

G: OK, this is one option, right? We could look for similar research. Assum [0.4] Let's assume now that no such research exists. How could [0.1] could we within our limited resources conclude that a particular claim about persuasion tools does or doesn't work? In other words [0.9] how shall we know?

M: [33.75] I don't know.

G: And how do we know if anything is working? Let's take [1.2] Well, let's take a clock. Or can you please give us an example of a thing which is working. This can be a process, this can be a device. [1.1] Anything.

M: [12.88] so then eeee we need such a [3.25] mmm [10.89] with such a system of examination, right? When water is boiling.

G: Ok, so something is working

M: Yes, something is working

It started with a silence...



Where lack of wordings plays a part

*A few observations on silence in
one coaching conversation*

What is silence?

Silence is absence of speech

What is silence?

Silence is absence of speech

???

silence (v) [I] – to perform a collective and co-ordinated activity in conversation in which the current speaker and the previous speaker refrain from wordings and other aspects of vocalization thus working together towards their individual and shared goals

My questions

- How does silence occur, progress and end in institutional talk?
- How do participants co-ordinate when silencing?
- What actually happens before wordings occur?

Silence (1)

- most indirect and ambiguous form of linguistic communication (cf. Tannen 1985),
- capable of expressing a range of discursive and propositional meanings
- may display the same illocutionary effects as verbal speech acts
(Saville-Troike 1985)

Silence (2)

contributing factors:

- contextual setting of talk-in-interaction
- conversation dynamics
- what happens in preceding turn
- dynamics of participant(s)' co-action
- silencing agent's state and constitution (mood, personality, physical shape, etc.)
- other?

Psycholinguistic perspective

Silences:

- are cyclically distributed (Jaffe & Feldstein 1970)
- are necessary and variable impositions of slow-time on the temporal sequence of speech (Bruneau 1973, p.23)
- have their macro- and microstructure (Butterworth 1975, p. 75)

Cognitive perspective

Silence demonstrates how formulation arises out of time-dependent collective cognitive processes

- delaying of response is sign of uncertainty (*Feeling of Knowing* (Hart, 1965; Smith&Clark, 1993), *Feeling of Another's Knowing* Brennan &Williams, (1995) and Swerts&Krahmer (2005))
- latency to respond is inability to find an answer (Glucksberg & McCloskey, 1981)

CA perspective

Taxonomy of silence:

- hesitation pause (in-turn)
- switching pause (between-turn)
 - attributable silence
 - gap
 - lapse

Levinson 1983, 298-300, McLaughlin 1984:11, Sacks, Schegloff, Jefferson 1978, 25

Turn-taking models

stochastic – change of speaker is probabilistic

signalling – change of speakers mediated by exchange of discrete cues (the 'over' convention)

sequential-production – speakers actively co-construct units of talk and effect exchange of turns

Between-turn silence in CA

- stochastic and signalling models: **silence as response latency**; arises from processes within next speaker
- sequential-production model: **interactionally generated**; involves both current and next speaker

BTS as attributable silence

*Such a mechanism can quite literally make something out of nothing, assigning to a silence or a pause, **itself devoid of interesting properties**, the property of being A's, or B's, or neither A's nor B's*

Levinson, 1983, p. 321

Features of BTS

(CA contribution)

- follows transition places in talk (TRPs)
- transitions between turns = gap of ~100–300 ms between turns (central tendency estimate)

Kendrick, K. H. (2015). The intersection of turn-taking and repair: the timing of other-initiations of repair in conversation. *Frontiers in Psychology*, 6, 250.

Silence in ordinary talk (1)

- average ITS: 600ms (Levinson&Torreira 2015)
- average BTS: 200ms (Levinson&Torreira 2015)
- silence approx. 1s is trouble-indicative (Jefferson, 1989).
- longer silences usually filled with non-verbal activity (e.g. scanning documents or writing something down)

Silence in ordinary talk (2)

- BTS minimal and rare: next speaker predicts upcoming TRP Levinson&Torreira (2015)
- next speaker prepares his/her TCU in advance

Silence as planning phase

- some pauses – next speaker plans content of his/her turn unit
- task difficulty affects number of pauses a speaker makes
- speakers use additional pauses to carry out additional planning

Goldman-Eisler (1958, 1968); confirmed by: Maclay and Osgood (1959), Boomer (1965), Henderson, Goldman-Eisler, and Skarbek (1966), Ford and Holmes (1978), Holmes (1988), Roberts and Kirsner (2000)

Silence (3)


Silence is inherent part of dialogue, so it is:

- NOT antithetical but complementary to talk
- co-constructed by both speakers ('it takes two')
- a joint affair (concerns both speakers)
- synergistic (yields results for the entire dialogical system)

The empirical material

ELAN 5.0.0-beta - LangEnact_1.eaf

File Edit Annotation Tier Type Search View Options Window Help



00:02:11.553 Selection: 00:00:00.000 - 00:00:00.000 0

Segmentation Controls

- Two keystrokes per annotation (non-adjacent annotations)
- One keystroke per annotation (adjacent annotations)
- One keystroke per annotation, fixed duration

Duration (ms.): 1000

- Stroke marks start of annotation
- Stroke marks end of annotation

Client | trying | to change the essenc | of who I am or getting confused |

Client | trying | to change the essenc | of who I am or getting confused |

Client_silence | s | looks | chin |

Coach_silence | | | | nods sligh | looks into notebook, nods mi | looks i

Coach | | | | ok | | | | ok |

Institutional talk

- goals of participants are limited and institution-specific
- restrictions on interactional contributions are in force
- institution- and activity-specific inferential frameworks are common

Institutional talk is more restricted local conversational variant Drew and Heritage (1992)

Fuzzy boundary

- institutional talk not confined to particular physical or symbolic settings (e.g. hospitals, offices, classrooms) (Drew & Heritage 1992)
- 'ordinary conversation' also possible in any setting (Drew and Sorjonen 1997)

duration of empirical material 06:04.551			CLIENT	COACH
SILENCE-SPEECH FREQ. RATIO			0.90	0.31
SILENCE	TOTAL	number	67	12
		time (sec.)	01:17.094	00:12.608
BTS	TOTAL	number	9	5
		time (sec.)	00:20.345	00:04.653
	DURATION	min.	00:00.426	00:00.304
		max.	00:08.608	00:02.229
		average	00:02.260	00:00.931
ITS	TOTAL	number	58	7
		time (sec.)	00:56.749	00:07.955
	DURATION	min.	00:00.190	00:00.556
		max.	00:04.161	00:01.734
		average	00:00.978	00:01.136
VOCALIZATI ONS	TOTAL	number	74	38
		time (sec.)	02:32.466	02:02.383

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The study

- MAIN INTEREST: between-turn silence
- peripheral interest: in-turn gaps
- BTS and ITS of 100ms+
- Key questions:
 1. How does silence begin and develop?
 2. How do participants co-construct silence?
 3. How do participants' actions contribute to the co-construction of silencing
 4. What results does silencing yield?

The study: technicalities

in-turn silence: intervals 100ms+ in TCU
(energy drops of ≤ 100 ms common in
normal speech production Danes & Pinson 1973
pp. 160-1)

between-turn silence 100ms+ intervals

Our perspective and assumptions

- verbal and non-verbal utterances carry the same meaning potential (cf. Pedersen 2015)
- TCU comprises at least one of: BTS and ITS and vocalizations as sub-units
- silence is attributed by current speaker's TRP as 'nudge'
- silencing is a task-oriented activity

Key findings (1)

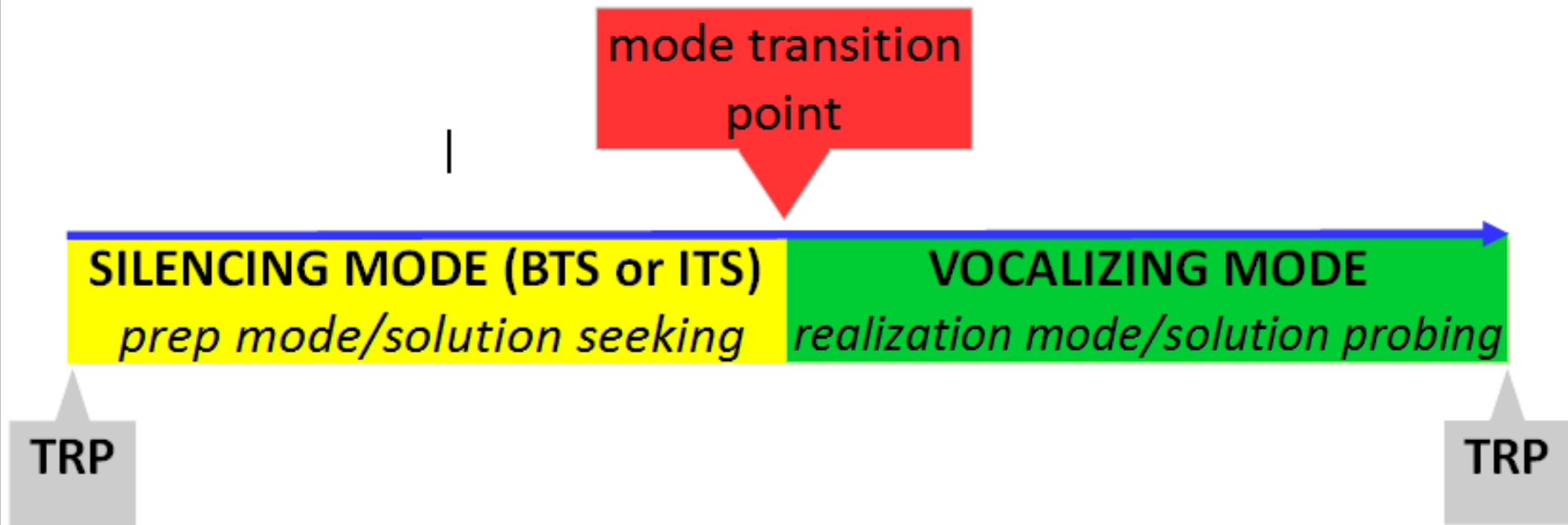
- both participants display bodily activity when silencing
- client's bodily action marks her decision-making moment
- client's BTS 'nudged' by coach's TRP
- client's ITS signalled by sound lengthening

Key findings (2)

- client-to-coach BTS shorter than coach-to-client BTS
- task is accomplished during silence and reported in vocal part of TCU
- silence = preparatory phase
- vocalisation = execution phase
- TCU = preparatory phase+execution phase

Model of TCU with BTS

(BTS) as part of Turn Construction Unit (TCU)



Conclusions (1)

Although silence is attributed to a particular participant, it is co-constructed and co-acted by both participant

Conclusions (2)

- speakers co-construct silence ('active' vs. 'facilitating' agent) (cf. Bruneau's (1973) 'interactive silence')
- silence in coaching/therapeutic talk is turn-preparatory NOT troubles-indicative
- silence in talk is activity where meaning is made and yields cognitive results („I-know-what-to-say“)
- silence is transformatory

Selected bibliography

- Bruneau, Thomas J., 1973. Communicative silences: Forms and functions. *Journal of Communication* 23: 17-46
- Brennan, S.E., Williams, M., 1995. The feeling of another's knowing: Prosody and filled pauses as cues to listeners about the metacognitive states of speakers. *J. Memory Language* 34, 383–398.
- Hart, J.T., 1965. Memory and the feeling-of-knowing experience. *J. Education. Psychol.* 56, 208–216
- Jefferson, G., 1989. Preliminary notes on a possible metric which provides for a 'standard maximum' silence of approximately one second in conversation. In: Roger, D., Bull, P. (Eds.), *Conversation: An Interdisciplinary Perspective*. Multilingual Matters, pp. 166–196.
- Levinson, S. C., & F, Torreira (2015). Timing in Turn-taking and its Implications for Processing Models of Language. *Frontiers in Psychology*, 6(731).
- Nelson, T., 1993. *Metacognition: Core Readings*. Prentice Hall.

Selected bibliography

- Sacks, H., Schegloff, E., & Jefferson, G. (1974). A Simplest Systematics for the Organization of Turn Taking for Conversation. *Language*, 50. 696-735
- Smith, V.L., Clark, H.H., 1993. On the course of answering questions. *J. Memory Language* 32, 25–38.
- Swerts, M., Kraemer, E., 2005. Audiovisual prosody and feeling of knowing. *J. Memory Language* 53, 81–94.
- Steffensen, S.V. (2013). Human interactivity: Problem-solving, solution-probing and verbal patterns in the wild. In S.J. Cowley & F. Vallée-Tourangeau (Eds.), *Cognition Beyond the Brain: Computation, Interactivity and Human Artifice* (pp. 195–221). Dordrecht: Springer
- Steffensen, Sune, Vallee-Tourangeau, Frederic and Vallee-Tourangeau, Gaelle (2016) Cognitive events in a problem solving task : qualitative methods for investigating interactivity in the 17 animals problem. *Journal Of Cognitive Psychology*, 28(1), pp. 79-105.
- Wilson, T.P., Zimmerman, D.H., 1986. The structure of silence between turns in two-party conversation. *Discourse Process*. 9, 375–390.