8 Preliminary notes on a possible metric which provides for a 'standard maximum' silence of approximately one second in conversation

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Introduction

For most of the 18 years that I have been producing transcripts for the analysis of naturally occurring conversation, I have been timing silence in 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 stop-watch but in 1968 it broke and instead of replacing it I switched over to the method favoured by amateur photographers, simply mumbling 'no one thousand, one one thousand, two one thousand …') And while many regularities have emerged from more or less unmotivated scanning of the materials, over the years I have not 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 a wide range of lengths. For example, in the following array of intra-utterance silences following an 'uh', i.e. in the same sort of environment, there are silences ranging from approximately 0.2s to approximately 3.4s.

(1) [GTS:I:2:3:R:3:SO] ((face-to-face))
Ken:　　　　And then I work (.) I work at Jake's Jug and I go in there
　→　and I: uh (0.2) put all the ↓bottles in ba:ck,

(2) [Rah:A:1:(6):1-2:SO] ((telephone))
Mr F:　　　Got them sorted out the: tent's: the tent's up and
　　　　　everything,
Jessie:　　Ye:s,
Mr F:　→　A:nd uh:m (0.6) uh I've just given them a mea:l so: (.)
　　　　they're gonna be uh it'll keep them warm for awhile,

(3) [PB:3-4:22:SO] ((face to face))
Merle:　　It was so depressing registering for classes next quarter
　→　becau:se, u::m, (1.3) 'tch! (0.9) I: you know if I don't
　　　get through Oh I've got to tell you. You're gonna die
　→　laughing. (0.4) Dennis and I were talking a:nd uh (1.3)
　　　'hh Oh see- in September I'm gonna go over there …

(4) [NB:II:2:R:8:SO] ((telephone))
Nancy:　　You know for all of this: u⌈h: inten⌐sive thou:ght
Emma:　　　　　　　　　　　　　⌊°Oh::.°⌋
　　　　　　　　　　　　(.)
Nancy:　　bus⌈iness,h⌈'hhhh
Emma:　　　⌊Mm:　⌊hm,
Nancy:　→　A::nd uhm (1.8) 'tch I can't remember one: (.) one of
　　　　the f:↓kids had said in his thin:g u-something abou:t …

(5) [SF:II:22:SO] ((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)
(　　):　　'khhh'hhhhh
Bob:　→　Uh:::: let's see. hYou know:: basic uh::(2.0)uh:::oh:,hh
　→　(2.2) cre:w,

(6) [Goodwin:AD:7:R:14–15:SO] ((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 Fragments 3 and 4, the silences are counted, not from speech-object to speech-object, e.g. from 'uh' to a word as in Fragments 1, 5 and 6, or from 'uh' to 'uh' as in Fragments 2 and 5, but from 'uh' to either an inbreath, as in Fragment 3, 'Dennis and I were talking a:nd uh (1.3) ˙hh' or a tongue-against-teeth click, as in Fragment 3, 'becau:se, u:m, (1.3) ˙tch!' and Fragment 4, 'A::nd uhm (1.8) ˙tch'.

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 kind 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', but here is one that comes close, preceded by 'uhm' (0.3) ˙tch'. And this five-second silence is the longest intra-utterance case I have come across so far.

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(7)  [SBL:2:1:8:R:7–8:SO]   ((telephone))
Nora:    I thought I knew] ↓ HER 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, ˙hhh and one of the most deli:ghtful
         woman I (.) women: I know in tha:t u-She was OUR:: uh
         counselor: one year? when I was on the boa:rd.
Bea:     Oh:. No I duh‹
Nora:    And she:'s a (.) perfectly deli:ghtful woman and I tell you:
         uh the light was kind of in my eyes, and I th- I:spoke to her
         because I thought it was she and I: thought=
Bea:     =┌M- h m ┐ hm
Nora:→    └well gee┘I didn't know
  *→          (1.2)
Nora:→   I'll think of her name in a minute well any ↓ wa:y. I thought
         it was she↓:.
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Here, the announcement of a name has been set up as the point of the story. Perhaps because of its special status, the speaker permits herself such a long time to search for it. She then tries a good tactic for remembering, which

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time to search for it. She then tries a good tactic for remembering, which is to sneak up on the forgotten item by building a sentence in which it will naturally occur. She may be starting on something like 'Well gee I didn't know (NAME) was a friend of Bea's', or 'I didn't know (NAME) played bridge'. This second try also failing, she resumes talk much more rapidly.

The foregoing array provides 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 consists of data which, it seems to me, provide glimpses of such a phenomenon.

Biography of the phenomenon

Early in 1983 I was reading and making comments on an exercise in conversation analysis by a Dutch colleague, Hanneke Houtkoop. She was working with some problematic interactional bits in materials she had collected, and in commenting on her analyses I would occasionally refer to fragments 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 (the three Dutch fragments translated by Houtkoop into English).

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

```
[M-F]    ((M phones F, talks to someone else who calls F to the phone.
          Fragment starts with F's first utterance))
F:       Hi Mar(t), are you coming too?
   →          (1.3)
M:       Hello: Frank. ((smiling))

[M-S]    ((Same situation as the M-F call))
S:       We:ll van Noort. What's up.
M:       Hello Sjoerd.
   →          (1.2)
M:       Hey how was your party last night?

[M-P]    ((P is the Answerer-Not-Called of the above interchange))
P:       You're the first one to ring at the new house!
M:       Yeah.
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                    (0.7)
M:        Oh yeah?
P:        Yeah.
  →                 (1.3)
P:        Well I'll call Sjoerd.
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[DA:2:3-4:SO]   ((Two women in the course of a problematic
                  arrangements-making))

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N:        She's going to pick me up Thursday morning.
  →                 (1.2)
N:        ˙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 resolutional 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 more-or-less 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 artefact a 'standard maximum tolerance' for silence of more or less one second.

Further, some of the materials with longer silences suggested that there might be an alternative available metric; a 'gearing down' to a pacing which provided for silence-termination at one-second intervals, i.e. at about two seconds, and if not then, then at about three seconds, etc.

As I was going through the materials, focusing on this more-or-less 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 silence in interaction must have come across it and written it up. On the other hand, if I were doing some sort of selective

observation, noticing the 320 cases of problematic interaction in which the silence just happens to be more or less one second, conveniently ignoring the myriad similar cases in which the silence is longer, then some of the work done on silence would show the non-significance of one second. That is, it seemed to me that I had got myself into something that other work would show to be either redundant or wrong.

So I sent out a request for references to a literature on silences/pauses with a sample collection of the more-or-less one-second silences in problematic interaction. The following are just a few of those sample cases.

(1.1)   [SBL:2:2:3:R:30-31:SO]   ((telephone))
```
Claire:           if I say one club and they say one diamond
                  ⌈what do you d⌉o
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 . . .
```

(1.2)   [JG:IV:1:1-2:SO]   ((telephone))
```
Ronald:           I'll get a Ninety Niner. ((a fast-food meal))
Maggie:           Oh no honey no no no no.
Ronald:          ⌈Eeyeh-
                 ⌊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.
```

(1.3)   [SBL:1:1:12:R:15-16:SO]   ((telephone))
```
Maude:            I says well it's funny: Missi:z uh: ↑Schmidt ih you'd
                  think she'd help‹ ˙hhh W:ell (.) Missiz Schmidt was the
                  one she: (0.2) assumed 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 ↑her 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:SO] (face-to-face))

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:SO] ((telephone))

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] (telephone))

Sue: → Hello:?h

    *→   (1.0)

Sue: → Hello::,hh

        (3.0)

Sue: H'llo?h

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

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⌐ ⌐˙eh

Dan: └huh└ huh huh huh huh hu⌐h °↓hu° ˙hhh⌐=

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]   ((face-to-face))
Andrea: By the way do you   want any lettuces little lettuces?
             because they've come ou:t very we⌐ll
                                         └↑Have they,
Bette:
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: bibliographies, articles, and occasionally some encouragement. Glancing through the few articles that had been sent me, I found two pieces which in some way addressed the more-or-less one-second silence. The first is from Kraut (1978). Here are the relevant segments (emphasis added).

> 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. . . .*
> 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.* . . . 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.

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. Second, 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 more-or-less 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 Butterworth (1980).

> *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 to the many longer silences in the 'spontaneous' materials with which I work. On the other hand it was 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 because the work involved in (dis)proving the possible phenomenon seemed overwhelming.

A possible complementary approach to the candidate phenomenon

In August 1983 I started typing up several hundred pages of retranscriptions I had done when I first arrived in Holland (careful rehearings for a project on the organisation of overlapping talk). As I was typing up these materials, with 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 0.9s to 1.2s 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 1–7 and Butterworth, 1980), 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, through some 168 transcripts, altogether some 1,860 pages, collecting and counting all silences of nine-tenths of a second and longer.

The data run yielded a couple of striking results. For one, there are some 951 occurrences of silence of 0.9–1.2s, i.e. of 'approximately one second', compared to some 328 cases of longer silences. Secondly, if the candidate 'standard maximum' cluster of 0.9–1.2s is compared to the next longest cluster, 1.3–1.8s, there is a tremendous drop-off. The 951 silences of 0.9–1.2s are followed by some 92 occurrences of silence of 1.3–1.8s.

Parenthetically let me note that several months later I did my own timings of the Houtkoop fragments, and came up with shorter intervals than her 1.3s, 1.2s and 1.3s (see p. 169–70 above).

```
        [M-F:GJR]
        F:        Hi Mar(t), are you coming too::?
                        (0.9)
   →    M:        eh ↑Hello Frank,


        [M-S:GJR]
        S:        We:ll van Noort. What's up.
        M: ____  Hello Sjoe:rd,
               ⊤          (0.3)
   →    ( ): (1.0) ehh hh
        M: __|__ He:y how was your party last night?


        [M-P:GJR]
        P:        You're the first one to ring the new house!
        M:        Yeh-
                        (0.7) ((not retimed))
        M:        Oh yeah?
        P:        Yea:h.
                        (1.0)
   →    P:        ⌈˙hhhh⌉Well I'll call Sjoerd.
                  ⌊(0.3)⌋
```

Among the 328 cases of longer silences there are five especially long ones, of 6.2, 6.5, 6.5, 7.3, and 16.4s. Three of the five, the two 6.5s and the one of 16.4, occur in close proximity in a conversation between two secretaries on a coffee break, examining a train schedule.

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(2.1)   [Owen:8B15(A):29-30:SO]
Andrea:      I think I'm gonna have to get up the night be↑fore
                  (1.2)
Bette:       ˙t'hh Check with the station and (.) ask them what the fir
             train that goes on Good Friday is and-
Andrea:      ˙hh Wonder if I could advertise in the grad centre for
             anyone who's going up.
                  (1.9)
Andrea:      Be worth trying,
                  (1.0̃)
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:       =Th⌈ere's plenty⌈
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'clo:ck
             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 h<u>u</u>h ·hhhh ↑heh ·h<u>e</u>::h
Bette: ⌊ehh-heh-h<u>e</u>h
**→   (6.5)
Andrea: °The l<u>a</u>test trai:n down on (.) Thursday,°

The 7.3s silence occurs in a conversation between two young women sitting in a sunny corner at a neighbourhood block party.

(2.2)   [Goodwin:50:Clacia:7-8:SO]
Donna: It was pr<u>e</u>tty ni:ce.It r<u>e</u>ally wa:⌈s,
Tanzi: ⌊°(Yeh)°=
Tanzi: =°(it ⌈ w a : s.   Y e h.)° ⌉
Donna: ⌊It was nice and it was⌋clean:,=
Tanzi: =⌈Right.⌉
Donna: ⌊it was ⌋hew: and they⌈(h a : d)⌉‹you know like made the=
Tanzi: ⌊°Right.°⌋
Donna: =b<u>e</u>:ds and, (0.5) °fu⌈rniture (and stuff.)
Tanzi: ⌊(You) had (choice) furniture.=
Tanzi: =Right. Well <u>we</u> had that over in our p- uh, (0.8) <u>u</u>-They had bought that for our h<u>ou</u>se. °When they furnished the house.°
               (2.5)
Tanzi: °(But it was d<u>i</u>fferent) there's no dou:bt about it.°
**→   (7.3)
Donna: Wh<u>o</u>se c<u>a</u>r is that down there⌈(   ).
Tanzi: ⌊BYE BYE ENJ<u>O</u>Y YOUR
          BRO::CCOLI PIE::,
               (0.4)
Donna: Broccoli pie::,
               (0.6)
Tanzi: She's going to her s<u>i</u>ster's house.

In the coffee break materials of Fragment 2.1 the long silences may well be unproblematically occupied by one or another of the women looking through the train schedule. In the block party materials of Fragment 2.2 there is good reason to suppose that the long silence is occupied by both women scanning the surrounding scene, each thereafter speaking by reference to things they noticed in the scan; Donna asking about a car, Tanzi calling to someone.

The remaining longest silence occurs in a telephone call. While face-to-face environments provide more resources for, and recurrently

house such unproblematic long silences as the two above, telephone environments do permit of at least a few, such as the following, in which one of the participants is writing down an address given to her by the other.

(2.3)   [DA:2:5-6:SO]   ((Goldie had started to give her address, 'ten forty two . . .' earlier and had interjected some other matter.))
Goldie: Alright now you] take the addre:ss and if she doesn't know how to get here then she can uh-call me.=
Netty: =Yah.
               (0.3)
Goldie: Alri:ght, ⌈(that's)-⌉
Netty: ⌊T<u>e</u> n for⌋ty two what.hh
               (0.4)
Goldie: I beg your pardon?=
Netty: =T<u>e</u>n forty tw<u>o</u> what.
               (0.2)
Goldie: ee-<u>u</u>-ri:ght eh: eh-Sou:th Shenando<u>a</u>h,
*→   (3.0)
Netty: Ten forty two: s-Sou:th Shenandoah.=
Goldie: =Y<u>e</u>:s,
               (0.3)
Goldie: A:nd uh you may t<u>e</u>ll h<u>e</u>:r that it is, (0.3) about a half <u>a</u> blo::ck,(.)s<u>ou</u>:th, of Olympic.
**→   (6.2)
Netty: Is- eh, wha-wh<u>a</u>t part of uh::::=
Netty: =⌈⌈ul- ⌉uh-
Goldie: ⌊It's⌋L<u>o</u>s Angeles it's eh:: (0.4) It <u>is</u> Los Angeles,
               (.)
Netty: Y<u>e</u>:s,
               (1.0)
Goldie: I:t's n<u>ea</u>r B<u>e</u>verly ↓Hills.

The silences of from 6.2–16.4s in these three fragments can be seen to be occurring in quite different activity bits than those in which the candidate 'standard maximum' silences tend to occur (see again Fragments 1.1–1.8). Indeed, when such activities as examining a train schedule, scanning the scene, writing down an address are not occurring in these fragments, and the participants are engaged in back-and-forth talk, the longest silences tend to fall within the candidate 'standard maximum'. For example, in Fragment 2.1 there are five of 1.0–1.2s, two of 1.3–1.4s, and

then two which suggest the 'alternative metric', of approximately two seconds.

And the 'statistical' run yielded yet a further glimpse of the possible phenomenon of an alternative metric, a gearing down to a slower pace with silence parsed second-by-second rather than in small units culminating at approximately one second (cf. Fragment 2.1 just mentioned, the five-second silence in Fragment 7, and in Fragment 1.6 the three-second silence before the third 'Hello'). For example, a small group of transcripts showed an interesting pattern of silences. In 16 conversations ranging in length from three to 65 pages there are very few silences above the candidate standard maximum of 0.9–1.2s, none at all of 1.5–1.8s, and then a little flurry of silences of 1.8–2.2s duration (Table 8.1).

TABLE 8.1 *A pattern of silences in a small subset of conversations*

Transcript:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
No. of pages:	6	27	7	3	15	13	7	12	65	29	6	9	6	12	10	61	
Silence(s)																	Total
0.9–1.2	–	1	2	2	2	3	3	4	19	11	9	7	3	5	2	33	106
1.3	–	–	–	–	1	4	1	–	2	–	–	–	–	2	1	2	13
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

And in transcript 16 there is another gap between the six more-or-less two-second silences and the range 2.8–3.2s, where another two silences occur. (The pattern in these materials suggests that perhaps I should in the future treat the 'target cluster' as starting at 0.8s rather than the arbitrarily chosen 0.9s.)

Continuing exploration

Given the results of the counting procedure, it seemed useful to continue with it. From August to September I worked both 'interactionally'

and 'statistically' with the candidate phenomenon; looking at selected activity-types and environments, and going through additional transcripts simply counting up the silences of 0.9s and over.

For example, I collected instances of 'innocuous' occurrences of the 'standard maximum', i.e. in the course of activities which did not recommend themselves as interactionally problematic and thus were not collected in the primary data run.

Having used the phenomenon of intra-sentence silences as an example of the wide range of silences (see again Fragments 1–7 above, with its range of 0.2–5.0s), I decided to explore it for possible consistency. The following are a few cases taken from that second data run.

(3.1)   [Owen:8B15(A):34:SO]   ((face-to-face))
Andrea: →   The big<u>gest</u> check <u>I</u> ever wrote <u>o</u>ut was: (1.0) ˙k tw<u>o</u>
hundred and thirt<u>y</u> fi:ve (.) pounds

(3.2)   [SBL:2:1:6:R:1:SO]   ((telephone))
Bea: ˙hhh <u>I</u>'m jus:t se<u>r</u>vin:g um
                         (0.7)
Bea: ˙tlk˙hhh⌈hh
Tess: ⌊Dessert⌈(I im<u>a</u>gine),⌉
Bea: ⌊a b<u>ow</u>l of ⌊ce cr<u>ea</u>m and some:::
   →   b-little: home m<u>a</u>de˙ (1.0) c<u>a</u>ke c<u>oo</u>kies or something

(3.3)   [Goodwin:DP:38:R:SO]   ((face-to-face))
Beth: you know what I mean?
Jan: True. True.
Beth: →   We were much younger and, (1.0) <u>lots</u> of stuff you
know, like a lot less settled in a lot of wa:<u>ys</u>?
                         (0.6)
Beth: *→   And uh, (1.7) whereas no:w, you know even with the
   →   <u>se</u>cond one, ˙hh it's it was mo:re, (0.9) u-uh::-uh
   →   (1.2) like deliberately.

(3.4)   [NB:IV:10:R:14:SO]   ((telephone))
Emma: M⌈m h m ?
Lottie: →   ⌊A:nd h<u>e</u> c⌋ame <u>i</u>n about ˙ (1.0) °l<u>e</u>t's see° five thi<u>r</u>ty,

(3.5)   [PB:3-4:16:SO]   ((face-to-face))
Merle: JoLee's kind of cranky to<u>ni</u>: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.

(3.6)   [CDHQ:II:100:R:4:SO]   ((telephone))
Opal: but th<u>ey</u> said tha(0.2)t uh:::*u:-:-: s<u>o</u>me way that (0.3)
             *→   th<u>ey</u> would know h<u>o</u>:w uh (2.5) that they were g<u>e</u>tting
                  in <u>touch</u> with him › you know what I mean?‹
Josh: ›<u>M</u>hm?‹
Opal: ˙hh┌h
Josh: └°M┌↓hm.°┐
Opal: └B u┘t (.) it was <u>the</u> wro:ng <u>number</u> I mean a
             →   wom<u>an</u> answ<u>e</u>red an:d uh (0.9) u┌h: it was=
Josh: └<u>M</u>hm,
Josh: =[[°hm,°
Opal: =[[just a ↑<u>re</u>:sidence

The results of this second run, through a corpus consisting of intra-sentence silences, are not as dramatic as those of the primary run, but both the ratio of the 261 cases of the 'target cluster' of 0.9–1.2s to the 109 cases of all longer silences (a ratio of 2.5 to 1), and the drop-off from the target cluster to the next cluster of 1.3–1.8s, from 261 to 67, remains substantial.

I also started retiming and counting the silences in some face-to-face, multi-party conversations, which are drastically underrepresented in the primary data run. And given that there was now good reason to be as accurate as possible with the timings, I bought a digital stopwatch, now timing the silences both 'photographer' fashion and by clock. The timings are fairly consistent, within a tolerance of about a tenth of a second, but still rough.

I took samples of half an hour from each of three multi-party conversations; a group therapy session for teenagers, a dinner party of two married couples and two children, and an afternoon in a neighbourhood upholstery shop where several men are gathered, working, talking, and drinking beer.

I will only touch on these materials. First, I want to note that the longest

silences seem to support the notion of an 'alternative metric'. In the therapy session sample, of the three longest silences, one is approximately three seconds long and two are approximately four seconds long.

In the dinner party sample, two of the three longest silences fit the candidate alternative metric, one of approximately four seconds and one of approximately six seconds. The other is a 'nowhere' (5.6s).

In the upholstery shop sample the two longest silences, of approximately three and approximately eight seconds, fit the metric.

I will talk about the possible presence of a standard maximum silence of about one second by incorporating the results of the counting done on these three samples into an overview of the results so far.

None of the materials counted for silences of nine-tenths of a second and over shows as strong a preponderance of the candidate standard maximum silence as did the primary run. Here are the ratios of approximately one second to all longer silences:

1. Primary run: 951 to 328 (c.3 to 1)
2. Intra-sentence silences: 261 to 109 (c.2.5 to 1)
3. Group therapy session: 88 to 42 (c.2 to 1)
4. Dinner party: 36 to 34 (c.1 to 1)
5. Upholstery shop: 23 to 10 (c.2 to 1)

The subsequent runs are rather stronger, although much less dramatic than the primary run, when it comes to the drop-off from the target cluster of approximately 1 second (0.9–1.2s) to the next cluster (1.3–1.8s).

1. Primary run: 951 to 92 (c.10 to 1)
2. Intra-sentence silences: 261 to 67 (c.4 to 1)
3. Group therapy session: 88 to 20 (c.2.5 to 1)
4. Dinner party: 36 to 18 (c.2 to 1)
5. Upholstery shop: 23 to 7 (c.3 to 1)

The difference in strengths of ratio as between about one second and all longer silences, and as between about one second and the next cluster of silences raises the following possibility: perhaps it is that *when* the 'long' silences are not well beyond standard maximum, not having geared down into the alternative metric or gone off metric (or into some other metric I do not know about), *then* they tend to occur in the target cluster. That is, when the 'base metric' *is* orientated to, it is finely orientated to. So, for example, in the dinner party sample it appears that the base metric is not as strongly orientated to as in the other materials (a 1 to 1 ratio of about one second to all longer silences). But when it *is* orientated to, silences are

(3.5) [PB:3-4:16:SO] ((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.

(3.6) [CDHQ:II:100:R:4:SO]   ((telephone))
Opal: 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?‹
Opal: ˙hh[h
Josh: [ºM[↓hm.º
Opal: [B u]t (.) it was the wro:ng number I mean a
          →   woman answered an:d uh (0.9) u[h: it was=
Josh: [Mhm,
Josh: =[[ºhm,º
Opal: =[[just a ↑re:sidence

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1. Primary run: 951 to 92 (c.10 to 1)
2. Intra-sentence silences: 261 to 67 (c.4 to 1)
3. Group therapy session: 88 to 20 (c.2.5 to 1)
4. Dinner party: 36 to 18 (2 to 1)
5. Upholstery shop: 23 to 7 (c.3 to 1)

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terminated with a 2 to 1 ratio as between the target cluster and the next cluster.

As to the dramatic difference between the results of the primary run and subsequent runs, there are a number of possibilities. For one, it may be that the phenomenon is most strongly present in inter-utterance silences. The primary run was an aggregate of inter- and intra-utterance silences, while the second run consisted exclusively of intra-utterance silences. For another, the phenomenon may be most strongly present in those 'types' of interaction by which telephone calls are heavily constituted (with such exceptions as writing down some information, as in Fragment 2.3, where then the base metric may be temporarily relaxed), but which in face-to-face environments occur in combination with other 'types' of interaction and other activities. The primary run was taken mostly from telephone calls, while the third to fifth runs were taken specifically from face-to-face talk.

Further possible manifestations of the candidate metric

In October I began to look into other areas in which an interval of approximately one second recurs. One such area is story-telling (which begins perhaps to converge on the phenomenon, reported on by Butterworth, 1980, of reading aloud). The materials are cumbersome, so I will just show one extended fragment.

(4.1)   [Merritt:Egg Story:4-5:SO] ((face-to-face))

Halda:	she says can I move <u>in</u> today.
Jean:	˙u<u>hh</u>!˙
Halda:	Uh I said uh,
*→	(1.3)
Halda:	well I just don't <u>know</u> if you can get a- uh:: w-wh<u>a</u>t uh-uh are you gonna- have you-
→	(1.0)
Halda:	What are you gonna do about your <u>fur</u>niture. and she said I haven't got a st<u>i</u>ck <u>of</u> furniture!
→	(1.0)
Halda:	And ah- a:nd uh I⌜says well-
Jean:	⌞hhh!
Jean:	hhh!
Halda:	h(ha)how can you move <u>i</u>:n then. ˙hh <u>She</u> said,
→	(1.0)
Halda:	<u>oh</u> haven't you got a little bed. or uh <u>hav</u>en't you

	got a bed- I- you're not gonna use or a chest of drawers or something.
	(0.5)
Halda:	or a <u>li</u>ttle, uh, c<u>a</u>rd table or, <u>something</u>? and she said <u>this</u>- <u>oh</u> it doesn't matter, hh she says, <u>oh</u>::: 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 int<u>e</u>nd to furnish this house, in antique furniture.
⊦→	(1.2)
Halda:	And so uh,
	(0.7)
Halda:	We:ll? huh <u>huh</u>-huh! ˙hhhh I was so sw<u>e</u>pt off my feet, and so was Ira, we were just both <u>aghast</u>. that,
Jean:	uhh!
Halda:	<u>A:nd</u> uh,⌜so finally-
Jean:	⌞( ),
→	(1.0)
Halda:	uh::m, I said y<u>e</u>::<u>s</u>, 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 <u>do</u> have a card table, ye:s, and uhm I said you can, probably use a couple chairs (couldn't you), and so uh. Well, th<u>e</u>y set up <u>house</u>keeping
*→	(1.3)
Halda:	<u>A:nd</u> uh
→	(1.0)
Halda:	thrilled t<u>o</u> death.
→	(1.0)
Halda:	Well wh<u>a</u>t I started to say. T<u>a</u>lking about your boiled eggs. One day . . .

Let me note that this is an older transcript and I do not have access to the tape. Given the results of various retimings I have done, it is likely that not all the silences marked as precisely one second are just that, although a surprising number of the silences do come out at precisely one second in the 'photographer' count, perhaps 0.9s or 1.04s by the stopwatch.

Another area in which the interval of about one second recurs is that of intra-sentence inbreaths. I only have some preliminary data here, compiled by spotting a long inbreath in a transcript, finding it on the tape and timing it. Recurrently the long inbreaths fall into the target cluster of 0.9–1.2s, occasionally going over as in Fragment 4.2g. These are all from telephone calls.

(4.2a) [SBL:3:3:R:1:SO]

                                           ┌──(1.2)──┐

Milly: → but it co̲sts so mu̲ch to su̲e: that uh[ˑhhhhhhhhhh]
               hhe̲ says . . .

(4.2b) [TCI(c):11:2:SO]
Irene: See w*e wa̲nted to bo̲rrow fi̲ve hundred dollars: mo̲:re
        → from[ˑhhhhhhhhh] H.F.C̲:.h
             └──(0.9)──┘

(4.2c) [MDE:60-1:7:3:SO]
Sheila: And it- it was] re̲ally ama̲zing because if you go to the
         realtor::,h
           (0.3)
Sheila: th:ey s- ˑhh e̲-have ↓hou̲:ses and they're about fo̲ur
       → hundred do̲llars and[ˑhhhhhhhhhh]around the̲:re,
                 └──(1.0)──┘

(4.2d) [DA:2:12:SO]
Ellie: she̲ kept getting sicker and sicker and uh::::
       → [ˑhhhhhhhhh] uh d-ed e̲ven when she sa̲id she was . . .
         └─ˑ(0.9)──┘

(4.2e) [NB:II:4:R:22:SO]
Nancy: he said I̲'d (.) I'd lo̲ve to (.) ge̲t to the be̲ach and
        *I[ˑhhhˑhhˑhhˑhhh̲]he said yo̲u live at the be̲ach to̲o . . .
          └──(1.0)──┘

(4.2f) [NB:IV:10:R:26:SO]
Emma: He's gonna be ve̲ry ↓wealthy °some day.° h 'Cause he
          got a̲:ll these bi̲g co̲:ntra̲cts with A.B.C̲: and
    → [ˑhh̲ˑhhˑhhuhhh] oh::: General Telephone . . .
         └─(1.1)°─┘

(4.2g) [SF:II:15:SO]
Mark: ˑhhhh A:nd a:t wha̲t point did you find ou̲:t tha̲:t uh:
  *→ [ˑhhhhˑhhhhhh] hhe::r uh hhm̲hh wha̲t shall we ca̲ll him.
        └──(1.4)──┘
          (0.7)
Mark: ˑt uh:::m, her[uh::m::,
Bob: [Her old bo̲yfriend,

I came across another possibly interesting area, that of prolonged sounds. So, for example, in one conversation, one of the participants tends to produce extended 'uh's. I went through the tape and timed the longer ones. There are some 14 of them running to 0.9s and above, and none of them are longer than 1.2s. Here are several.

(4.3a) [DA:2:8:SO]
Ellie: So(w̲)-uh when she̲ comes over:,
         (0.9)
Ellie: → I:[uh:::::::] I'll, I'll ca̲ll you, and tell you . . .
         └──(1.0)──┘

(4.3b) [DA:2:11:SO]
Goldie: how did they li̲ve uh lately.=
Ellie: → =u̲-They li̲ved[eh:::::::fa̲r better than a lo̲t of . . .
            └──(0.9)──┘

(4.3c) [DA:2:12:SO] ((see Fragment 4.2d. for continuation))
Ellie: → But[uh:::::::::she̲ kept getting sicker and sicke̲r . . .
          └──(1.1)──┘

(4.3d) [DA:2:15:SO]
Ellie: because uh ˑhh she left him nothi̲n:g with nothi̲ng but
        a::: a-a-a thing full of uh: probably o̲ver his he̲a:d,
     → [ˑhhhhhhhh]in[uh:::::::]
        └──(0.9)──┘ └──(1.2)──┘
          (1.0)
Goldie: °But uh°[] [But you know]
Ellie: u̲[W h o̲ knows.]

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 1.7s. One gets a strong sense of the possible metric, watching this speaker achieving the termination of his problematic silences within, upon, and rarely beyond the standard maximum. Here are just two fragments from that corpus.

(4.4a) [Her:OI:3:1:SO]
Barnaby: →　'hhh We've agreed (.) agree:d to (.) 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 ‹goin: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 th:em
→　→ and 'hh aw- (1.0) all this: rubbish (0.3) then (1.2)
forget it.

(4.4b) [Her:OI:3:9:SO]
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　　　　°

Discussion

The possibility of a metric for conversation which has as one of its artefacts a 'standard maximum' silence of approximately one second emerged via a few fragments of problematic interaction (see pp. 169–70). Ironically, had I transcribed those materials in the first place, then examining them the possibility of such a metric would not have occurred to me (see p. 176; the one-second interval marked in the second fragment would not have been noted in my own transcript; it is there to show the interval that Houtkoop was timing, disregarding an intervening sound. Thus, that fragment would only show 0.3s silence.).

Although I became interested in working up some procedures by which to prove or disprove the presence of such a metric, I have, at least so far, not found a way to make use of the phenomenon in the sort of sequential-interactional analysis I do. However, the possibility of this metric has become an instrument for monitoring data, such that much

materials than those from which it emerged, materials such as intra-sentence silences, inbreaths, prolonged 'pause fillers', and stammering, become interesting, not only because they seem to support the notion of such a metric, but they 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. (Note that Fragment 5.3 terminates at the 'alternative metric'.)

(5.1) [NB:I:5:5:SO] ((telephone))
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:SO] ((face-to-face))
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) [Campbell:7:6:SO] ((telephone))
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) [SBL:2:1:6:R:1:SO] ((telephone))
Tess:　　　You're only ha]ving six aren't y[ou,]
Bea:　　　　　　　　　　　　　[Eh-]No I'm having
te-e:n.hh'hhhhhhh (0.3) u-But uh:m hhh (0.3) i-See
　　→ four for bri:dge and six for: (1.0) ↑Tripoly.

(5.5) [SBL:2:1:8:R:1:SO] ((telephone))
Nora:　　→ A:nd uh:*: uh:: she pro:bably wrote a: (1.0) a paper o:n it?

(5.6) [NB:I:1:25:SO] ((telephone))
Bud:　　　I've got San Juan Hills phone number here in (my)-
　　→ in the uh, (1.0) phone book,

(5.7) [TCII(a):14:2:SO]   ((telephone))
EJ: Is he a ma::le?
                         (1.0)
Croff: →   I had him (1.0) demaled.

(5.8) [PB:3-4:20:SO]   ((face-to-face))
Merle: → But wuh-u-we haven't⌈seen them since, (1.0) September
Paul: ⌊°Mm hm?°

(5.9) [SBL:1:1:12:R:12:SO]   ((telephone))
Maude: At least I ↓like her↓ I: you know what I mean she's a
            →   ↓fo:rthri:ght uh (1.0) HARDWORKING . . .

(5.10) [GTS:I:2:49:R:SO]   ((face-to-face))
Ken: I thought that was against their uh (0.6) their code of
            →   (0.9) eth⌈ics to uh
Louise: ⌊Their code of ethics is not to advertise,

(5.11) [SF:II:16:SO]   ((telephone))
Mark: hAnd what was your immediate reaction to that.h
                         (1.3)
Bob: Oh:: I guess I was:: uh::hh⌈hh
Mark: ⌊hhhₒhhh=
Bob: →   =Well let me see::. (1.0) Plea::sed?h
See also Fragment 3.1.

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 'standard maximum tolerance', but where some activity occurs. Again, there are longer intervals. (Note that Fragments 5.12 and 5.14 terminate at the 'alternative metric').

(5.12) [NB:II:4:R:20:SO]   ((telephone))
Nancy: e-he's drivin:g his uhm (.) au:nt Hel↓en, up to uh f::
            → , (1.9) °*Oh h*ell° where does she ↓live. Up (.) nea:r
              Sartta(b) not s-uh::m (0.3) ↑Oj*ai.
                    ₒ

(5.13) [Goodwin:AD:7:R:14-15:SO]   ((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. [This is Fragment 6]

(5.14) [SBL:2:1:8:R:7:SO]   ((telephone))
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 . . . [This is the first part of Fragment 7]

And it is rather interesting that in each of these fragments, selected only by reference to the above 'standard maximum' silences involved in a word-search, the long silence is terminated with a particular type of exclamation in various degrees of 'nicety' ('Oh hell', 'Oh shit' and 'Oh gee').

Recurrently, however, some activity occurs at the proposed edge of the 'standard tolerance' for silence. Fragment 5.15 stands somewhere between resolution and some activity, a possible solution.

(5.15) [Goodwin:84:AD:23:SO]   ((face-to-face))
Bart: What's his na:me.
                         (0.5)
Cal: →   Harry uh, (1.0) Schirmer? ‹Shure?

(5.16) [Owen:8B15(A):41:SO]   ((face-to-face))
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⌈ng in⌉Boot's::
Bette: ⌊Mm:,⌋

(5.17) [S:PRP:7-8:SO]   ((face-to-face))
Ann: I got- uh my- my evening gown was uhm uh crepeback
              satin. The rea:l hhea:vy sa:tin.
                         (0.5)
Ann: →   in the uhm (1.0) 'tch! uh: what do they ca- princess cut.

(5.18) [NB:II:2:R:15:SO]   ((telephone))
Nancy: e-He: had uhm (.) 't'hh fi:led a complaint with the
              schoo:l, (1.0) 't⌈'hhhhh⌉hh
Emma: ⌊°Mm:,°⌋
Nancy: →   that he thought Mister Bradley: (.) was uhm (1.2) 'tch
              uh::m(0.5) condoning hhhhh 'hhhh u⌈h   t h⌈in:gs . . .
Emma: ⌊(   )- ⌋

In the following two fragments both participants produce some activity at the edge of the proposed standard tolerance.

(5.19)   [NB:III:3:R:2:SO]   ((telephone))
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 h :⎤
Bud: ⎣Some- ⎦Something?

(5.20)   [Her:III:1:5:1:SO]   ((telephone))
Heath: ˙hhh Ah: he thinks that it's uh as much as anythin:g
                  ah:m a um:
       →   (0.9)
Joan: ar⎡:thritis.
Heath: ⎣uh

I find myself surprised that this doesn't happen more often, i.e. that recurrently only one participant moves to terminate the silence at the edge of the 'standard maximum'. It may be mere chance but the participants of Fragment 5.19 are husband and wife, and those of Fragment 5.20 are brother and sister. Conceivably there is some organisation or range of organisations which provide for only one participant to terminate the silence in various interactional circumstances, where, then, the fact that the participants here are 'family' to each other may constitute another instance of 'relaxation' of certain 'rules' among intimates.

Another case of 'some activity' occurring at the edge of the proposed 'standard maximum tolerance' can be seen in the second part of Fragment 7. The discussion there refers to the resumption of talk 'much more rapidly'. Perhaps that can be more closely specified as 'at the standard maximum'.

It seems to me that the foregoing series of arrays indicates that the metric which provides for the 'tendency' reported by Butterworth (1980), 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 is the 1.0–1.24s pause which occurs in reading — otherwise it surely would have been reported.

I am tempted to amend the Butterworth (1980) characterisation of silences in 'spontaneous speech'. It may be that although silences in conversation 'vary considerably' compared to silences in reading, this does not mean that in 'spontaneous speech' the silences are determined by sheer

'cognitive demands' (see, for example, Fragments 5.15–5.20 and Fragment 7 where silence is resolved although the 'cognitive problem' is not). Rather, it appears that the same ·metric is present in both forms of speaking, perhaps, say, less strictly adhered to in conversation, or perhaps in a more complicated form. For example, the possible 'alternative metric', the gearing down after one second to a parsing which provides for 'next' termination points at two, three and four seconds etc., is one possible 'complication'. There may be others.

References

BUTTERWORTH, BRIAN 1980, Evidence from pauses in speech. In B. BUTTERWORTH (ed)., *Language Production, Volume 1, Speech and Talk.* London: Academic Press, 143–54.

GOLDMAN-EISLER, FREIDA 1972, Pauses, clauses, sentence, *Language and Speech*, 15, 103–13.

KRAUT, ROBERT, E. 1978, Verbal and nonverbal cues in the perception of lying, *Journal of Personality and Social Psychology*, 36: 4, 380–91.

Glossary of transcript symbols

[A *single left bracket* indicates the point of overlap onset.

]   A *single right bracket* indicates the point at which an utterance or utterance-part terminates *vis-à-vis* another.

=   *Equal signs*, one at the end of one line and one at the beginning of a next, indicate no 'gap' between the two lines.

[]   A *combined left/right bracket* indicates simultaneous onset of the bracketed utterances. It is also used as a substitute for equal signs to indicate no 'gap' between two utterances. This relationship may be shown as:

     E: Yah,=
     L: =Tuh hell with im.

or as:

     E: Yah,⎤
     L: []Tuh hell with im.

(0.0)   *Numbers in parentheses* indicate elapsed time in silence by tenths of seconds. For example (1.3) is one and three-tenths seconds.

(.)   A *dot in parentheses* indicates a tiny 'gap' within or between utterances. It is probably no more than one-tenth of a second.

_____   *Underscoring* indicates some form of stress, via pitch and/or amplitude. A short underscore indicates lighter stress than does a long underscore.

::   *Colons* indicate prolongation of the immediately prior sound. The length of the colon row indicates length of the prolongation.

::+_____   *Combinations of stress and prolongation markers* indicate intonation contours. If the underscore occurs on a letter before a colon, it 'punches up' the letter, i.e. indicates an 'up → down' contour. If the underscore occurs on a colon after a letter, it 'punches up' the colon, i.e. indicates a 'down → up' contour. In the following utterance there are two pitch-shifts, the first, in 'venee:r', an 'up → down' shift, the second, in 'thou:gh', a 'down → up'.

> J: it's only venee:r thou:gh,

↑ ↓   *Arrows* indicate shifts into higher or lower pitch than would be indicated by just the combined stress/prolongation markers.

.,?¿   *Punctuation markers* are used to indicate intonation. The combined question mark/comma [¿] indicates a stronger rise than a comma but weaker than a question mark. These markers massively occur at appropriate syntactical points, but occasionally there are such displays as:

> C: Oh I'd say he's about what . five three enna ha:lf?arentchu Robert,

And occasionally, at a point where a punctuation marker would be appropriate, there is none. The absence of an 'utterance-final' punctuation marker indicates some sort of 'indeterminate' contour.

WORD   *Upper case* indicates especially loud sounds relative to the surrounding talk.

°   The *degree sign* is used as a 'softener'. Utterances or utterance parts bracketed by degree signs are relatively quieter than the surrounding talk.

A subscribed degree sign indicates unvoiced production.

A subscribed degree sign in parenthesis [(b̥)] indicates an 'incipient' sound. For example:

> E: you couldn'ev'n putcher hand ou:ts:I:DE the CAR ih jiz: (b̥)bu:rn.

And in the speaker-designation column, an empty parentheses plus degree sign [( )°] indicates that an unidentified speaker sounds like a female.

word   A *subscribed dot* is frequently used as a 'hardener'. In this capacity it can indicate, e.g. an especially dentalised 't'. Usually when it occurs under a 'd' it indicates that the 'd' sounds more like a 't'. And, for example, under a possibly ambiguous 'g', it indicates a hard 'g'. Under a possibly ambiguous 'th', it indicates a hard 'th'.

Another sense in which it works as a 'hardener' is to indicate that a sound which is implied in the spelling of a word but is not usually pronounced, is indeed pronounced. For example, in 'different' and 'evening', which are usually pronounced as 'diff'rent' and 'eev'ning'.

The *subscribed dot* is also frequently used as a 'shortener', for example, in 'the', which is pronounced as 'thee' or 'thuh'; if 'the uh:' is shown, then it is being pronounced 'thuh'.

It can also indicate a trilled 'r'.

‹   A *pre-positioned left carat* indicates a 'hurried start'; in effect, an utterance trying to start a bit sooner than it actually did. A common locus of this phenomenon is 'self repair'. For example:

> C: Monday nights we play, (0.3) ‹I mean we go to ceramics,
> J: y'see it's diffrent f'me:.‹eh f'(.) the othuh boy:s

A *post-positioned left carat* indicates a 'sudden stop'.

-    A *dash* indicates a cut-off.

› ‹   *Right/left carats* bracketing an utterance or utterance-part indicate speeding up.

·hhh   A *dot-prefixed row of* hs indicates an inbreath. Without the dot the hs indicate an outbreath.

wohhrd   A *row of* hs *within a word* indicates breathiness.

(h)   A *parenthesized* h indicates plosiveness. This can be associated with laughter, crying, breathlessness, etc.

f   The *florin sign* is, for the time being, used to indicate a certain quality of voice which conveys 'suppressed laughter'. I have not yet settled on a symbol for this phenomenon.

*   An *asterisk* indicates 'creaky voice'

wghord   A *'gh' stuck into a word* indicates gutturalness.

hr   An 'h' *preceding an* 'r' softens the 'r'. This device is used frequently in my transcripts of British talk. Thus, for example, 'part' is shown as 'pahrt', 'court' as 'cohrt', etc.

( )   *Empty parentheses* indicate the transcriber's inability to hear what was said. The length of the parenthesised space indicates the length of the untranscribed talk. In the speaker-designation column, the empty parentheses indicate inability to identify a speaker.

(word)   *Parenthesised words* are especially dubious hearings or speaker-identifications.

(Ø)   A *nul sign* indicates that there may or may not be talk occurring in the designated space.

(( ))   *Doubled parentheses* contain transcribers' descriptions rather than, or in addition to, transcriptions.

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