  
 Gwen: °Mm hm,°  
 (0.3)
- Mab: †Oo she said °Connie said° <eh:m Sylvia said °perhaps she's eaten something to up°set he:r.  
 Gwen: Mm hm,  
 Mab: °No: she says not out of the° ordina↑ry  
 → (1.0)
- Mab: Uh we-ell?  
 (0.3)
- Mab: her mother and father went ou(.)t, 'hhh one night for a meal and left Connie: and Geo:rge w- now and lea:ve Lena and Lena and what do you call her.  
 Gwen: [Ye:s,  
 (0.6)
- Mab: Well ih some bo:ys who came i:n?  
 → (1.0)
- Mab: And uh::  
 (0.7)
- Mab: they cleared off before the parents came back.  
 Gwen: °M-hm,°  
 Mab: So the following week, (.) this sickness kept o::n,  
 → (1.2)
- Mab: And eh:: she said can't understand it Celia she said 'hh you must have eaten something very (.) p- (.) peculiar:: to upset your tummy like that. Oo she said (.) She turned to her mother quickly, oh she said you can expect something bigger than that,  
 Gwen: °Ohh:°  
 (.)
- Gwen: (Well) [she ( )  
 Mab: [Twelve Gwen.  
 Gwen: [Oh:oh:oh: twelve=isn't that terrible,  
 Mab: [Sh:e:  
 was twelve.  
 → (1.0)
- Gwen: °Isn't that (.) awful.°  
 → (1.2)
- Mab: (I mean) she knocked her over nearly eh her mother (.) nearly went into pieces.  
 → (1.0)
- Mab: And she said good gracious alive she said couldn't you have seen befo:re?  
 (0.3)
- Mab: what was the matter with me?  
 → (1.2)
- Mab: Her mother said I don't know what you're talking about or whom you're talking to:.  
 Gwen: °Mm hm,°  
 → (0.9)
- Gwen: °Te:rrible°  
 Mab: [She says good gr:acious alive (Sylvia) 'hh †Ooo she said that's why the boys come evry night

Mab: she said we have fine fun.  
 → (1.2)  
 Gwen: (Fi:ne) fun, isn't that terrible.

And following are a few of the intra-sentence inbreaths I have timed so far. As I go through the materials now, when I see a long inbreath in a transcript, I find it on the tape and time it. So far I have picked up nine, all but one of which fall into the (0.9)-(1.2) cluster, the remaining one running to (1.4).

(3.3.1.) [SBL:3:3:R:1:S0]  
 Milly: → but it costs so much to sue: that uh [·hhhhhhhhhh] hhe  
 says . . .

(3.3.2.) [TCI(c):11:2:S0]  
 Irene: See w\*e wanted to borrow five hundred dollars: mo:re  
 → from [·hhhhhhhhhh] H.F.C: h  
 [·(0.9)·]

(3.3.3.) [MDE:60-1:7:3:S0]  
 Sheila: And it- it was] really amazing because if you go to the  
realtor::,h  
 (0.3)  
 Sheila: th:ey s- 'hh e-have ↓hou:ses and they're about four  
 → hundred dollars and [·hhhhhhhhhh] around there,  
 [·(1.0)·]

(3.3.4.) [DA:2:12:S0]  
 Ellie: → she kept getting sicker and sicker and uh::: [·hhhhhhhhhh]  
 uh d-ed even when she said she was very sick . . .

(3.3.5.) [NB:II:4:R:22:S0]  
 Nancy: he said I'd (.) I'd love to (.) get to the beach and \*I  
 → [·hhh'hh'hh'hhh] he said you live at the beach too . . .  
 [·(1.0)·]

(3.3.6.) [NB:IV:10:R:26:S0]  
 Emma: He's gonna be very ↓wealthy °some day.° h 'Cause he got  
 → a:ll these big co:ntracts with A.B.C: and [·hh'hh'hh'hh] oh:: General Telephone . . .  
 [·(1.1)·]



(3.4.6.) [DA:2:15:S0]

Ellie: because uh 'hh she left him nothin:g with nothing but  
 a::: a-a-a thing full of uh: probably over his hea:d,  
 → [ 'hhhhhhh in uh::: ]  
 [ (0.9) ] [ (1.2) ]  
 (1.0)  
 Goldie: °But uh° [ But you know ] . . .  
 Ellie: [ u [ W h o knows. ]

(3.4.7.) [DA:2:17:S0]

Ellie: unfortunately in the interim the:: several of our:  
dear friends uh you know passed away and u:h:  
 Goldie: [ Anyone I  
 know :w?  
 Ellie: [ 'hhh't'hhh  
 (.)  
 Ellie: → Uh well I don't know whether you knew [ (1.1) ] well  
 you remember Laura Landau don't you?

## V. Discussion

In the first place, the possibility of a metric which has as one of its artifacts a 'standard maximum' silence of approximately one second emerged via a few fragments of problematic interaction (see page 6). With that possibility as an instrument for monitoring data, much blander materials, such as intra-sentence silences, inbreaths, and prolonged 'pause fillers' not only seem to yield support for the existence of such a metric, but become animated in a way that was heretofore unavailable.

Some of the intra-sentence silences have taken on a particular vividness; for example, those in which a speaker is searching for a word. Sometimes the search extends beyond the candidate 'standard maximum':

(5.1) [NB:I:5:5:S0]

Bud: → And if you can bring uh (1.4) Buster Brown along with you? why bring him along.



(5.2) [Goodwin:84:AD:41-42:S0]

Lenny: → but some guy up in, Ed Shaller or somebody up in, (1.5)  
Detroit built this engine and he's got over twelve  
 hundred dollars just in the engine,

(5.3) [Cam:7:6:S0]

Mac: → Well it's: it used to be s:: eh::, (1.9) 'hh only three  
bo:b to get down there

But recurrently, the search is resolved at the proposed edge of  
 the 'tolerance' for silence:

(5.4) [Owen:8B15(A):34:S0]

Andrea: → The biggest check I ever wrote out was: (1.0) 'k two  
 hundred and thirty fi:ve (.) pounds

(5.5) [SBL:2:1:6:R:1:S0]

Tess: You're only ha]ving six aren't y<sup>[\_ou,]</sup>  
 Bea: <sup>[\_Eh-]No I'm having</sup>  
te-e:n.hh'hhhhhh (0.3) u-But uh:m hhh (0.3) i-See  
 → four for bri:dge and six for: (1.0) †Tripoly.

(5.6) [SBL:2:1:8:R:1:S0]

Nora: → A:nd uh:\*: uh:: she pro:bably wrote a: (1.0) a paper  
o:n it?

(5.7) [NB:I:1:25:S0]

Bud: I've got San Juan Hills phone number here in (my)- in  
 → the uh, (1.0) phone book,

(5.7) [Goodwin:84:AD:23:S0]

Bart: What's his na:me.  
 (0.5)

Cal: → Harry uh, (1.0) Schirmer? <Shure?

(5.8) [TCII(a):14:2:S0]

EJ: Is he a ma::le?  
 (1.0)

Croff: → I had him (1.0) demaled.

(5.9) [PB:3-4:20:SO]

Merle: → But wuh-u-we haven't seen them since, (1.0) September.  
Paul: [°Mm hm?°]

(5.10) [SBL:1:1:12:R:12:SO]

Maude: → At least I ↓like her↓ I: you know what I mean she's a  
→ ↓fo:rthri:ght uh (1.0) HARDWORKING °(uh↓:m)°  
(.)  
Bea: 't †Where's she fro:m where did she trai:n.

(5.11) [GTS:I:2:49:R:SO]

Ken: → I thought that was against their uh (0.6) their code of  
(0.9) ethics to uh  
Louise: [Their code of ethics is not to advertize,

(5.12) [SF:II:16:SO]

Mark: → hAnd what was your immediate reaction to that.h  
(1.3)  
Bob: → Oh:: I guess I was:: uh::hh [hh  
Mark: [hhhmhhh=  
Bob: → =Well let me see:: (1.0) Plea::sed?h

Perhaps the most interesting in terms of an orientation to the candidate metric are the word searches which are not resolved at the proposed point of 'maximum tolerance', but where some activity occurs. Again, there are longer intervals:

(5.13) [NB:II:4:R:20:SO]

Nancy: → e-he's drivin:g his uhm (.) au:nt Hel↓en, up to uh f::  
(1.9) °\*Oh h\*e11° where does she ↓live. Up (.) nea:r  
Santa(b) not s-uh:m (0.3) †Oj\*ai.

(5.14) [Goodwin:AD:7:R:14-15:SO] ((This is Fragment 10))

Bart: → Keegan used to race uhruh- uhr it was uh:m (0.4) used  
to run uh::m. (3.4) oh::: sh::it. (0.3) uh::m, (0.4)  
Fisher's ca:r.

(5.15) [SBL:2:1:8:R:7:SO]

Nora: → I thought it was uh:m (0.3) 'tch (5.0) oh:::-: ↓gee:  
uhm u-one of the women who's eh: ex president of the  
woman's clu:b . . .

But recurrently some activity occurs at the proposed edge of the 'tolerance' for silence:

(5.16) [NB:IV:10:R:14:S0]

Emma:           M<sub>[m h m ?]</sub>  
Lottie: →   A:nd he c<sub>ame</sub> in about< (1.0) °let's see° fi:ve thirty,

(5.17) [Owen:8B15(A):41:S0]

Andrea: → You can ge:t eh::m (.) grape (1.0) I don't know what they call it grape juice or grape extract=

Bette:           = Mm:,  
Andrea:           or somethi<sub>[ng in]</sub> Boot's::  
Bette:           Mm:,

(5.18) [S:PRP:7-8:S0]

Ann:            I got- uh my- my evening gown was uhm uh crépeback satin.  
The rea:l hhea:vy sa:tin.  
(0.5)

Ann: → in the uhm (1.0) 'tch! uh: what do they ca- princess cut.

(5.19) [NB:II:2:R:15:S0]

Nancy:           e-He: had uhm (.) 't'hh fi:led a complaint with the schoo:l, (1.0) 't<sub>[°Mm:,°]</sub> 'h<sub>hhhh</sub>hh

Emma:           that he thought Mister Bradley: (.) was uhm (1.2) 'tch  
uh::m (0.5) condoning hhhhh 'h<sub>hhh</sub> u<sub>[h t h]</sub> in:gs . . .  
Emma:           [ ( ) ]-

(5.20) [NB:III:3:R:2:S0]

Emma:           We just had a vo:dka Barbara and I: just had a ni:ce  
great big double vo:dka and we're having a barbequed  
→ (1.2)

Emma:           [ u<sub>h</sub> : ]  
Bud:           Some- Something?

(5.21) [Her:III:1:5:1:S0]

Heath:           'h<sub>hh</sub> Ah: he thinks that it's uh as much as anythin:g  
ah:m a um:  
→ (0.9)

Joan:           ar :thritis.  
Heath:           [ u<sub>h</sub> ]

Akin to the prolonged "UH"s produced by one particular speaker, an interesting little corpus of intra-sentence silences is generated

singlehandedly; in this case, by a man with a formidable stammer. In the aggregate his 'standard maximum' intra-sentence silences occur at a 4-to-1 ratio as against all longer silences, the longest of which is (1.7). Again, with the possibility of a 'maximum tolerance' for silence of approximately one second, the talk comes alive, and we can begin to watch this speaker achieving the termination of his silences within, upon, and rarely beyond that boundary. For example:

(5.22) [Her:OI:3:1:S0]

Barnaby: †A::n::d s:so (.) r-rih u- (.) really this there's  
 nothing much else that we can do for the time being  
 → 'hhh We've agreed (.) agree:d tō (.) to go: th- (1.0)  
 sa:me price, (0.7) which i:s twenty six:; †a:n:d  
 (0.2) 'hhh if there's going <goi:n:g to be any ek (.)  
 any sor- sort of (0.5) fuss about oh well we'll: go  
 an extra five hundred an:d so it goes back to the:m  
 → → and 'hh aw- (1.0) all this:: rubbish (0.3) then (1.2)  
forget it.

(5.23) [Her:OI:3:9:S0]

Barnaby: The:y s:aid (.) said i-k- (.) who it i:s ih-ih-eh-  
 → up- appar- apparently it's a Mister:(b) (1.0)  
 \*→ Mister(b) (1.7) Blumford

It seems to me the foregoing data arrays and graphs indicate that the metric which provides for the "tendency" reported by Goldman-Eisler and Butterworth, of inter-sentence pauses in reading to be "roughly of the same length, 1.0 - 1.24 seconds", is operative in "spontaneous speech" as well. Clearly it is not as consistently manifest as other systematicities in conversation; for example, the "tendency" of a first greeting to be followed by a return greeting. And most likely it is not as consistently manifest as the (1.0)-(1.24) pause which occurs in reading - otherwise it surely would have been reported. I would then be tempted to ammend the Goldman-Eisler/ Butterworth characterization of silences in "spontaneous speech".

It may be not so much that silences in conversation "vary considerably" (such a formulation invoking a free range of durations), as that they do not adhere as strictly as do silences in reading, to a Base Metric for speech.

References Cited

Robert E. Kraut, "Verbal and nonverbal cues in the perception of lying", in Journal of Personality and Social Psychology, 1978, Volume 36, Number 4, pages 380-391.

Brian Butterworth, "Evidence from pauses in speech", Chapter 7 of Language Production, Volume 1, Speech and Talk, edited by Brian Butterworth, Academic Press, 1980, pages 143-154.