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Eloquent silence*

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1. Introduction: Speaking with, about and as opposed to silence

Being silent can be expected of us in one situation and unexpected in another, but it can also be incidental. It is unexpected, for example, when someone giving a speech loses their train of thought or when a confused person is at a loss for words. Silence is expected from an audience listening to a speech or from people in the reading room of a library. Silence is incidental when no one perceives it as silence; all speech is continually and almost imperceptibly interrupted by pauses of various lengths. These are the three forms of non-articulation, in contrast to silence in general. Silence as not-speaking is the absence of articulation, silence generally is the absence of sound. "Human silence", silence as not-speaking, is

thus the linguistic form of silence and is what concerns us here. (Poyatos 1981, by way of contrast, distinguishes between acoustic and kinetic silence.)

The following is intended to make the case for a single thesis; namely, that there can be no language nor speech without silence, nor can there be silence without speech (No signs without silence, no silence without signs). Speaking and silence live in a symbiosis; they are dialectically dependent on one another.

This appears to be and is a rather simple assertion, yet it necessitates certain conclusions, especially as regards the determination of the subject area of linguistics. What is called for then, is not an essay in praise of silence, although, to be somewhat contradictory, there is much to be said in appreciation of its roles in language.

I will attempt to describe the relationship between language and silence without resorting to arbitrary, authoritarian distinctions between forms of silence which are 'profound' or 'meaningful' and others which indicate nothing more than a lack of thoughts or feelings. My description will nonetheless contain an ethical element. It seems to me that the only representation of the real gradation between the two, with all its simultaneous undertones and contradictory aspects, is to be found in literature (cf. Hart Nibbrig 1981). In the end, literature derives its force precisely from the attempt to map out unknown realms between language and not-language, between speaking and silence; these realms are filled in in the process. Orpheus is the western mythological archetype for this endeavour: how he brings order to mankind by singing and playing his lyre, how he is ultimately incapable of bringing Eurydice back from the underworld due to his turning round upon hearing her footsteps behind him, and how his head continues to sing and recite even after it is torn from his body by the scornful Maenads.

Putting aside for the moment artistic intensity, this conscious working with the literary forms of language, it must be said that grappling with silence is indeed a characteristic of all speech. The effort of the speaker 'namely, the perpetually self-repeating work of the mind to make articulated sound capable of expressing thought' (Energieia, Humboldt 1963:418) is precisely the effort to draw the dividing line between silence and speaking. Thus, silence becomes the reverse as well as an integral part of language. 'Silence is a sentence', says Lyotard (1987:11). I shall attempt to show that, not only does it divide and link other sentences, but it is also to be found inside of them and is, furthermore, inhabited by them as well.

For every human remark produces symbolic calm concerning the ontological question (why something exists, rather than not): in symbols at least, we create something rather than nothing. At the same time, as symbols exist only as references to something else, the dialectic of presence and absence is built into them. Symbols can take the place of what is missing. There is even something to take the place of missing symbols: silence becomes their sign.

For this reason, there is sometimes something violent about speaking in contrast to silence. ('the said must be torn from the unsaid', remarks Barthes (1985:318) regarding the beginning of discourses, and Gadamer (1986:83-85) describes philosophy as 'continual suffering from a crisis of expression'.) But also for this reason, silence cannot be destroyed, despite Marquis de Sade's program to the contrary (to say everything). 'For everything could not ever possibly be said.' (Ortega y Gasset 1958:338)

2. Silence at every level of language

No silence without speech, no speech without silence. Hnigswald (1937:164-165) refers to silence as the mh on of speech. Sontag (1969:11/19) writes, "Silence never ceases to imply its opposite and to depend on its presence [...] without the polarity of silence, the whole system of language would fail." At first glance, speech and silence seem to be related as figure and ground, as if a text as a whole, by virtue of its structured array of symbols, stood out against an unstructured, chaotic, silent background (cf. Bruneau 1973:18; Wittgenstein 1987:38). I would like to show, however, that just this relation between chaos and order must be forever redetermined for each and every level of speech and in every conceivable respect of language: to formulate something (the activity which Humboldt calls "Energie") is to draw fractal boundaries between recognizable form and incommunicable formlessness. The very contrast between articulation and non-articulation, which is always produced anew and is always intertwined in itself, makes meaning and consequently, understanding, possible.

For this reason, let us now have a closer look at the various dimensions of silences. In this brief journey through the scales of silence we will find all the topic areas of linguistics represented.

2.1 The origins of and the general relationship between language and silence

"In the beginning, was the word" (John 1,1); but there was also silence according to Judeo-Christian thought. The relationship between the two is found in the biblical image of the "Spirit of God" floating above the waters (Gen. 1,2). The contrast, then still unexpressed, deriving from this description, namely, between the language of God and the language of man, has propelled the Christian tradition of silence-friendly semiotics, especially since Augustine (Mazzeo 1962). In myriad secular forms, the dual experience of the silence of nature and the (Adamitic) language of nature runs through the history of western thinking about the perceived world; from the metaphors of 'speaking flowers' and 'silenced weapons', to the structuralists' conception of things which only have structure in so far as they conduct a silent discourse, which is the language of signs (Deleuze 1975:270). The origin of human language, for its part, was sought, in the 18th century for example and depending on the author, in either silence or muteness (Gessinger 1989) or in the sounds of nature (Herder n.d.:9-10 et passim). And that which does not speak is made to speak (cf. Kant 1956:23 = B XIII; Blumenberg 1981; Devereux n.d.:55-57; Sartre 1983:193). For speechlessness is threatening (cf. Pascal 1954:115 = No. 206): as something completely other, as meaninglessness, lack of order (cf. Hrisch 1979), insanity (Foucault 1961), inhumanity, death (Freud 1946a). Thus, the division between self-expression and secrecy (Foucault 1963:vii) comes into being, the history of which sets Foucault's discourse in motion.

2.2 Speaking or not-speaking as coded alternatives

From a logocentric point of view, speaking and not-speaking appear to be mutually exclusive. They represent alternatives: those of informing and keeping secret, of talkativeness and reserve, of public and private, of market and esoterics, as well as those of knowledge and ignorance, strength and weakness, and of prolific or stoic behaviour. Whereas in superstitious perspectives, silence releases superhuman forces or protects ritual acts from profane disruption. Naturally, silence can also have meaning (and not only in connection with non-verbal

communication): for example, 'sympathy', when clasping someone's hand at a funeral; 'memorializing', when observing a public minute of silence; 'hostility', when not returning a greeting; 'contempt' or 'dismissal', when not answering a question; 'agreement', by virtue of not raising an objection in certain legal contexts. Such silent behaviour varies culturally (Hymes 1979a:46; 1979b:199; Enninger 1983; 1987:286-296; cf. Basso 1972, Bock 1976, Hostetler 1984, Itayama/Gakuin 1981, Nwoye 1985, Samarin 1965) and depends on institutions: silence in a temple (Bauman 1974, 1983; Davies 1988; Maltz 1985) means something different from silence in an examination. Indeed, when and whether one is silent varies from person to person (cf. Bell 1986, Burgoon/Hale 1983a & b, Street/Street/Van Kleek 1983), as can be observed in any school classroom or group therapy session. Interestingly, norm-breaking silence, in particular, (for example, complete silence) always means something; at least it is understood as meaningful. As Moritz Lazarus (1986:31) remarked, "Silence, with its various types and reasons, should be counted among the forms of discourse."

2.3 Speaking or not-speaking as uncoded alternatives

Human silence is not only a culturally or institutionally coded alternative which can systematically carry a wide variety of meanings. Silence can also express many different individual emotions, for example, intimate attraction, emotional defense, embarrassment, joy, grief, sulking, a high state of arousal, withdrawal of love, hate, disgust... (cf. Zeligs 1961:8; Baker 1955; Saunders 1985).

The more intensively the id is involved, the more difficult it is to formulate things. Silence then contains the seed of meaning, so to speak, which can be understood in the best of circumstances, be it through empathy, attentiveness or technique. The "talking cure" (Freud 1945:7) of psychoanalysis serves just this purpose, for "the id cannot say what it wants" (Freud 1940:289). Thus the silence of the patient represents an obstacle to therapy (Arlow 1961:44), and can, for this very reason, mark its beginning (cf. Freud 1946b:130). It represents an ego-disturbance and serves either the function of defense or the function of drive discharge (Arlow 1961:46-50). Silence is the path and the boundary between the conscious and the unconscious mind. "Without a doubt, we must open our ears to the unsaid which rests in the gaps in discourse; but this is not a matter of listening to someone knocking on the other side of a wall." (Lacan 1973:152)

Moreover, extensive silence can be perceived as phobic avoidance behaviour (Kriebel 1984:22). Fear of an audience, however, can result in two opposing types of behaviour, depending on personal history: either fear of speaking, in its clinical manifestation, logophobia, with silence being the passive avoidance reaction; or as incessant, excessive talking (logorrhea, in its clinical form) as active avoidance behaviour (ibid.21).

2.4 Silence as speech act

It is not only the complete refusal to speak, but also acts of silence within discourse which are considered meaningful. Here, silence functions as an indirect speech act (Searle 1975, cf. Tannen 1985:97), which admittedly, due to its heavily contextual and non-explicative nature, can be easily misunderstood (Saville-Troike 1985:6; Mihaila 1977). The ambiguity of such acts of silence is a source of the quite different possible meanings of "silence" and "saying nothing", and is the source of various sayings and proverbs, literary inspiration, and everyday misunderstandings. An act of silence never ends a conversation. Sometimes, it is harshly sanctioned.

2.5 One at a time

Communication and, as Lazarus (1856/1857, vol. II:114-115) concludes, mental activity, are only possible when distinctions are made between who is speaking and who is listening: if one wants to listen, one has to be silent.

The way in which the alternation between speaking and listening is determined varies according to the type of discourse; differently, for example, at the dinner table of an affluent family at the turn of the century as opposed to a single parent and an only child at a modern fast food restaurant, and differently in the litany of a Catholic mass as opposed to on a television talkshow. When one who is expected to be silent speaks, it is considered impolite (due to the lack of regard for norms) or strange (due to ignorance of norms). In contrast, when one who is supposed to speak is silent, this tends only to cause embarrassment; sanctions against inaction are apparently not so easily undertaken.

Speaking and listening reflect power relationships, and the way in which a person deals with this can affect their chances in society (for example Gilmore 1985, Farr 1962, cf. Zedler 1743:col.244-245).

Women and men are silent in different ways and to different degrees, and male silence is perceived differently compared to female silence (Gal 1989, Klann 1978, Schramm (ed.) 1981:41-69, Zimmerman/West 1975). There are well known positive and negative clichés in this regard.

2.6 Intervals of silence in discourse

The less institutionally determined the alternation between speakers, or the less established in advance due to social expectations, and the less it is managed by means of verbal ("Quiet, please") or, more commonly, non-verbal (raising a hand, nodding the head) signals, the more it is silently negotiated along the way: intervals of silence are used to interactively organize who "has the floor" (Bergmann 1982; Sacks/Schegloff/Jefferson 1974:704-708; Levinson 1983:321; Wilson/Zimmerman 1986). This has to be learned (cf. Umiker-Sebeok 1980), and is dependent on social norms as well; one who hesitates for too long or too short a time can be considered dishonest (Enninger 1987:296), for example, in the cross-examination of a witness in a trial (Walker 1985).

The distribution of speaking and silence in conversations is, of course, influenced by the specific individual participants (Matarazzo et al. 1968:352f, Crown/Feldstein 1985), but it is also something which is observed and interpreted very differently in different cultures (Enninger 1987). Finns are considered so stubbornly silent that the joke has been made that the Finnish variant of the Gricean conversational maxims would be "Don't speak", "Be uncommunicative", etc. (cf. Lehtonen/Sajavaara 1985: 194; cf. Keenan 1974). Canadians do not pause as long as the Chinese, New Yorkers of Jewish heritage talk enthusiastically and quickly, Navajos pause for relatively long periods in conversation (Crown/Feldstein 1985:48f; Tannen 1985:93,101-105; Saville-Troike 1985:13). Anglo-Saxon English speakers expect a pause of approximately one second for a change of speakers, speakers of Athapascan languages (Indians in northwestern Canada, Alaska and northern Mexico) a pause of about one-and-a-half seconds. As a result, when the two meet, the Anglo-Saxon will talk uninterrupted, whereas the Athapascan will wait in vain for a long enough pause. Once the Athapascan does "get the floor" he can barely finish expressing a thought (Scollon/Scollon

1981:25-26). In such cases, communication problems and mutual personal or ethnic prejudice can result.

2.7 Silence within a sequence of speech

A person speaking organizes their flow of speech with many intervals of silence of varying length. "Psycholinguistic silences are necessary and variable impositions of slow-time on the temporal sequence of speech" (Bruneau 1973:23). The cyclical distribution of these silences (cf. Jaffe/Feldstein 1970), the "microstructure" and "the macrostructure of hesitation" (Butterworth 1975:75), shows how formulation arises out of cognitive processes which require time; time, as Kleist (1964b:54) says, "for the manufacture of my ideas in the factories of reason". It has been shown that there is a relationship between the mental effort required (degree of generalization) and the length of the pauses in speech (Henderson/Goldman-Eisler/Skarbek 1965). Pauses reflect the difficulty of planning the semantic content of speech (Boomer 1965, Chafe 1980). Simultaneously occurring mental images must be transformed into the spoken sequence of grammatically organized sentences with the help of words. The position and the duration of these pauses (measured in milliseconds) indicate that this process is hierarchically (analytically) and not sequentially (synthetically) organized (Boomer 1965:155f; Goldman-Eisler 1972:110-113; Butterworth 1975:84; 1980:173). Pauses are also used supra-sententially to organize what a speaker wants to say. Quintilian (1974:124) was not the first to make use of this as a rhetorical device. All in all, the distribution of articulation and pauses resembles the fractal pattern of breaking waves. Cognitive strategies of verbal planning can be detected therein, strategies which overlap with social considerations in the conduct of discourse.

We see that, once silence is examined more closely, all the aspects which we know from language can also be found in silence. The study of silence would be the negative mold to the study of language. Indeed, in O'Connell and Kowal's bibliography (1983) of 400 published studies of pauses - pauses are periods of silence in speech or conversation (ibid.221) - virtually all areas of linguistics are touched upon, from phonetics, phonology and grammar, to psycho-, socio- and pragmalinguistics, and areas such as research into polyglottism and didactics. And this, when pauses comprise only one category of silence. The relationship between language and silence becomes that much more intimate, the more generally we define the terms.

I will give more examples and, in so doing, will approach the "internal elements of language", as Saussure (1974:20) puts it. Next, we turn to semantics.

2.8 Things not said

Everything which is said can only be understood against the background of that which is not said. On the one hand, it occupies a position in the tradition of what has been said before; on the other hand, and at the same time, it occupies a place in a culturally and historically specific context. Thus, "all speech is indirect or referential or, if you will, silence" (Merleau-Ponty 1984:73). There are subtexts to every text: presuppositions, implications, connotations, references. To some extent these are clear, they can be understood or expected in context; but they can also unwittingly give rise to misunderstandings, or be used as a deliberate element of strategy (e.g. in gossip, jokes, essays, and contracts). Classic texts are "full of withheld language" (Barthes 1970:222). In everyday texts there is an interplay

between revealing and concealing, between an excess of superfluous information ("Nice weather today, isn't it?") and terse, abbreviated minimalism ("second left, first right"); here it can be seen how the language game is woven into everyday life. And some things can't be said at all, they must to be shown. This is particularly true in the case of the rules for using a language itself - which was discussed by the Vienna Circle (e.g. Schlick 1986:236) and which became the central idea in Wittgenstein's philosophy (cf. Bezzel 1988:73-93).

There is no clear border between that which one says and that which one does not say, between "Dire et ne pas dire" (Ducrot 1972; cf. Myers 1975). When a speaker considers that a listener might silently agree with him, when subjects are taboo, when there is censorship or when one wishes to avoid taking a stance - in such situations it is possible to give an impression or imply something without having to say it. Silence can't be contradicted. Thus, it can be a subtle way of dealing with power relationships. Foucault (1976) examines the case in a (our) society where a taboo is reinforced by the very act of breaking it: a society which talks at great length of its own silence and which describes with passion and in detail that which it doesn't say (ibid.16): "Sex ignites an explosion of discourse" (ibid.25)

2.9 Ellipses

Complete silence is radical ellipsis. Less extreme forms populate the periphery of pragmatic, semantic and grammatical attentiveness. The most common rhetorical forms of omission (detractio) are aposiopesis (Greek, falling silent [at the end of a sentence]) and ellipsis (Greek, lack of). In open and closed questions, for example, silence can hold a position open for an answer (Teacher: "And the name of this plant is... - John?"; Greeting: "Good morning, Mrs. ..."); words can be left out in the hope that they will be implicitly understood ("Behave [like you are supposed to]!"); and one can, interestingly enough, speak just for the sake of speaking, to fill a silence as it were, and say something without semantic content ("How do you do?" - "How do you do?"). Ellipsis is an anaphoric or deictic zero sign (Jakobson 1971: 216); what it doesn't express is revealed by the linguistic context or the non-linguistic context.

2.10 Syntax

Now we come to grammar. Silence as an element of syntax? Indeed. Sentences such as:

- (i) John persuaded Bill [PRO to feed himself]
- (ii) John promised Bill [PRO to feed himself]

contain, according to Chomsky (1981:75), the empty category PRO in the infinitive clause; here PRO is the subject (otherwise, the clause would be incomplete). Due to the different verbs in the main clause, PRO is controlled by Bill in the first case and by John in the second. One might consider empty categories (PRO and trace) to be theoretical constructs whose only purpose is to enable the projection principle to be applied without exception within the framework of the Government-Binding theory (according to which the syntax of a sentence is ultimately determined by the subcategorizing characteristics of the lexical entries in question); Chomsky 1981:29,38). Chomsky, however, considers them, as he does everything in his theory, to be empirically real (ibid.28,92 et passim). They are simply not realized phonetically: "it lacks phonetic properties"

(ibid.23) . Thus, what we have are grammatical categories which are realized by means of inaudible silence. In any case, according to Chomsky (ibid.41), "Surface structure is (in part) an impoverished form of S-structure." The following example (ibid.42) may serve to illustrate this without empty categories:

(i) [S[NP they] INFL [VP[V kill] [NP John]]] {S-structure}

(ii) they killed John {surface structure}

Seen in this way, our language carries a great deal of unexpressed, but nevertheless intended and understood grammatical information in the form of blind, silent passengers, if you will. The null copulas in Russian or Latin ("Usus tyrannus") are more traditional examples of these "white spaces between words" (Merleau-Ponty 1984: 73).

2.11 Morphology, phonology

The possibility of saying something with nothing allows for the utmost economy on an even more basic level, in the core of the linguistic system. Empty elements are zero signs (cf. Jakobson 1971:212) (e.g. zero allomorph and zero allophone) when they are systematically opposed to other signs. "language is satisfied with the opposition between something and nothing." (Saussure 1974:86)

Is silence such a zero sign in general and in all circumstances, i.e., with a linguistic value but no material realization? No. This would mean (cf. Jakobson 1971:212-213) that silence is the unmarked form of speech. We have already seen, however, that silence can also occur in a marked form and, furthermore, that it takes on functions in the langue (the linguistic system) and in the parole (the language in use) to the the same extent. It even makes the strict division between the two somewhat questionable.

One more example for this:

2.12 Phonetics

On the most minute level (that of the shortest silence), phonetic articulation (Lat. articulus = small joint) itself organizes the alternation between active speech organs and those at rest. Say "psst" in order to get somebody to be quiet; take your "psst" and look at it through an acoustic magnifying glass and you will see how, in the transition from sound to sound, you produce one moment more, one moment fewer and the next moment no sound waves at all.

3. Between order and chaos

3.1 Introduction: Speech and silence

Everything said up to this point has been variations on one theme: namely, the self-similarity of the boundary between articulation and non-articulation. "Silence is the inner limit of discourse and conversation" (Benjamin 1977:92). At every level of language and with silences of every length, silence has proved to be dependent on speech, and to the same extent, speech to be dependent on silence. Everything which is interesting about language can also be found in silence. As with articulated signs, silence falls under specific norms; as those of articulated signs, the function and meaning of silence depend on its distribution. By itself it

means nothing, it only becomes meaningful in the specific situation and in what comes before and after it in the flow of speech. Silence is neither nothing nor "another language" (Bindeman 1978:191); it is both the presence and the absence of language. The boundary between the two is complex: it does not stand still, and it is intertwined in itself. How can one represent this tangled coupling of nothing and something, recurrent at every level of language and speech?

3.2 On the morphology of complex boundaries

The metaphor which suggests itself, that of figure (language) and ground (silence), will obviously not suffice, nor will its occasionally suggested reversal (Tannen/ Saville-Troike 1985:xi; Nwoye 1985:191; Calvino 1985:120-121). For, in addition to the greatly varying and, in part, opposing functions which silence can perform in the communication process, the relationship between perceived gestalt and unnoticed formlessness should repeat itself in one form or another with every different length of silence (if you zoom through the various levels).

Fortunately, there is a form of representation for boundaries as tangled as those between order and chaos. It originated in the mathematics of complex dynamics (or non-linear geometry) and has come to be known by the name, "fractals". "A fractal is by definition a set for which the Hausdorff-Besicovitch dimension strictly exceeds the topological dimension." (Mandelbrot 1983:15; cf.351) It is obtained by mathematical feedback, that is, by repeatedly calculating a formula using its own result. The typical case is $x_{n+1} = f(x_n) = x_n^2 + c$: a number x_0 is squared, added to a constant c , the result x_1 is manipulated in the same fashion, and so on. Depending on the choice of x_0 and c , the most amazing series of numbers are obtained, in which order and chaos overlap in a highly complex manner. In geometric representation, the self-similarity of the complex boundaries between order and chaos is most striking. Numerous natural, as well as some social structures and processes which are irregular can be more aptly depicted using fractal geometry rather than rougher classical techniques. Some of the more well known examples of applications have been phase transitions, turbulences, relief, coastal and cloud formations, population developments, and price changes. The thought-provoking question as to the relationship between order and chaos in language and speech has yet to be asked.

Given our topic, it now stands to reason that we consider the boundary between articulation and non-articulation as a fractal structure. To this end, linguistic utterances can be modelled as Julia sets, which represent the relationship between order and chaos as a complex and self-similar boundary. "The Julia set contains [...] chaotic sequences of points that never approach any kind of regularity" (Peitgen/Richter 1986:10-11). The Mandelbrot set represents the norm (thought to be ideal) of the language as complete order; beyond that there are no rules whatsoever, only uninterpreted, silent, and hermetic chaos. When we speak, we move on the border between the two. More pointedly, *Energieia* brings this border into being.

In this way, silence is considered not as something missing (absence of language), but as a constitutive element of human communication. Scollon (1985:26/28) criticizes the metaphor upon which, he says, communication research is based: "It is the metaphor of the machine. If one assumes the engine should be running, the silences will indicate failures. [...] Changing the metaphor changes the meaning of silence." We suggest the concept of fractals as a more fitting metaphor. To speak is to put into language; the process of articulation establishes the boundary between

static order and incomprehensible chaos. In this sense, as stated at the beginning, grappling with silence must be inherent in any speech; and this is true, as presented in part two, in every respect and for silences of every different length. The boundary lies within, not beyond, human speech.

3.3 Speech in silence in speech in...

What does the fractal model show?

1. That the specific discourse environment in which a silence develops serves as the primary resource in its interpretation (Bergmann 1982:144). For, if it had not been opposed to speech in a certain way deriving from the situation, it would be considered uninterpretable chaos; but it is the very process of articulation which creates meaning: the boundary, which relates this side (familiar order) to what is beyond (unfamiliar chaos) is what is interesting.
2. Both sides of the boundary should be interpreted to the same extent since they refer to one another (which is the nature of the boundary). Neither the text nor its gaps contain the meaning: we find there only traces of the meaning-giving instance which drew the dividing line. As is the case with silence, the meaning of a text is to be found beyond its immediate surroundings, namely, in the co-text and context. (The speaker drew a line; the listener can draw it differently.)
3. We see that, in speaking of boundaries, we exceed them. The boundaries of language are not to be found outside of it, but within it. This is reflected in the boundaries of the study of language: linguistics has no walled-in territory. Perhaps part two was able to demonstrate this.
4. Verbal silence, in particular, can be interpreted to mean quite opposing things, for example, defiance or submission, depending on the nonverbal context.
5. More generally, the degree of ambiguity of a silence is inversely related to the extent to which the context is decoded. If we know the whole context, that is, the exact way in which the border between said and unsaid was drawn, then we know the exact meaning of the individual silence.
6. The same is true, by analogy, of articulated text; no text is in itself unambiguous. The articulated is indeed already structured: it refers not only to its opposite (the unarticulated), but also to everything else capable of being articulated; whereas silence is in itself amorphous and only obtains its meaning by virtue of its opposition to the sayable and the said. A sparse text, because of its order, can be more easily understood than eloquent silence.
7. Conversely, the speaker takes the trouble to formulate what he means, and that means drawing a line between said (order) and unsaid (chaos). In speech, meaning is communicated by constructing order. For this reason, as Hjelmslev (1974: 106f, referring to Kierkegaard) says: in an ordinary language, and only in an ordinary language, is it possible to work with the unstateable, until it is stated. Ordinary languages allow much freer, wilder, more complex boundaries to be set than do established technical languages; the former are more process-oriented and permit active, amorphous forms of silence, the latter are more result-oriented and leave as little as possible to the imagination. (In mathematical formulas, pauses for thinking are omitted, and nothing is concealed.)
8. Texts thus become interesting at that very moment when they operate at the edge of silence. Particularly in the vicinity of silence, the prestige and eloquence of language appear to unfold, and every silence which seeks

recognition returns inevitably to language. (Roloff 1973:8)

9. Lively conversation demands the most turbulent ordering of the chronological alternation between speech and silence. Spontaneous everyday conversations are full of such unpredictable turbulences (since, from a mathematical point of view, more than two variables of freedom are involved).
10. The relationship between something and nothing in human speech is not constructed as a simple opposition, which in turn is combined with other similarly constructed building blocks in order to make complete sentences. Rather, it is a recursive process whose individual stages are continually influencing one another. The reciprocal oscillation with which speech and silence refer to one another reveals, in silences of all lengths, both the paradox of communicated unwillingness to communicate and the protodox (the very possibility) of communication. Therefore, "There is no good reason for assigning ontological priority to discourse over silence. Each makes an irreducible contribution to the sense of the other and to that of the entire domain of signitive performances" (Dauenhauer 1980:106).

3.4 The three main functions of silence

- (0) In summary, we can characterize the general functions of silence. Silence can shape sequences of speech, carry meaning and organize the social relationships between speakers. These are the same three functions which are known as the syntactic, semantic and pragmatic functions of language. This should come as no surprise if we consider that, in speaking, the boundary between silence and language is the boundary between chaos and order, and that this boundary is constantly in a state of flux and forever being redrawn. Similarly, we should expect that these functions will be performed differently by silence as compared to speaking.
- (1) With regard to syntax, silence helps to differentiate between the units of speech. It facilitates understanding. "Silence lends clarity to speech by destroying continuity" (Bruneau 1973:18). In various ways, this is also true of silences which are extreme in either length or brevity. Long silences (e.g. when listening to or preparing a speech) allow thoughts to be collected; the shortest silences contribute to the economic organization of language. Silence is an element of composition. The alternation between quieter and louder, at its most succinct in the case of silence and musical notes, produces rhythm. John Cage's work dealt with this most directly. He demonstrated how silence and speech are dependent on one another - particularly in the wording and form of his "Talk about Nothing" (Cage 1969) for example, in which text and pauses of various lengths refer to one another in a well organized way.
- (2) Quite often, however, nothingness is also interpreted; Silence carries meaning. Castorp and Settembrini, for example, in Thomas Mann's "The Magic Mountain", "were silent for some way; but the silence spoke of Naphta" (Mann 1927:515). And the silence that Naphta preserved "suggested that when he broke it, his speech would be incisive and logical." (ibid.472) As silence is uncoded, it can mean anything, particularly acceptance or rejection. Misunderstandings can only be prevented by referring back to the co-text and the context. Sometimes these are coded to such a great extent that the situation in which a silence occurs demonstrates how closely related communication and culture are. A Japanese woman, for example, accepts a marriage proposal by lowering her head and being silent;

an Ibo woman (in Nigeria) declines by being silent, unless she runs away, which means acceptance (Saville-Troike 1985:8-9). Admittedly, silence can also serve as an indicator of unsuccessful communication; for example, when there is no laughter after a joke or no answer to a test question. Even this is spontaneously interpreted (as *ëstupid jokeí, ëI don't understandí or ëI don't knowí*), in order to prevent communication from being broken off.

- (3) Since silence can mean anything (semantically) and nothing (syntactically), it is particularly suited to sounding out as yet unclear relationships between speakers before such are really settled: "keeping silent among the Western Apache is a response to uncertainty and unpredictability in social relations" (Basso 1972:83) - to be sure, this is similar in all societies. Paradoxically, not-speaking then serves to maintain communication. As always, silence is both something (presence) and nothing (absence, in this case, of communication): it is the only sign without a material vehicle and, due to this very reason, so open. Silence, as a lack of established meaning, can be unfamiliar and strange (cf. Malinowski 1974:349f; Mann 1927:652). Its open ambiguity cries out for semiotic release: what is being concealed? Silence then, like suspense, demands to be ended.
- (4) Thus, generally considered, silence has the same functions as language, namely, syntactic, semantic and pragmatic ones. In contrast to language, silence is not structured, but empty, amorphous, chaotic: In silence there is no difference between system and relation (or between system and element). In this way, then, undifferentiable silence on the whole functions as a sign: in certain contexts, the mere absence of a signifiant is understood as a signifiant. As there is no material signifiant (expression, sign carrier), there is also no coded signifiÈ (content, meaning): silence, in principle, can mean anything. It is the joker of language: freed from the normal rules, its role depends solely on context.

"The magnificence of silence in interpersonal relationships is its very ambiguity." (Arlow 1961:51) This observation, said or unsaid, runs through the entire literature on silence. It is not uncommon for silence to confuse its listeners in everyday life or in science: as if it meant something in itself, as if subjects did not wish to express something with it. Out of this come pseudo-problems of the sort which Wittgenstein criticized. In reality, silence, as an extreme linguistic form (both the opposite of language and a part of it) reveals most clearly that which is also true of language: ambiguity, context-dependence, speaker-constructed meaning. The ambiguity of the sign (when seen abstractly), is first fixed to each individual meaning by the speakers in a situation.

When one disregards the single instance, that is, the profane, a theoretical problem arises which is never really a problem in the practical use of language. This is the problem of distinguishing between the said and the unsaid, the sayable and the unsayable. At that very point where sacred and profane are to be communicated, Denis Areopagite deals with it as a problem of a dual tradition; on the one hand unsayable and inaccessible, on the other hand logical and demonstrable. "Denys reconnaÓt que chacun de ces deux modes sí'entrecroise^a avec liautre. Lí'inexprimable^a (arreton) síentrelace ou síentrecroise (sympeplektai) avec lí'exprimable^a (tÜ retÜ)." (Derrida 1987:557).

This is more complicated still in everyday life. Speech and silence are fractally intertwined in one another; it is because of this that they are at all able to refer things beyond themselves, not to the divine, but rather to human experience. When we are silent we interrupt something in order to link it to something else.

4. Silence in non-verbal sign systems

We have so far concentrated on the most conspicuous forms of silence, namely, the spoken silences, so to speak, silence in speaking. There are also silent channels of communication in addition to these; even someone who does not speak can communicate, for example in written form, non-verbally or in, as Edward Hall (1959) calls it, the "silent language" of cultural behaviour patterns. General impositions of silence activate these channels all the more, as can be seen in any school classroom or silent monastic order (Fuchs 1989a). Both in written and speechless modes of communication, the same reciprocal relation between order and chaos, between revealing and concealing, repeats itself with great self-similarity.

A page not yet written on is not an empty page - and writing requires silence. "Ecrire, c'est se taire." (Courtine/Haroche 1987:30). In letter writing, breaks for the turn-taking alone take days or weeks. And the fact that one usually reads and writes silently nowadays must have something to do with the intrinsically silent nature of written text. More concentrated than speech, writing demands that things be left out. The text cannot be endlessly long and should be understandable outside the situation in which it was written. Reading must recover what is between the lines (that which is there and not there), be it the horizon (Gadamer 1972:286ff) or the individual phoneme (in Hebrew, for example). As a result, more is written about written texts than spoken material. Interpretation is a symbolic version of the never ending game of now you see it, now you don't; of being silent and discovering.

Silence, for its part, can be self-similarly coded in written form. In addition to described silence, there is also written silence. Empty spaces on forms await the filling in of answers. A gap in correspondence (no letter when one is expected) can mean a great deal, pragmatically as well as semantically (e.g. Hacks 1978:302-303). Abbreviations leave out something known (Schmitz 1983); three dots (ë...i) merely imply. In general, meaningful written silence can only be notated by means of punctuation: Kleist (1964a:95) expresses by means of a dash the unheard of event which happens upon the Marquise de O... In the writings of Theodor Storm, according to Adorno (1974:109), myth hides in punctuation marks. The form-giving function of silence, by contrast, is fulfilled not only by means of punctuation, but also by means of empty spaces: spaces between words (not in the case of Japanese), only partially filled lines at the beginning and end of paragraphs, open spaces in layouts.

Related forms of silence in other sign systems, each form-giving and/or meaningful in its own way, are spaces in painting and graphic design (this is most succinct in Malevich's "Black Square"), black boxes in crossword puzzles, pauses in flag and morse codes, broadcast silence. One is reminded of empty speech or thought balloons in comics, stopping to think while playing chess, waiting times involved in institutional processes, markings at the beginning and end of books, records, and discs, as well as of lobbies and niches in churches, museums and all buildings. And one is reminded of significantly returned off channels of communication in certain art forms, such as cartoons without captions, pantomime and silent film.

Everywhere (and the list of substances whose absence determines the form of silence could easily be extended), information and its opposite contrast with one

another in such a way as to make the non-articulated a prerequisite for articulation, as well as meaningful in its own right. What Lem (1986:86) reports, in connection with a scene in an erotic film, is true everywhere: "the unshown, the gap in showing (or describing) was considered a sign of its own."

If we turn our attention to the emptiness which is to be found in silence (if one looks at the hole without its rim, so to speak), then one opens up all sorts of paradoxes, operations whose conditions of fulfillment are at the same time the conditions for the impossibility of their fulfillment. (Fuchs 1989b:54). This is a driving force, as Luhmann and Fuchs (1989) show, behind those extraordinary cases where complete silence is a goal: monasteries and convents, Zen, mysticism, secrets and lyrical poetry. If silence contributes to communication in these cases, then this is all the more so in daily life.

For communication and silence do not prevent one another, they need one another. Silence appears to stop communication; by making time stand still, the very possibility of its experience comes into being.

5. Samples of historical description

5.1 Introduction

What forms has the relationship between speech and silence taken historically? We shall limit ourselves here to the longer, most visible silences, and that means to the historical pragmalinguistics of speech and silence in general, since historical and social influences find their most direct and open expression in these cases.

Admittedly, the great distance which separates the "favete linguis" required at an ancient Roman sacrifice (Horaz 1957:108=III,1,2) from the "Let's stop talking for a minute, do you mind?" in Beckett's (1963:372) "Godot" cannot be represented: it is a distance of two and a half thousand years of cultural history. (Then a magic spell could be broken by the spoken word... and now?) Not even a few mosaic tiles can be presented. We are reminded, for example, of the Jewish law against speaking the name of god, which has had a great deal of influence on the development of Jewish culture (cf. Werner 1985). And we are reminded of the rules in the Christian convents and monasteries of the fourth to the seventh centuries, whereby silence belonged to a system of silence, mouth and laughter, in which silence represents virtue, the mouth the control organ to be kept watch over, and laughter sin. (Le Goff 1989: N3) We may wonder what has become of this system today...

But let us instead concentrate on three ideas. The first, concerning unequal command of language, has to do with the range of silence; the second, concerning power and resistance, has more to do with the type; and the third, concerning mass media, more to do with the amount of silence. The first deals more with the social distribution, the second more with the political and ethical dimension, and the third with the societal spread of silence. But we shall see that all three belong together.

5.2 Unequal command of language: the silence of the patient

If a person recognizes ways of speaking in which they themselves are not

conversant, then they must be silent. Consider the debate over language barriers; consider Putnam's (1979:39) hypothesis on the universal division of linguistic labor, according to which different speakers understand different words more or less exactly. With the example of medical treatment in the early 18th century, Barbara Duden (1987) shows how the professionalization of ways of speaking arising out of the division of labor can rob the lay person of the ability to express himself. 'The sick person's words and the doctor's terms were [until the 19th century; U.S.] still in osmosis. It was not until the professionalization of medical terminology, which runs parallel to the sociogenesis of the new body, that two heterogeneous ways of speaking and of perceiving came about, thereby silencing the patient.' (ibid.79-80) 'When the power of the right words is concentrated on one side, the side of medicine, we are left stuttering or not speaking at all in the face of the normative nomenclature of technical language.' (ibid.107) (Such is the case in general for the professionalized division between scientific and everyday or ordinary discourse.

5.3 Power and resistance: silence and fascism

Secondly, silence, like speech, is connected in yet another way with the relationship between the intellect and power. 'Stifle all voices but one' - this, according to Stefan Zweig (1940:424), was the motto of National Socialism in Germany; an icy 'silence of terror', an 'enormous, impenetrable zone of silence in the middle of our Europe' was its accomplishment (ibid.425,424). Gerhard Bauer (1988) studied its spread in the most detail. Certainly, silence can also be the determined defense against that one voice; consider the resolute 'Republic of Silence', as Sartre described occupied France in 1944: 'We are forced to be silent, but we say 'no' with our silence (Sartre 1949:11f; cf. Vercors 1942).

The ambiguity of silence (acceptance, rejection, powerlessness, opportunism, ignorance, reflection) allows it to be hypocritically continued after release from such terror. The motto for getting by, 'keep quiet and work' (Hfer 1943:2), with its allusion to the Benedictine saying, puts daily life under fascism in the role of historical mediator between occidental tradition and post-fascist modernity. How else to explain the 'armour of apology and silence' (Habermas 1989:9), the 'numbing silence', the 'mute denial of the past' (Bude 1987:86) in post-war Germany? L,bbe (1983:9) even makes the 'communicative silence' on the Nazi past out to be, as Haug (1986: 509) formulates it, 'the true act of democratization': his speech 'breaks the silence on the (National Socialist) past by justifying that silence' (ibid.507).

On the other hand, there is, in the Federal Republic of Germany, a tradition which identifies speaking with progressive republican courage and silence with a 'lack of basic dignity' (Magass 1967:21). The above examples, however, show that it is the type, rather than the amount, of speaking and silence which is more important. Silence arising out of inability, thoughtlessness, cowardice, conformity, denial, bitterness, resignation, powerlessness, the act of waiting, pensive thought, resistance and rebellion is in each case a very different action. In the end, Bloch's (1969:412) maxim: 'What we experience demands expression. We should not be silent about things we cannot say.'

5.4 Proliferation of sign production: Mass media

The last area we come to is mass media, a typically modern and most influential means of communication. As a result of ever rising productivity, the continuing

trend toward more specialization in the division of labour, the differentiation of social systems and internationalization of communications traffic, our own semiotic production is becoming more and more complex and abundant. Signs are proliferating. There is hardly a space without writing in it or a quiet quarter of an hour to be found (cf. Bloch 1965; Anders 1980:250). Silence stands in the way of the speeding up of life. (The built-in pauses in letter writing, for example, are being shortened or eliminated by new media technologies.) When, in the process of progressive civilization, new signs take the place of silence, the relationship between speaking and silence becomes more intimate, more microcosmic, and takes on altogether new forms. The Walkman is a graphic example of the way in which a semiotic outer-world conquers the quiet inner-world, under the pretext of defending against outside semiotics determined to an all too great extent by others. The headphones serve to hold at bay the semiotic demands of an outside world by means of a self-chosen sign world, be it linguistic or musical (cf. Schnhammer 1988). In earlier days, one would have sought complete, and not just one's own, silence in such situations; today this is not such an easy task. (Listening to a Walkman is a sort of reverse meditation.)

It is above all mass media of all different varieties which fills up time and space, which earlier would have been *espeech-free*, with linguistic and non-linguistic signs. On the average, the more recent the mass media product is, the fewer pauses are admitted. Mass media destroys silence. It ignores boundaries and mixes up subject areas.

6. Beyond boundaries

When we speak, we draw small borders in the pursuit of larger ones: in speaking (syntax), in the sayable (semantics), in social relations (pragmalinguistics). The opposition of nothing and something, of silence and speaking, is the *epartial unit* (Vygotsky 1934:9) of such borders, their smallest units of construction. So empty, so blank, so full of possibilities, that speakers are able to set in motion an elusively complex dynamic; orderly science is overwhelmed. In order to get a better grasp, science draws its own artificial and more rigid boundaries. As a first step, the chaotic competitor, silence, is shut out. Thus, the boundaries of linguistics become the boundaries of its world. But these boundaries are artificial and not those of language, not those of the speaker. Science institutionalizes itself by separating the inner from the outer; rules and exceptions are then left in a tangle *inside*.

"One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need." (Wittgenstein 1958:46=ß108) This requirement *is* the requirement of viewing the structures of ordinary language from the standpoint of the user: then everything which appears confused from the standpoint of constructive semantics could appear clear and ordered. (Wellmer 1985:125-126)

In fact, the continual setting apart of order and chaos is the life-blood of speech, and of sign production in general. To describe this, disciplinary borders must be crossed in order to trace the more complex ones of everyday life. In this way, that *which runs counter to it* (Barthes 1973:55) can be brought back into science: in this case, silence. Silence on which science has been silent.

My goal has been to survey the boundaries of discourse (Foucault 1972) without losing my mind and having to be silent, and to leave behind the totalitarian

demand for the one true perspective in the hopes of approaching the pivotal point of our real need.

The whole time we have been discussing eloquent silence, that is, silence which says something due to its symbiosis with language. What could be said about silence otherwise? Perhaps, silence and desire - forever divorced in discourse - have become one. (Benjamin 1977:96) Or, "There is always in sadness the inclination to speechlessness, and that is endlessly more than inability or unwillingness to communicate." (Benjamin 1974:398) Or, "in the end, everything hinges on the ultimate, the unexpressible. Speech is based on an indecent overestimation of self." (Hofmannsthal 1979:403=II,14) Or, near the very end of the "Tractatus" (Wittgenstein 1922): "The longer one reflects, the more deeply and inwardly one is silent, and all desire to speak is lost." (Hamann 1967:222)

Let us remember the orator tacens, Quintilian's conception of a speaker, who does not speak at all (Seel 1977:75,353 et passim): "The perfect speaker and someone who never speaks are identical" (ibid.78) - an idea from the pythagorean tradition (cf. Wind 1980:53-54) which resurfaces in another context in Augustine (cf. Mazzeo 1962:187) and which is, in yet another way, central to Derrida's ideas (for example, 1987:548 et passim) and which receives its most radical application in the philosophy of ethics in Wittgenstein (1980:96-97). Silence is "the empty area" (Deleuze 1975: 292) of language, "the only place which neither can nor may not be filled in" (ibid. 298), when intersubjectivity is to become structure, namely, the "order of positions under changing conditions" (ibid.292); silence is the "zero-point" (ibid.293) without which language in general would not function. Let us be silent about silence. As Picasso's Silence (1989:261) says: "Would you just be quiet!"

Note

*Translated from the German by Allen Mundy. This is a much shorter version, with some small changes, of "Beredtes Schweigen - Zur sprachlichen Fülle der Leere" (Schmitz 1990), which contains a detailed report on research and an extensive bibliography on the subject of silence. The following have been published since then: Bellebaum 1992, Jaworski 1993, Wohlfart/Kreuzer 1992. An earlier selective survey of the literature can be found in Wandt 1982. Munoz-Duston/Kaplan 1985 is a selective bibliography with commentary (35 titles). For introductions see, for example, Bruneau 1973, Geißner 1975, Jensen 1973, Johannesen 1974, Poyatos 1981, Scott 1972, Stedje 1983. Anthologies: Tannen/Saville-Troike (eds.1985), Schmitz (ed.1990)

[Bibliography](#)

The date after the author's name is that of the edition referred to. The date of the earliest publication, when this is different, follows the title.

Adorno, Theodor W. (1974). Satzzeichen (1956). In: Gesammelte Schriften, vol. 11. (Ed. Rolf Tiedemann). Frankfurt/M., 106-113.

Anders, Günther (1980). Die Antiquiertheit des Menschen. Vol. II. München.

Arlow, Jacob A. (1961). Silence and the Theory of Technique. Journal of the American Psychoanalytic Association 9: 44-55.

Baker, Sidney J. (1955). The theory of silences. Journal of General Psychology

53: 145-167.

Barthes, Roland (1970). *S/Z*. Paris

Barthes, Roland (1973). *Le plaisir du texte*. Paris

Barthes, Roland (1985). *La lutte avec l'ange: analyse textuelle de GenÈse 32.23-33* (1972). In: id.: *L'aventure sÈmiologique*. Paris, 315-328

Basso, K[erith] H. (1972). 'To Give Up on Words': Silence in Western Apache Culture (1970). In: Giglioli, Pier Paolo (ed.): *Language and Social Context. Selected Readings*. Harmondsworth, 67-86.

Bauer, Gerhard (1988). *Sprache und Sprachlosigkeit im 'Dritten Reich'*. Kln.

Bauman, Richard (1974). *Speaking in the light: The role of the Quaker minister*. In: Bauman, Richard/ Sherzer, Joel (eds.): *Explorations in the ethnography of speaking*. Cambridge, London, 144-160.

Bauman, Richard (1983). *Let your words be few*. New York.

Beckett, Samuel (1963). *Waiting for Godot* (French 1952). In: *Dramatische Dichtungen*, vol. I, 363-452 [English translation by Samuel Beckett]

Bell, Robert A. (1986). *The multivariate structure of communication avoidance*. *Communication Monographs* 53: 365-375.

Bellebaum, Alfred (1992). *Schweigen und Verschweigen. Bedeutungen und Erscheinungsvielfalt einer Kommunikationsform*. Opladen

Benjamin, Walter (1974). *Ursprung des deutschen Trauerspiels* (1928). In: id.: *Gesammelte Schriften* (eds. Rolf Tiedemann/ Hermann Schweppenhuser). Vol. I.1: 203-430.

Benjamin, Walter (1977). *Metaphysik der Jugend* [1913/14]. In: id.: *Gesammelte Schriften* (ed. Rolf Tiedemann/ Hermann Schweppenhuser). Vol. II.1: 91-104.

Bergmann, Jrg R. (1982). *Schweigephase im Gesprch - Aspekte ihrer interaktiven Organisation*. In: Soeffner, Hans-Georg (ed.): *Beitrge zu einer empirischen Sprachsoziologie*. Tbingen, 143-184.

Bezzel, Chris (1988). *Wittgenstein zur Einf,hrung*. Hamburg.

Bindeman, Steven Lee (1978). *The Role of Silence in the Philosophies of Martin Heidegger and Ludwig Wittgenstein*. Ph.D. Thesis, Duquesne University.

Bloch, Ernst (1965). *Stilles Land*. In: id.: *Literarische Aufsätze* (= Gesamtausgabe, vol. 9). Frankfurt/M., 401-402.

Bloch, Ernst (1969). *Heraus zum Tag* (1946). In: id.: *Philosophische Aufsätze zur objektiven Phantasie* (= Gesamtausgabe, vol. 10). Frankfurt/M., 412.

Blumenberg, Hans (1981). *Die Lesbarkeit der Welt*. Frankfurt/M.

Bock, Philip K. (1976). "I Think But Dare Not Speak: Silence in Elizabethan Culture". *Journal of Anthropological Research* 32: 285-294.

- Boomer, Donald S. (1965). Hesitation and grammatical encoding. *Language and Speech* 8: 148-158.
- Bruneau, Thomas J. (1973). Communicative Silences: Forms and Functions. *Journal of Communication* 23: 17-46.
- Bude, Heinz (1987). *Deutsche Karrieren. Lebenskonstruktionen sozialer Aufsteiger aus der Flakhelfer-Generation.* Frankfurt/M.
- Burgoon, Judee K./ Hale, Jerold L. (1983a). A research note on the dimensions of communication reticence. *Communication Quarterly* 31: 238-248.
- Burgoon, Judee K./ Hale, Jerold L. (1983b). Dimensions of communication reticence and their impact on verbal encoding. *Communication Quarterly* 31: 302-312.
- Butterworth, Brian (1975). Hesitation and Semantic Planning in Speech. *Journal of Psycholinguistic Research* 4: 75-87.
- Butterworth, Brian (1980). Evidence from Pauses in Speech. In: Butterworth, B[rian] (ed.): *Language Production. Vol. 1: Speech and Talk.* London, 155-176.
- Cage, John (1969). Vortrag ,ber Nichts (English [1949]1959). In: id.: *Silence.* (Transl. by Ernst Jandl). Neuwied, Berlin/W., 5-23.
- Calvino, Italo (1985). *Herr Palomar (Italian 1983).* M,nchen, Wien.
- Chafe, Wallace L. (1980). Some reasons for hesitating. In: Dechert, Hans W./ Raupach, Manfred (eds.): *Temporal Variables in Speech. Studies in Honour of Frieda Goldman-Eisler.* The Hague, Paris, New York, 169-180.
- Chomsky, Noam (1981). *Lectures on Government and Binding. The Pisa Lectures.* Dordrecht, Riverton.
- Courtine, Jean-Jacques/ Haroche, Claudine (1987). Silences du langage, langages du visage ? l'ge classique. In: Dinouart, AbbÈ [Joseph Antoine Toussaint] (1987): *Líart de se taire. Principalement en matiÈre de religion (1771).* Paris, 13-54.
- Crown, Cynthia L./ Feldstein, Stanley (1985). Psychological Correlates of Silence and Sound in Conversational Interaction. In: Tannen/Saville-Troike (eds.), 31-54.
- Davies, Alan (1988). Talking in silence: ministry in Quaker meetings. In: *Styles of discourse,* 105-137.
- Dauenhauer, Bernard P. (1980). *Silence. The Phenomenon and Its Ontological Significance.* Bloomington.
- Deleuze, Gilles (1975). Woran erkennt man den Strukturalismus? (French 1973). In: Ch,telet, François (ed.): *Geschichte der Philosophie. Vol. VIII: Das XX. Jahrhundert.* Frankfurt/M., Berlin/W., Wien, 269-302.
- Derrida, Jacques (1987). Comment ne pas parler. DÈnÈgations (1986). In: id: *PsychÈ. Invention de líautre.* Paris, 535-595
- Devereux, Georges (1973). *Angst und Methode in den Verhaltenswissenschaften (English 1967).* M,nchen.

- Ducrot, Oswald (1972). *Dire et ne pas dire. Principes de sÈmantique linguistique.* Paris.
- Duden, Barbara (1987). *Geschichte unter der Haut. Ein Eisenacher Arzt und seine Patientinnen um 1730.* Stuttgart.
- Enninger, Werner (1983). Silence(s) across cultures. *INTUS News/-NUUS* 7, No. 1: 36-44 [Stellenbosch].
- Enninger, Werner (1987). What interactants do with non-talk across cultures. In: Knapp, Karlfried/ Enninger, Werner/ Knapp-Potthoff, Annelie (eds.): *Analyzing Intercultural Communication.* Berlin/W., New York, Amsterdam, 269-302.
- Farr, James N. (1962). How to communicate with silence. *Nation's Business* 50: 96-97.
- Foucault, Michel (1961). *Histoire de la folie.* Paris
- Foucault, Michel (1963). *Naissance de la clinique. Une archÈologie du regard medical.* Paris
- Foucault, Michel (1972). *L'ordre du discours.* Paris
- Foucault, Michel (1976). *Histoire de la sexualitÈ 1. La volontÈ de savoir.* Paris
- Freud, Sigmund (1940). Das Ich und das Es (1923). In: *Gesammelte Werke*, vol. XIII. London, 235-289.
- Freud, Sigmund (1945). ?ber Psychoanalyse (1910). In: *Gesammelte Werke*, vol. VIII. London, 1-60.
- Freud, Sigmund (1946a). Das Motiv der Kstchenwahl (1913). In: *Gesammelte Werke*, vol. X. London, 23-37.
- Freud, Sigmund (1946b). Erinnern, Wiederholen und Durcharbeiten (1914). In: *Gesammelte Werke*, vol. X. London, 125-136.
- Fuchs, Peter (1989a). Die Weltflucht der Mnche. Anmerkungen zur Funktion des monastisch-aszetischen Schweigens (1986). In: *Luhmann/Fuchs 1989*, 21-45.
- Fuchs, Peter (1989b). Vom Zweitlosen: Paradoxe Kommunikation im Zen-Buddhismus. In: *Luhmann/Fuchs 1989*, 46-69.
- Gadamer, Hans-Georg (1972). *Wahrheit und Methode. Grundz,ge einer philosophischen Hermeneutik (1960).* 3rd ed. T,bingen.
- Gadamer, Hans-Georg (1986). *Begriffsgeschichte als Philosophie (1970).* In: *Gesammelte Werke*, vol. 2: *Hermeneutik II.* T,bingen, 77-91.
- Gal, Susan (1989). Between Speech and Silence: The Problematics of Research on Language and Gender. *IPrA Papers in Pragmatics* 3, No. 1: 1-38.
- Gei?ner, Hellmut (1975). Ist Schweigen Gold? In: Badura, Bernhard, et al.: *Reden und reden lassen. Rhetorische Kommunikation. Begleitmaterial zur gleichnamigen Fernsehreihe in Zusammenarbeit mit dem S,dwestfunk und dem ÷sterreichischen Rundfunk.* Stuttgart, 183-198.

- Gessinger, Joachim (1989). Der Ursprung der Sprache aus der Stummheit. Psychologische und medizinische Aspekte der Sprachursprungsdebatte im 18. Jahrhundert. In: Gessinger, Joachim/ von Rahden, Wolfert (eds.): Theorien vom Ursprung der Sprache. Vol. II. Berlin/W., New York, 345-387.
- Gilmore, Perry (1985). Silence and Sulking: Emotional Displays in the Classroom. In: Tannen/ Saville-Troike (eds.), 139-162.
- Goldman-Eisler, Frieda (1972). Pauses, clauses, sentences. *Language and Speech* 15: 103-113.
- Habermas, Jürgen (1989). Verwundete Nation - oder lernende Gesellschaft? Thesen zur Geschichte der Sozial- und Geisteswissenschaften in der Bundesrepublik. *Frankfurter Rundschau*, 11.4.1989, 9.
- Hacks, Peter (1978). Ein Gespräch im Hause Stein über den abwesenden Herrn von Goethe. In: id.: *Sechs Dramen*. Düsseldorf, 263-318.
- Hall, Edward T. (1959). *The Silent Language*. New York.
- Hamann, Johann Georg (1967). Metakritik über den Purismus der Vernunft (1784). In: id.: *Schriften zur Sprache*. (Ed. Josef SiUlrich Schmitz (Essen) El
- Hart Nibbrig, Christiaan L. (1981). *Rhetorik des Schweigens. Versuch über den Schatten literarischer Rede*. Frankfurt/M.
- Haug, Wolfgang Fritz (1986). Die neuen Deutungskämpfe um Anti/Faschismus. Eine Untersuchung zur neokonservativen Offensive im Spiegel der Frankfurter Allgemeinen. *Das Argument* 28 (No.158): 502-526.
- Henderson, Alan/ Goldman-Eisler, Frieda/ Skarbek, Andrew (1965). The common value of pausing time in spontaneous speech. *Quarterly Journal of Experimental Psychology* 17: 343-345.
- Herder, Johann Gottfried (n.d. [ca.1978]). *Abhandlung über den Ursprung der Sprache* (1772). Text, Materialien, Kommentar (ed. Wolfgang Pro?). München, Wien
- Hjelmslev, Louis (1974). *Prolegomena zu einer Sprachtheorie* (Danish 1943). München.
- Hfer, Werner (1943). Luftstrahlung gegen Luftterror. Erlebnis einer Rüstungstagung. *Bremer Nachrichten*, 30.9.1943, 1-2.
- von Hofmannsthal, Hugo (1979). *Der Schwierige* (1921). In: *Gesammelte Werke in zehn Einzelbänden*. (Eds. Bernd Schoeller/ Rudolf Hirsch). *Dramen IV: Lustspiele*. Frankfurt/M., 331-439.
- Hnigswald, Richard (1937). *Philosophie und Sprache. Problemkritik und System*. Basel.
- Horaz (1957). *Carmina/ Oden* (Latin ca. 33-17 B.C.). In: *Sämtliche Werke. Lateinisch und deutsch*. (Tusculum). München, 6-223.
- Hrisch, Jochen (1979). Die Sprachlosigkeit des Kaspar Hauser. Nachwort des Herausgebers. In: id. (ed.): *Ich möchte ein solcher werden wieÖ Materialien zur*

Sprachlosigkeit des Kaspar Hauser. Frankfurt/M., 263-310.

Hostetler, J. A. (1984). Silence and survival strategies among the New and Old Order Amish. In: Enninger, Werner (ed.). Internal and external perspectives on Amish and Mennonite life. Essen, 81-91.

von Humboldt, Wilhelm (1963). Ueber die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts [1830-1835]. In: id.: Schriften zur Sprachphilosophie. (= Werke in fünf Bänden, eds. Andreas Flitner/ Klaus Giel, vol. 3). Darmstadt, 368-756.

Hymes, Dell (1979a). Die Ethnographie des Sprechens (English 1962). In: id.: Soziolinguistik. Zur Ethnographie der Kommunikation (ed. Florian Coulmas). Frankfurt/M., 29-97.

Hymes, Dell (1979b). Ethnographisches Protokollieren (English 1976). In: id.: Soziolinguistik. Zur Ethnographie der Kommunikation (ed. Florian Coulmas). Frankfurt/M., 193-215.

Itayama, Mayumi/ Gakuin, Kwansai (1981). Schweigen als sprachliches Verhalten. In: Goethe-Institut Osaka in Zusammenarbeit mit japanischen Germanisten (ed.): Protokoll 6, 6. Ferienseminar für Germanisten und Deutschlehrer, Osaka, 9.-13. Mrz 1981, 2-8 [ibid. pp. 1f Introduction by Itsuhiko Noiri, pp. 9-13 co-paper by Alfred Binder and minutes of the discussion by Sigrid Karkavelas].

Jaffe, Joseph/ Feldstein, Stanley (1970). Rhythms of Dialogue. New York.

Jakobson, Roman (1971). Signe zéro (1939). In: Selected Writings II. The Hague, Paris, 211-219

Jaworski, Adam (1993). The Power of Silence. Social and Pragmatic Perspectives. Newbury Park, London, New Delhi

Jensen, J. Vernon (1973). Communicative functions of silence. E.T.C.: A Review of General Semantics XXX: 249-257.

Johannesen, Richard L. (1974). The functions of silence: A plea for communication research. Western Speech 38: 25-35.

Kant, Immanuel (1956). Kritik der reinen Vernunft (1781). In: Werke. (Ed. Wilhelm Weischedel). Vol. II. Wiesbaden.

Keenan, Elinor Ochs (1974). The universality of conversational implicatures. In: Fasold, Ralph W./ Shuy, Roger W. (eds.): Studies in language variation. Washington, D.C., 255-268.

Klann, Gisela (1978). Weibliche Sprache - Identität, Sprache und Kommunikation von Frauen. In: Andresen, Helga/ Giel, Klaus, Helmut/ Markmann, Sigrid (eds.): Sprache und Geschlecht, vol. 1. (= Osnabrücker Beiträge zur Sprachtheorie 8). Osnabrück, 9-62.

von Kleist, Heinrich (1964a). Die Marquise von O... (1808). In: id.: Erzählungen. (= dtv Gesamtausgabe, ed. Helmut Sembdner, vol. 4). München, 94-130.

von Kleist, Heinrich (1964b). ?ber die allmhlliche Verfertigung der Gedanken beim Reden [Ms. 1805/1806?]. In: id.: Anekdoten, Kleine Schriften. (= dtv Gesamtausgabe, ed. Helmut Sembdner, vol. 5). M,nchen, 53-58.

Kriebel, Reinholde (1984). Sprechangst. Analyse und Behandlung einer verbalen Kommunikationsstrung. Stuttgart, Berlin/W., Kln, Mainz.

Lacan, Jacques (1973). Funktion und Feld des Sprechens und der Sprache in der Psychoanalyse (French 1953). In: Schriften I. (Ed. Norbert Haas). Olten, Freiburg i. Br., 71-169.

Lazarus, M[oritz] (1856/1857). Das Leben der Seele in Monographieen ,ber seine Erscheinungen und Gesetze. 2 vols. Berlin.

Lazarus, Moritz (1986). ?ber Gesprche (1876/1878). Berlin/W.

Le Goff, Jacques (1989). Kann denn Lachen S,nde sein? Die mittelalterliche Geschichte einer sozialen Verhaltensweise. Frankfurter Allgemeine Zeitung, 3.5.1989, N3.

Lehtonen, Jaakko/ Sajavaara, Kari (1985). The Silent Finn. In: Tannen/Saville-Troike (eds.), 193-201.

Lem, Stanislaw (1986). Bekenntnisse eines Antisemioten. In: id.: Sade und die Spieltheorie. Essays. Frankfurt/M., 60-78.

Levinson, Stephen C. (1983). Pragmatics. Cambridge etc.

L,bbe, Hermann (1983). Es ist nichts vergessen, aber einiges ausgeheilt. Der Nationalsozialismus im Bewu?tsein der deutschen Gegenwart. Frankfurter Allgemeine Zeitung, 24.1.1983, 9.

Luhmann, Niklas/ Fuchs, Peter (1989). Reden und Schweigen. Frankfurt/M.

Liotard, Jean-FranÁois (1987). Der Widerstreit (French 1983). M,nchen.

Magass, Walter (1967). Das ffentliche Schweigen. Gibt es Ma?stbe f,r die Kunst der ffentlichen Rede in Deutschland? Heidelberg.

Malinowski, Bronislaw (1974). Das Problem der Bedeutung in primitiven Sprachen (English 1923). Supplement in: Ogden, C.K./ Richards, I.A.: Die Bedeutung der Bedeutung. Frankfurt/M., 323-384.

Maltz, Daniel N. (1985). Joyful Noise and Reverent Silence: The Significance of Noise in Pentecostal Worship. In: Tannen/Saville-Troike (eds.), 113-137.

Mandelbrot, Benoit B. (1983). The fractal geometry of nature (1977). New York

Mann, Thomas (1927). The Magic Mountain (German 1924). 2 vols. Translated by H. T. Lowe-Porter. New York

Matarazzo, Joseph D./ Wiens, Arthur N./ Matarazzo, Ruth G./ Saslow, George (1968). Speech and Silence Behavior in Clinical Psychotherapy and Its Laboratory Correlates. In: Shlien, John M. (ed.): Research in Psychotherapy. Vol. III: Proceedings of the Third Conference (Chicago 1966). Washington, D. C., 347-394.

- Mazzeo, Joseph Anthony (1962). St. Augustine's Rhetoric of Silence. *Journal of the History of Ideas* XXIII: 175-196.
- Merleau-Ponty, Maurice (1984). Das mittelbare Sprechen und die Stimme des Schweigens (French 1951/1952). In: id.: *Das Auge und der Geist. Philosophische Essays*. Hamburg, 69-114.
- Mihaila, Rodica (1977). Le silence en tant qu'acte de langage. *Revue Roumaine de Linguistique* 22: 417-421.
- Munoz-Duston, Emma/ Kaplan, Judith (1985). A Sampling of Sources on Silence. In: Tannen/ Saville-Troike (eds.), 235-242.
- Myers, Charles Raymond (1975). Silence and the unspoken: A study of the modes of not speaking. Doctoral dissertation (Philosophy). University of Texas at Austin.
- Nwoye, Gregory O. (1985). Eloquent Silence Among the Igbo of Nigeria. In: Tannen/Saville-Troike (eds.), 185-191.
- O'Connell, Daniel C./ Kowal, Sabine (1983). Pausology. In: Sedelow, Walter A., Jr./ Sedelow, Sally Yeates (eds.): *Computers in Language Research 2*. Berlin/W., New York, Amsterdam, 221-301.
- Ortega y Gasset, JosÈ (1958). *Der Mensch und die Leute* (Spanish 1957). Stuttgart.
- Pascal, Blaise (1954). *PensÈes. ?ber die Religion und ,ber einige andere Gegenstnde* (French 1669). (Tranlated by Ewald Wasmuth). Heidelberg.
- Peitgen, H[einz]-O[tto]/ Richter, P[eter] H. (1986). *The Beauty of Fractals. Images of Complex Dynamical Systems*. Berlin/W., Heidelberg, New York, Tokyo.
- Picasso, Pablo (1989). *Le dÈsir attrapÈ par la queue* (1944). In: id.: *Die poetischen Schriften* (ed. Marie-Laure Bernadac/ Christine Piot). M,nchen, 258-277
- Poyatos, Fernando (1981). Silence and stillness: toward a new status of non-activity. *Kodikas/ Code 3*: 3-26.
- Putnam, Hilary (1979). *Die Bedeutung von "Bedeutung"* (English 1975). Frankfurt/M.
- Quintilianus, M. Fabius (1974). *Institutio oratoria X. Lehrbuch der Redekunst*, 10. Buch (Latin ca. 95 A.D.). Ed. Franz Loretto. Stuttgart.
- Roloff, Volker (1973). *Reden und Schweigen. Zur Tradition und Gestaltung eines mittelalterlichen Themas in der franzsischen Literatur*. M,nchen.
- Sacks, Harvey/Schegloff, Emanuel A./ Jefferson, Gail (1974). A simplest systematics for the organization of turn-taking for conversation. *Language* 50: 696-73.
- Samarin, William J. (1965). Language of Silence. *Practical Anthropology* 12: 115-119.

- Sartre, Jean-Paul (1949). La République du silence (1944). In: id.: Situations, III. Paris, 11-14.
- Sartre, Jean-Paul (1983). Die Wörter (French 1964). Reinbek.
- Saunders, George R. (1985). Silence and Noise as Emotion Management Styles: An Italian Case. In: Tannen/Saville-Troike (eds.), 165-183.
- de Saussure, Ferdinand (1974). Course in General Linguistics (French 1916). (Eds. Charles Bally/ Albert Sechehaye). Revised edition. London.
- Saville-Troike, Muriel (1985). The Place of Silence in an Integrated Theory of Communication. In: Tannen/Saville-Troike (eds.), 3-18.
- Schlick, Moritz (1986). Über 'Konstatierungen' (French 1935). In: id.: Philosophische Logik. (Ed. Bernd Philipp). Frankfurt/M., 230-237.
- Schmitz, Ulrich (1983). Vorbemerkungen zur Linguistik der Abkürzung (Prol. Ling. Abk.). In: René Jongen/ Sabine De Knop/ Peter H. Nelde, Marie-Paule Quix (eds.): Sprache, Diskurs und Text. Akten des 17. Linguistischen Kolloquiums Braunschweig 1982, vol. 1. Tübingen, 10-27.
- Schmitz, Ulrich (1990). Beredtes Schweigen - Zur sprachlichen Fülle der Leere. Über Grenzen der Sprachwissenschaft. In: Schmitz (ed.), 5-58
- Schmitz, Ulrich (ed.1990). Schweigen. (=Osnabrücker Beiträge zur Sprachtheorie 42). Oldenburg
- Schnhammer, Rainer (1988). Der "Walkman". Eine phänomenologische Untersuchung. München.
- Schramm, Hilde (ed.1981). Frauensprache - Männersprache. Ein Arbeitsbuch zur geschlechtsspezifischen Sprachverwendung. Frankfurt/M., Berlin/W., München.
- Scollon, Ron (1985). The Machine Stops: Silence in the Metaphor of Malfunction. In: Tannen/ Saville-Troike (eds.), 21-30.
- Scollon, Ron/ Scollon, Suzanne B. K. (1981). Narrative, literacy and face in interethnic communication. Norwood, N.J.
- Scott, Robert L. (1972). Rhetoric and Silence. Western Speech 36: 146-158.
- Searle, John R. (1975). Indirect Speech Acts. In: Cole, Peter/ Morgan, Jerry L. (eds.): Syntax and Semantics. Vol. 3: Speech Acts. New York, San Francisco, London, 59-82.
- Seel, Otto (1977). Quintilian oder Die Kunst des Redens und Schweigens. Stuttgart.
- Sontag, Susan (1969). The Aesthetics of Silence (1967). In: id.: Styles of Radical Will. New York, 3-34.
- Stedje, Astrid (1983). 'Brechen Sie dieses rätselhafte Schweigen' - Über kulturbedingtes, kommunikatives und strategisches Schweigen. In: Rosengren, Inger (ed.): Sprache und Pragmatik. Lunder Symposium 1982. Stockholm, 7-35.

- Street, Richard L., Jr./ Street, Nancy James/ Van Kleeck, Anne (1983). Speech Convergence Among Talkative and Reticent Three-Year Olds. *Language Sciences* 5: 79-96.
- Tannen, Deborah (1985). Silence: Anything But. In: Tannen/Saville-Troike (eds.), 93-111.
- Tannen, Deborah/ Saville-Troike, Muriel (1985). Introduction. In: Tannen/Saville-Troike (eds.), xi-xviii.
- Tannen, Deborah/ Saville-Troike, Muriel (eds.1985). *Perspectives on Silence*. Norwood, N.J.
- Umiker-Sebeok, D. Jean (1980). Silence is Golden? The Changing Role of Non-Talk in Preschool Conversations. In: Key, Mary Ritchie (ed.): *The Relationship of Verbal and Nonverbal Communication*. The Hague, Paris, New York, 295-314.
- Vercors (1942). *Le silence de la mer*. Paris.
- Vygotsky, L. S. (1934). *Myshlenie i rechí* [Thinking and speech]. Moscow, Leningrad. [Translated as L. S. Vygotsky: *Thought and language*. Cambridge, Mass. 1962].
- Walker, Anne Graffam (1985). The Two Faces of Silence: The Effect of Witness Hesitancy on Lawyers' Impressions. In: Tannen/Saville-Troike (eds.), 55-75.
- Wandt, Karl-Heinz (1982). Schweigen - ein Desiderat sprachwissenschaftlicher Forschung? In: Lrscher, Wolfgang/ Schulze, Rainer (eds.): *Perspectives on Language in Performance. Studies in Linguistics, Literary Criticism, and Language Teaching and Learning. To Honour Werner H, llen on the Occasion of His Sixtieth Birthday*. 2 vols. T,bingen, vol. 1, 412-423.
- Wellmer, Albrecht (1985). *Zur Dialektik von Moderne und Postmoderne. Vernunftkritik nach Adorno*. Frankfurt/M.
- Werner, Johannes (1985). Verneinen und Verschweigen - Geschichte und Gegenwart eines sprachlichen Prinzips. *Universitas* 40: 399-406.
- Wilson, Thomas P./ Zimmermann, Don H. (1986). The structure of silence between turns in two party conversation. *Discourse processes* 9: 375-390.
- Wind, Edgar (1980). *Pagan Mysteries in the Renaissance* (1958). Revised edition. Oxford.
- Wittgenstein, Ludwig (1922). *Tractatus logico-philosophicus* (German 1921). London.
- Wittgenstein, Ludwig (1958). *Philosophical Investigations* (German/English 1953). Oxford
- Wittgenstein, Ludwig (1980). [107 Wittgenstein an Ficker] (1919). In: id.: *Briefe*. Frankfurt/M., 96-97.
- Wittgenstein, Ludwig (1987). *Vermischte Bemerkungen* (1977). Frankfurt/M. [Quotation from 1931.]

Wohlfart, G[ünter]/ Kreuzer, J[ohann] (1992). [Art.] Schweigen, Stille. In: Ritter, Joachim/ Gr[ü]nder, Karlfried (eds.): Historisches Wörterbuch der Philosophie, vol. 8. Darmstadt, cols. 1483-1495

Zedler, Johann Heinrich [verlegts] (1743). [Art.] Schweigen. In: Großes vollständiges Universal-Lexicon Aller Wissenschaften und K[ün]ste, vol. 36. Leipzig, Halle, cols. 244-246

Zeligs, Meyer A. (1961). The Psychology of Silence. Its Role in Transference, Countertransference and the Psychoanalytic Process. *Journal of the American Psychoanalytic Association* 9: 7-43.

Zimmermann, Don H./ West, Candace (1975). Sex Roles, Interruptions and Silences in Conversation. In: Thorne, Barrie/ Henley, Nancy (eds.): *Language and Sex. Difference and Dominance*. Rowley, Mass., 105-129.

Zweig, Stefan (1940). Das grosse Schweigen. In: *Das Neue Tagebuch*, 4.5.1940, 424-426.