"Meaning, in essence, means nothing": lessons about the real life of language in education from "pathological" cases in science classrooms

Abstract

In this study, a contribution to the philosophy of language in education, I take up Vygotskij's (1934) and Vološinov's (1930) discussion of an episode from the diary of Dostoevsky, in which six drunken workers have a (pathological?) "conversation" that exists only in the six-fold repetition of the same profane word. The analysis of these discussions leads to a critique of the notion of "meaning" (private or shared) associated with and denoted by words. I articulate a pragmatist approach to language, including the call for abandoning the concept altogether (Wittgenstein, Davidson, Rorty). Fragments from science classrooms are used to exemplify the need to go beyond the literal sense of words and the associated divorce of thought from the fullness of life. Implications are discussed.

Keywords   Philosophy of language; meaning; pragmatism; language-game; life-form; cultural-historical theory

1. Introduction

> The organizing center of every statement, of every expression, *is not internal*, but external: It is situated *in the social milieu* that surrounds the individual. (Vološinov, 1930, p. 95, emphasis added).

> Meaning, in essence, means nothing. (Vološinov, 1973, p. 101)

> Das Verstehen, die Bedeutung, fällt aus unserer Betrachtung heraus [Understanding, meaning, drops from our consideration]. (Wittgenstein, 2000, Ts-213,1r)

In the scholarly literature on language and education, there is a considerable preoccupation with (the construction of) "meaning"—so much so that we forget to really listen to and reflect upon how, when, and for what purpose language is used. We observe such preoccupation even when scholars of language take a decidedly social (semiotic) perspective (e.g. Lemke, 1990). This is astonishing given that preeminent language philosophers often quoted in the (educational) literature on language-in-use have pronounced themselves against the usefulness of the term. Thus, as the first opening quotation shows, Vološinov suggests that the signification of a word, that is, its dictionary sense, says very little [1]: "*Meaning,* in essence, *means nothing*" (emphasis added). Two decades later, and apparently unaware of the Russian scholar, a philosopher of language states, as the third introductory quotation shows, that meaning (Ger. *Bedeutung*), as understanding, drops from a pragmatist consideration of the nature of language-in-use. We by-and-large can do without "meaning" as a theoretical and descriptive term. In fact, the notion of "meaning" that accompanies and is attached to words is consistent with a Platonic view of language, or, as Wittgenstein (1997) states, "has a place in a primitive idea of the way language functions" or "is the idea of a language more primitive than ours" (p. 3 [§2]). One of the problems with the concept of meaning—e.g., as in statements such as "students construct meaning"—is that it freezes the word specifically and language generally into something stable when in fact these are living and therefore ever changing. Responding to his rhetorical question of what gives a sign life, Wittgenstein responds, "[i]n use it *lives*. Does it have its living breath in it?—Or is the *use* its breath?" (p. 128 [§432], my translation).[2] As Vološinov suggests in the first introductory quotation, the organizing center of a statement is situated in the social milieu, which, therefore, leads to an

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[1] The French version renders it more like 'Signification says nothing in itself' (Bakhtine [Volochinov], 1977, p. 145).
[2] The English translation of §432 translates *Leben* (life) and *Atem* (breath) by the same term "life." Saying that 'the meaning' of *Atem* in this passage is that of 'life' gets to the core of our problem, because it seeks recourse to a concept that Wittgenstein drops from his considerations.

intermingling of language and life to the point that these become indistinguishable. Such an approach has serious consequences for the ways in which we describe, theorize, and analyze language in educational settings.

This study constitutes a contribution to the philosophy of language. I begin by analyzing one pathological case of language-in-use in preparation of offering a conceptualization of language that does not need recourse to the metaphysical concept "meaning." In the context of this case, I discuss a similar case that two language philosophers (V. N. Vološinov, L. S. Vygotskij) discuss before providing a pragmatic reframing of language-in-use. I then present further classroom episodes that exhibit the rich intertwining of everyday language and concerns with the more sterile and serious language of a physics course. All episodes show that we may drop the notion of meaning from our analyses (as Wittgenstein suggests) because meaning means nothing (as Vološinov states). The article has consequences for the on ongoing discussions of linguistic competence (e.g., Leung & Lewkowicz, 2013), which, in the present study, is theorized to be indistinguishable from the competence of getting around everyday life generally. In contrast to these authors, I pursue a radical pragmatist (concrete human psychological) agenda that does not seek recourse in metaphysical "meanings."

2. Fragment from a real-life classroom

To situate the framing of the problem of "meaning," consider the following fragment, which, as a related incident was for Dostoevsky (1994, p. 258), "is a fact that I witnessed myself" while recording the events in a science class.[3] The videotape shows the students

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[3] The lesson fragments used in this study derive from eleventh- and twelfth-grade physics courses recorded in a private high school. Almost all students attend college or university following graduation. Physics is a compulsory prerequisite for university science and engineering programs in that part of the country where the school is located. The learning that occurs in the concept mapping tasks from which the lesson fragments have been extracted, and the institutional context of the school, have been described elsewhere (e.g., Roth, 2009).

working in small groups, nearing the end of a concept mapping task, which had asked them to hierarchically order the key terms from a chapter in their textbook and then transfer the resulting hierarchy to a large sheet of paper where they wrote verbs on lines connecting pairs of terms to produce statements. At one point, Pete, who has taken on the job of transcribing the concept map of his group asks Atif to return a pencil. Atif eventually tosses the pencil across the classroom, but misses Pete's hands. Pat picks up the pencil from the floor and reaches it to Pete, who, shifting his gaze to face Pat, says with very low volume "penis" (turn 15). We then hear the same word articulated 9 more times (turns 18, 21, 24, 26, 28, 30, 31, 33, and 35) before Pete comments, "*there* we go" (turn 36) followed by Marc, who, naming the last speaker using the word, announces, "Pat wins" (turn 37). Several turns later, Marc speaks again, this time saying, "Pat, so it's your turn" (turn 42). (Transcription conventions can be found in the appendix; prosody information is available in Figure 1.)

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Fragment 1 (science classroom 1)
→ 15  Pete:  <<pp>penis>
   16         (0.65)
   17  Pat:   whatyo=re writing;=
   18  Tom:   <<p>penis.>
   19         (0.82)
   20  Pete:  its right here-
   21  Todd:  ^penIS.
   22  Pete:  <<pp>here you go> ((Pete hands a pen to a student))
   23         (0.97)
→ 24  Pete:  <f>>^penIS>
   25         (0.31)
   26  Ferdi: <ff>>^penis;>
   27         (0.86)
→ 28  Pete:  [<ff>>'penIS>],
   29         (0.83)
   30  Craig: <ff>>^pE[nis>];
   31  Mike:     <ff>>[^pen]IS>,
   32         (0.48)
   33  Atif   <<f>^PEnis.>
   34  Pete:  aw you guys you=re [going to have]
   35  Pat:                      <ff>'[PE[nis;>      ]
→ 36  Pete:  THEre we go.
   37  Marc:  aw pat wins.
   38         (0.84)
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39  Tom:    anyone else?
40  Pat:    yes.
41  ?:      <<p>uh hu hu hu.>
42  Marc:   pat so its your turn;
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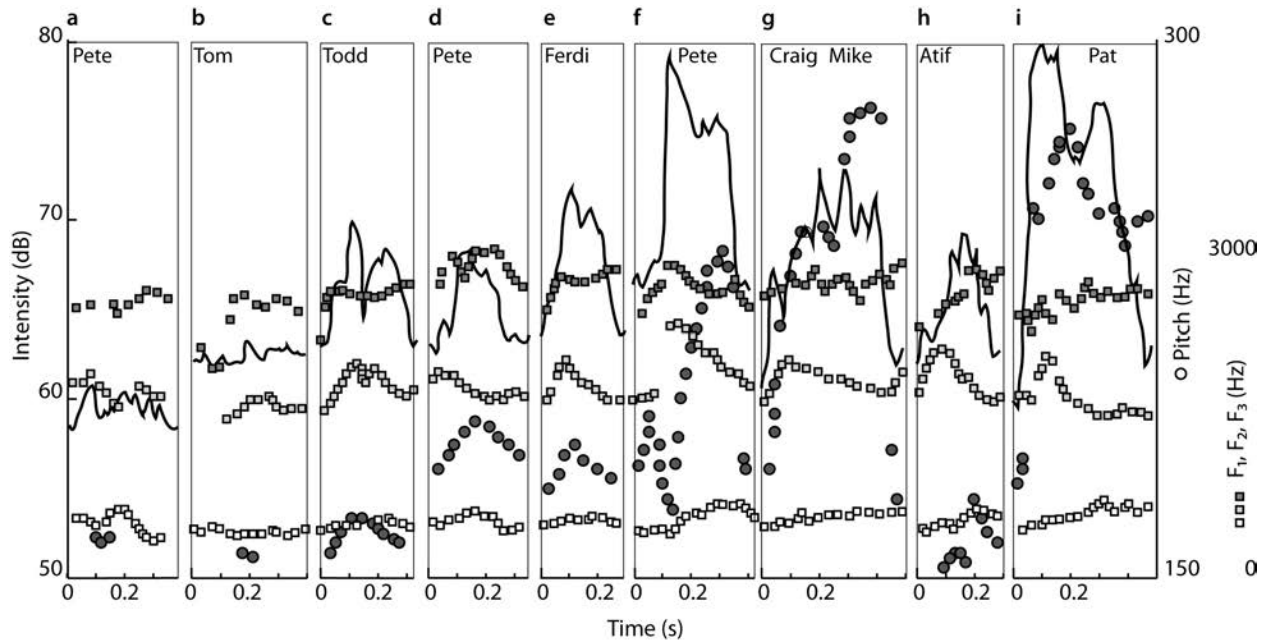

Fig. 1. Prosody information for the 10 occurrences of "penis."

In the course of the events, Pete not only is the first to articulate the word, but repeats it twice more (turn 24, 28), each time with greater speech intensity and substantial increase in pitch contour (Figures 1d, f). It is *as if* he was encouraging and inviting the production of a correct reply, the appropriate reproduction of the word that neither Tom (turn 18) or Todd (turn 21) prior to his first repetition nor Ferdi (turn 26) prior to his second repetition had produced. Of course, his own reproduction of the sound-word was not identical but became louder (increased speech intensity) and the peak pitch level moving from 160 Hz in the first instance to 194 and 244 Hz. Following his second repetition, which can be heard as a call for participation, Craig and Mike produce the word at considerable speech intensity and with increased maximum pitch levels (252 and 283 Hz) followed by Atif, whose production is not as loud and with a pitch near Pete's original production. At this point, the latter produces an evaluative turn, "Aw, you guys are going to have" (turn 34), as if he was

in the process of saying that the "guys" have to make a greater effort. It is in fact an evaluative turn in an IRE turn-taking sequence that he *i*nitiated, where others *r*eplied, and where Pete *e*valuated the replies. Pete's turn is overlapped by the final articulation of the word on the part of Pat (turn 35), which exhibits a high maximum pitch level and the heretofore-loudest instantiation. Pete then produces another evaluative turn with emphasis on the indexical turn, "*the*re we go" (turn 36). After Marc announces that it was Pat's turn (turn 42), many students in the class break out in laughter.

The episode shows that we cannot begin an analysis based on "lexical meanings," because—and this will be more clear as the present argument unfolds—at any instant the word is multiplicitous even though and precisely because it was articulated in a physics rather than a biology class. Language competency exists precisely in participating in exchanges where the full range of word-use comes to be played out, through metaphor and metonymy, rather than in the mere competence of "lexical meanings" that appear to be the sole preoccupation of science education research. Metaphor and metonymy are so pervasive in everyday life that linguistic mastery has to include competent participation in the real life of language, which, as argued here, is the language of real life. Humor and laughter are other important aspects of everyday classroom life; and the competent participation in the two phenomena is an integral aspect of identity formation among U.S. undergraduates in science programs (Bucholtz et al., 2011) and the dialectical overturn and reinforcement of science as a serious school subject (Roth, Ritchie, Hudson, & Mergard, 2011).

In its appearance, this episode has the feel of a game—which we can say based on its "family resemblance [*Familienähnlichkeit*]" (Wittgenstein, 1997) with other games people play. Clearly, the game is not about some "meaning" of the sound-word penis articulated a total of 10 times. In fact, if "penis" has been produced so many times it is because the {sound-word} unit does not stay constant, a fact that mitigates any appeal to the (lexical) "meaning" of the word. Although the episode is part of a real school day, producing an

instant of schooling life, it is about something else. I do not know this game, but, in the ways we learn to play many or most games in life, we do not need to read rules because the participants themselves articulate for all the other participants what the rules are. Thus, someone evidently initiates the game, here apparently having to do with the almost unnoticeable production of some (or this specific) word; it is completed when there is a response in the form of the same word but with the correct prosody. An evaluative turn ends the reproduction of the word ("there you go") and the last one to articulate has won (turn 37) and gets the next turn, as Marc says at the end of the fragment (turn 42). There are no other instances of this game in my database. But we may hypothesize that it is Pat's turn to initiate this game at another point in time. We also have encouragements, or "re-invites" when the offered responses are simultaneously evaluated as insufficient. The progression in maximum pitch values and increasing speech intensity may be a projection calling forth for the kind of production that could aspire to be the winner. It is possible to hear Pete's second and third articulation of the word as invitations to try harder, a hearing that is consistent with his subsequent unfinished statement, "You guys you're going to have," which might have ended in "to try harder" or something else of the same ilk.

In this fragment, we have a sound-word repeated for a total of 10 times; and yet it is not the same—at least those 8 repetition following the first instantiation and prior to the last, the one that "won," were different. Figure 1 provides evidence that the articulations were different in their prosodic dimensions. Some scholars might be tempted to conclude that the "meaning" of these different instantiations differed, but where would this "meaning" reside? Such a statement would also be inconsistent with the general use of the term when it concerns a term from the curriculum, such as "gravity." What would "meaning" consist of? What precisely is this "meaning" if it is different than what people say?

Pragmatists have no need for the concept of "meaning," as per the second introductory quotation. This is so because it fails to tell us how language really works. One problem is that it points to some non-physical, absent phenomenon that cannot even be named. Thus,

students can be said to "make meaning" with respect to "the majority of people" (Leung & Lewkowicz, 2013, p. 409) or to "electricity" (Arellano et al., 2001, p. 518). That is, there is something attached to these very different expressions both of which are referred to by the same concept "meaning." Vološinov (1930), however, would counter by saying "[s]ignification ('meaning')—not in the word, and not in the soul of the speaker, and not in the soul of the hearer. Signification is the *effect of the interaction of speaker and hearer on the material of the sound complex*" (p. 104, original emphasis). To tease out this effect of this interaction—working both backward from the present to the previous speaker and forward from present speaker to the next—these "connection[s] must be explored under the auspices of determinism, as though all the degrees of freedom available to whosoever is about to talk can somehow be mapped out, conceptualized, and ordered," "however tortured the[se] connection[s] can become" (Goffman, 1981, p. 72).

Although integral to classroom life, fragments such as this one do not normally feature in the literature on science or language and education. In all issues of the *Journal of Research in Science Teaching* and *Science Education,* dating back to the 1950s, the term "penis" appears in only 6 articles. Most recently, once in the context of discussing the appearance of the term in biology textbooks (Snyder & Broadway, 2001), 6 times in an article concerning the difficulties teachers have to use this word in their classes and their tendencies to use "bird" when talking about the male reproductive organ (Arellano et al., 2001), and once in a quotation from a biology text used in the teaching about HIV (Keselman et al., 2004). Peer reviewers in the discipline's journals tend to ask, "What does this have to do with science?" whenever students do not pronounce science words; and even when these are produced, such as in the present case, the community of practice may show little interest in the function of such language-in-use. There is a problem, however, because in considering only some language, and in separating signification [značenie] from sound, educational research runs the same risk of fruitlessness that Vygotskij (1934) attributes to linguistics and psychology.

The language-in-use of the type we observe in the fragment has a lot to do with (science) education, because they are integral part of the events that make the lessons we observe what they are. It is precisely at such points—others may concern sports activities or accusations of racism—where carnivalesque ways of life show through as Bakhtin (1990) exhibited in his work on Rabelais. Such forms of language-in-use tend to be suppressed both in schooling practice and in the scholarly literature (Roth, 2009). What can we learn from such episodes about the real life of language, especially about the real life of language in education? I begin the search for (a) possible answer(s) by presenting and discussing a similar episode, which Dostoevsky (1994) had noted in his diary, and which subsequently was quoted and commented upon by two illustrious scholars of psychology (Vygotskij, 1934) and sociology of language (Vološinov, 1930) familiar to linguists and educators alike.

3. A one-word conversation and its uptake in the scholarly literature

Educators might view the example analyzed in the preceding section as "pathological," off-topic, and, therefore, of little interest. But as shown in many examples—such as in the seminal analyses of how we perceive and know (Merleau-Ponty, 1945) or in ethnomethodological analyses (e.g. Garfinkel, 1967)—it is precisely the "pathological" cases that tend to exhibit the otherwise hidden, invisible work underlying mundane competencies and structuring of everyday life. The hardest and most singular cases of literature Reported exchanges may consist of very few words: Wittgenstein's builder and helper had had at least four words ("slab," "block," "pillar," and "beam"). A published case of a conversation with two words exists in the exchange where a male and a female articulate a female (Marsha) and male name (John) over and over again with different

intonation.[4] The limit language-based conversation uses at least one word. This was Dostoevsky's point in commenting upon a conversation he overheard while following six drunken workmen while taken a stroll: "it was possible to express all thoughts, sensations, and even entire profound propositions using only . . . one noun" (Dostoyevsky, 1994, p. 257–258). This account was subsequently taken up and commented upon for language theoretical purposes (Vološinov, 1930; Vygotskij, 1934).[5] Today, using conversation analytic transcription rules enhanced to include information on voice characteristics, the exchange between the six workmen that Dostoevsky reports might be transcribed in this way.

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Fragment 2: Six drunken workmen
  1   A:   <<sharp, forcefully>«epithet»>
  2   B:   <<doubt>«epithet»>
  3   C:   <<indignant, sharply, excited>«epithet»>
  4   B:   <<angry>«epithet»
  5   D:   <<shouting, delight, exuberant>«epithet»>
  6   F:   <<gloomily, very low pitch>«epithet»>
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Dostoevsky's description and explanation, in a conversation analytic rendering, includes the following. The first turn is actually already a response to something that has earlier occurred, which is scornfully dismissed here (Turn 1). The next turn pair (turn 1 | turn 2) constitutes a denial | rejection pair, as the second part of the turn is heard as thoroughly doubting the expediency of the preceding denial. The third turn also pairs with the first, constituting a statement | rejection pair (turn 1 | turn 3), where the second part is heard as disparagement and abuse. The pair turn 3 | turn 4 constitutes a joint action of the insult/offense | rejection type. Dostoevsky heard the subsequent turn 5 as answer ("Eureka, I got it") in relation to the original problem. Turn 6 was heard as paired with turn 5, again as a contention | rejection pair, thereby putting a stop to the preceding speaker.

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[4] http://www.youtube.com/watch?v=08T8Dt9tnFk
[5] Some content that it 'was apparently making the rounds' (Kellog 2009a).

What does it take for Dostoevsky to have heard the exchange in this rather than in any other way? At a minimum, he had to have overheard the preceding exchange in respect to which the present one has emerged and was commenting upon. It also takes a more general competence of hearing others speak without having to engage in the "costly" effort of interpretation, hearing others speak in the way we walk but do not have to reflect and place our feet.

Vološinov (1930) introduces the Dostoevsky narrative after explicating that evaluative accent is produced by means of expressive intonation. Following the quotation, he notes that the expletive was only the vehicle for the intonation, which expressed the value judgment each of the speaker made. In this approach, therefore, the {sound-word} constitutes a unit, and what is at stake is the function (value) of the unit as a whole in the concrete situation. The value judgments themselves depend on the immediate situation. Vološinov's reading is in the context of a theory of language where the organizing center of every statement, as per the quotation that opens this text, is not the word or the (psychological) inside of the individual but the social milieu. Another language theorist would later write that "the signification of a word's sound envelope is created in the concrete societal/public use by an individual, in the concrete 'labor' (with or without quotation marks) of individuals, required to achieve specific societal/public goals" (Mikhailov, 1976, p. 238). Thought, often considered to be internal to the speaker and behind the word, then no longer has to be an "'internal' thing" that "exist[s] independently of the world and of words" (Merleau-Ponty, 1945, p. 213). For Vološinov (1930), every sound-word exists out in the open. Its situational function lies on a continuity between dictionary sense [značenie], on the lower end, and the theme [tema], on the upper end:

<div align="center">

tema

↕

značenie.

</div>

The theme actually may be independent of the dictionary sense of the word because in the familiar register, the signification of intonation is quite independent of the semantic (sense) composition of speech. That theme is the theme of life, our competent participation in the mundane and familiar conduct of everyday affairs, which works even in those situations that we make up on the spot because we have not had prior experiences in a particular life-form. "Being-in-the-world" might be an appropriate equivalent, for the notion denotes "the *unthematic*, circumspect *absorption* in the references that constitute the handiness of the totality of useful things" (Heidegger, 1977, p. 76). We do not in the first instance interpret and constitute the world through active synthesis (i.e., "construction," "meaning-making"), which are secondary to the "presence of the world . . . as ek-stasis" (Merleau-Ponty, 1945, p. 490). We take care of things in the everyday world because of a familiarity with it, allowing us to recognize gestalts without conscious processing (thematization) and interpretation. This would have been the case at the instant when the game of penis was born, played for the first time, embodying rules that may never be explicitly stated. For Vološinov, research concerned with the lower limit of the {sound-word} function orients itself to the fixed and stable aspects of word-use, that is, toward the sense of the word that we find in the dictionary. But this research would not go very far in the penis and Dostoevsky's episodes. This is so because in everyday speech, what is relevant to the verbal relation is the theme. What both episodes show is that the theme may actually be completely independent of the dictionary (literal) sense of the words-in-use. At best, the dictionary sense is a potential to signify within a particular theme.

The suggestion that "intonation does not impinge upon the intellectual, real-object-oriented significance of the construction" (Vološinov, 1930, p. 106) misses the point that the word itself is irrelevant in the situation and only serves as a way of realizing the game—in the way it is unimportant for youngsters in Brazil whether they have a "real" soccer ball as long as the material object supports a recognizable move in the ongoing game. Vološinov also seems to provide material against the case when writing about the

intonational material being penned up inside the individual; it is inappropriate because, as sociologists of emotion show, emotion is a social and, therefore, inherently shared, public, reproduced and reproducible, witnessable phenomenon (e.g., Collins, 2004). The statement of the penned up intonational material fails to acknowledge that to have any bearing on the analysis of the social phenomenon, the intonational material has to be understood in its *double* origin: in the throat of one (speaker) and the ear of another (recipient).

Vygotskij (1934) discusses the episode in the context of the shortening of speech in verbal dialogue and after pointing to the fact that he already discussed the possibility of shortening verbal expressions when the participants in the conversation know the essence of the subject. That is, because the (literal) sense of the word may actually be irrelevant to the situation, those present need to know what is going on, the essential matters of the current affairs (Rus. *suti dela*). In this, Vygotskij writes about something that Vološinov denotes by the term *tema* (theme). Vygotskij (1934) suggests that those co-present in the situation perceive each other's facial expressions, gestures, and intonations. He introduces the episode by stating that it exhibits the acoustic aspects of verbal speech, which shows how subtle variations in intonation supports and facilitates a differentiated understanding of "word-signification [ponimanie značenija slov]" (p. 298). When the subject *or theme* of the conversation is known beforehand, speech may be shortened.[6] The author suggests that in the example from Dostoevsky, something else is in play. Taking up on Dostoevsky's own elaborations, Vygotskij refers to the possibility to express thoughts, feelings, and even deep reflections by means of a single word. Intonation then makes available the "sense of this word [smysl dannogo slova]" (p. 299). But in the present situation, the word itself is completely irrelevant. It is not the sense of the word that matters nor something internal to any one individual speaker—much in the same way that what matters in a game of football

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[6] The Kozulin English translation (1986) has omitted the sentence in which Vygotskij writes about the advance agreement on subject or theme; the Minick (1987) translation also changes text and paragraph breaks. The closest translation is the German one (2002).

(soccer) is irrelevant of hidden emotions or thoughts. Whatever is going on is between the six craftsmen participating in some kind of game. In the second paragraph following the quotation, Vygotskij writes that it is the thought [mysl'] that is transmitted by means of intonation. But that thought, if it exists at all, exists for the participants in the game, available in the public arena (sphere) and present for the taking.

There is an interesting twist to the story that both Vološinov and Vygotskij—as well as subsequent commentators—actually omitted: Dostoevsky writes that he had shouted after the six workmen saying that it was disgraceful saying the word, and, in this context, articulated the word a seventh time. The youngest craftsman turned around and in a shouting voice asked Dostoevsky why he had to say the word again when he had already heard it six times before.

The uptake of the episode and its discussion by Vygotskij and Vološinov has been limited. One commentator suggests that Vygotsky makes a point about the mediation of "thought, feeling, and action" by means of mundane words (Tappan, 1997, p. 86). Kellogg (2009b, p. 88) recognizes that the importance of the fact that Vološinov bases his model on a one-word obscenity lies in its resemblance with the grunts that were the origin of communication during "our humble origins." One science education study does refer to the Dostoevsky episode to suggest that words have "different implications," which is pertinent to classrooms, as "even words which are citations from a textbook may create a new meaning in the classroom, according to the voice of the teacher who explains the subject" (Kubli, 2005, p. 518). Whereas I disagree on the relevance to "meaning" in the present context, the study does recognize the fact that the nature of what speaking does changes with intonation.

We find another uptake of the episode in *Forms of Talk* (Goffman, 1981), where the author directly refers to Dostoevsky's version as discussed by Vološinov (1930) and Vygotskij (1934). Goffman does not discuss, however, how speakers ever can come to any sort of conclusion whether to take a word literally or whether to take its illocutionary force

from the intonation. It does not seem productive to me to seek an interplay of illocutionary
(intent) and perlocutionary (effect) forces, which emphasizes the independent character of
what actually happens. It seems more appropriate to pursue the route of dialogical
relations, where each sound-word is taken to have two aspects simultaneously (being in
the mouth of one and in the ear of the other), and, therefore, inherently constituting a
multiplicity. Goffman compares conversations to games, where there are individual moves
that have to be attended to by other players. Returning to the opening episode, we can hear
the first instant of "penis" as an invitation to a game, a game that does not really appear to
take off, so that there are two further calls by means of the same word, and then a more
extended comment, "aw you guys are going to have" (turn 34).

In his analyses, Goffman takes the perspective of the individual, as he focuses on the
moves of *individuals* attended to by other *individuals* rather than on irreducible *social*
actions. This failure may actually originate in/with the notion of "meaning," which tends to
force analysts to ask questions about whether a conversational move has the same
"meaning" for speaker and hearer. This question can only arise when "meaning" actually is
not available in the *social* arena but somehow hidden in the individual mind. Interestingly,
Goffman describes how conversations may shift, as one turn comments upon another turn
in a humorous or punning way and thereby changes the trajectory of the conversation. But,
Davidson (1986) would ask, what is it that allows speakers and hearers to know that such a
shift has occurred, that a statement has been taken metaphorically, for example, rather
than literally? This would require introducing rules about rules of conversation, and
making selections about which one to use.

How does any recipient distinguish whether to hear the word literally, metaphorically,
or not really at all because it is the intonation that matters? But making such distinctions is
precisely what marks linguistic competence. The competence required to make such
distinctions is precisely the situation Davidson (1986) discusses, which leads him to
postulate that speakers have to have some passing theory. The spontaneous having of a

passing theory cannot be taught because it emerges and disappears as quickly as it occurs in a life that never repeats itself (Bakhtin, 1993). It cannot even be taught how to create such theories in the same way that it cannot be taught how to come up with any theory in the sciences. In the end, Davidson is led to conclude that there is no such thing as language, not in the way language philosophers have articulated it. The upshot is an erasure of the boundary between knowing a language and knowing one's way around the world more generally.

4. A pragmatic reframing of language-in-use

The language of everyday life, as the life of everyday language, is ambivalent (Bakhtin, 1990), not only continuously dying and being born anew but also saying (meaning to say) differently than it actually says (Garfinkel, 1967). The carnivalesque nature of life has its source precisely in this phenomenon, so that the reduction literal meanings is an abstraction that kills off language and no longer lives among the living. This situation, as well as the speed with which events unfold, make "interpretation" and "meaning-making" unlikely candidates for good cognitive explanations. As has been shown in the case of a simple computer game, interpretation would be so expensive from a (mental) computational perspective that actions (responses) based on the interpretation of the world and preceding actions would always be too late (Kirsh & Maglio, 1994). Social practice theories are explicit about the need to theorize practice without appealing to interpretation precisely because social phenomena have a temporality that are better understood in terms of games and the feel people develop with familiarity than in terms of decontextualized rationality (Bourdieu, 1980). Once we make this theoretical choice of theorizing language in terms of games, we can then follow Wittgenstein (1997) and take what is occurring in the episode as a language-game (*Sprachspiel*). This is a game not (just) about language. The philosopher is quite explicit in describing a language-game as the

words/language *together with* and in the context of the ongoing activity, with all its (material, social) aspects. Language is integrated into and indistinguishable from a form of life (*Lebensform*), which is akin to the absorbed coping of being-in-the-world that includes language- and other signs-in-use (Heidegger, 1977). From this perspective, then, the above-described science lesson is one such language-game. It is one of those instances in which the seriousness of science comes to be overturned in a carnivalesque way, which, rather than undermining the seriousness of science and schooling instead reinforces it in a dialectical way (Bakhtin, 1990; Roth et al., 2011).

In this particular instance, we do not have to investigate what the "meaning" of "penis" is in the minds of the individual speakers. What we need to do instead is investigate the {sound-word} unit as a whole and the function of this whole in the present situation. The science lesson is a social phenomenon; any theory of language-in-use requires us to use categories (units of analysis) that are irreducibly social. That is, these categories cannot be constructed by creating *inter*actions of independently definable actors; instead, the categories are units such that the actors (parts) are themselves products of an irreducible relation. If we want to theorize the trajectory of the penis game in play, then we must not look for individual action but for *joint* (social) action that cannot be reduced to individuals.

This approach to joint action resembles the theoretical moves in other work, such as to view power as the effect of a relation rather than as a property inherent to individuals (Foucault, 1975). This approach leads us not only to the analysis of the episode as a game (of/at "penis") but also to the more encompassing analysis of schooling. Here, the everyday school life is realized, in part, by the game of "penis." For others, it may be a game of accusing others of racism (Roth, 2009). It is as if a group of people had started out playing a game of soccer, which, perhaps temporarily, turns into a different game when a player takes the spherical soccer ball in his hands and runs with it as if it were an oval football (rugby ball).

From a cultural-historical activity theoretical perspective, the unit of analysis for anything happening in a school is schooling (Roth & Lee, 2007); schooling is a language-game, for it constitutes a "language and the activities, with which it is interwoven" (Wittgenstein, 1997, p. 5 [§7]). That language-game of schooling constitutes an interplay of many different games, part of which involves talking physics, mathematics, or history; but other parts are different, and speakers, as can be seen in the penis episode, freely move from one—doing a concept maps with physics terms—into another without the apparent boundaries that often are invoked (e.g. Akkerman & Bakker, 2011). Moving from the game of concept mapping to the one involving "penis" plus its phonetic inflections and back to the one concerning physics concepts does not require "interpretation" and extensive searches of "meaning." Instead, it requires more of the kind of competencies Davidson (1986) suggests to be underlying language-use generally. This then allows invitation | acceptance moves for a game of "penis," which ends just as suddenly as it has started, with a clear marker of whose role it is to start it off again. Even though the designation of the initiator has occurred in public, loud enough so that everyone present in the classroom could hear it, the game may not get off the ground easily at some other time. This is precisely how we can hear the beginning part of the episode. In fact, saying the word almost inaudibly may just be part of the game, the first half of the initiating move when, with hindsight, we may say that the game in fact has taken off.

In this fragment we can see the interweaving of different games. Initially, there is the organizational talk of classroom life. The penis game is still interwoven with other aspects of classroom talk, surrounding the talk about copying the physics terms onto a 11'' x 17'' sheet of paper (turns 17–20) and the positive reply to a request for a pen (turn 22). The game clearly develops force and becomes the game that it is when Pete articulates penis for the second time. This, then, comes to be the first half of another invitation to the game that then is fully in play involving six consecutive repetitions of the term and no other words before the last invitation | acceptance pair that is then followed by a reply | evaluation pair

and the denotation of the winner of the game and the nomination of the person to make the first part of the initiating move the next time that the game comes to be played.

It is not *just* Pete who started the game. Pete could have said "penis" as often as he wanted—perhaps playing at a solitaire instead—if the acceptance to the game had not occurred. The game is one of those phenomena that Durkheim (1919) exhorted us to study as *social* rather than as individual facts. It is taken here as such. If others had not used the word, some other game would have played itself out, and the analyst would have had to focus on a different one. To understand social *events*, we need to look for the *social, joint* actions rather than for individual intentions and (private) meanings. The notion of game orients researchers to the collective, social aspect. As we read in the opening quotation of this text, "meaning" "means nothing." Because any word or any statement that is part of conversational turn taking is subject to what Vološinov denotes by the 'theme', its actual dictionary or personal sense is not what we have to focus on to understand the unfolding of what is in play. Any word and any statement may belong to multiple games simultaneously and, most specifically, takes its place at the crossroads from one to another. In this way, it is both part of one game (e.g., its end) and part of another very different one. Like a (mis-)take in a jazz improvisation (Klemp et al., 2008), or a syncope in music more generally, the same note is split, a multiplicity. Instead of focusing on individual (private) meanings and actions, we may more usefully focus on the ways in which collective games play themselves out often *independently* of the intentions of individual actors (e.g., even though every player wants to win, only one team does—the intentions of the others being thwarted). In games, players not only are the agential subjects but also are subject and subjected to the conditions—which they, as all others, contribute to creating.

Theorizing schooling as language-game consisting of a mix of constitutive language-games—many of which are played in sequential order (according to the curriculum) and others reach into these more limited ones in a more overarching manner—provides us with a different appreciation of this social fact. Because the study was focusing on events in

a physics classroom, we do not have evidence of other instantiations of this game. In other instances, however, the participants make reference to multiple situations in which the game in play has been played before (Roth, 2009). But even here, there are hints that support the hypothesis that the game was played elsewhere during the school life of the individuals involved. Thus, the very fact that there are multiple "players" is an indication that they are (somewhat) familiar with the game; and the *formulation* that it is now Pat's turn suggests that the game is to be played again. The notion that it is Pat's turn may suggest that it was Pete's turn, which had followed his designation at some earlier time. But it is not necessary for the penis game to have been played before to initiate it as such. There is evidence that in society new language games emerge continuously and spontaneously. Interesting and instructive cases for the study of language-games are those instances where new games emerge without any existing prior rules, where the rules themselves emerge as a matter of the unfolding events. Cultural-historical studies of language precisely look at such situations, as has been shown in the emergence of technology talk within and across concrete settings (e.g., Roth, 2013a). Such situations tend to be hard to come by, especially when it comes to terms that 'go viral', including such terms as those selected by Oxford English Dictionary. The question of how such games emerge requires analysis in terms of a language-game in play.

5. The real life of language in everyday classrooms

Educational researchers, especially those concerned with subject matter learning, hardly ever make available more extensive transcriptions from actual classrooms and a more extensive record of the conversations that do take place, especially during those instances that teachers and researchers alike refer to as being "off topic" (Roth, 2009). This omission leads us to a skewed depiction of what schooling is about and how to understand language-in-use in a broader, more encompassing framework. Over the course of doing

research in classrooms spanning more than a quarter century, taping thousands of hours of classroom talk, I have recorded many occasions of "off-topic" talk and innumerable cases of talk that exhibit the polyphony of voices and situations with many repetitions of the same words. Even though I used the concept of "meaning" in my earlier work, I have come to realize more recently that it is actually detrimental to our thinking about language and *social* processes.

To exemplify a different approach to the analysis of classroom episodes that does not require the concepts of "meaning" or "(thematic) understanding," I present several fragments from a database of physics lessons recorded in several countries around the world. The analytic approach is to take verbal exchanges *trans*actionally (Dewey & Bentley, 1949/1999) such that no turn in itself is taken to "mean" anything on its own. I view talk as "an example of that arrangement by which individuals come together and sustain matters having a ratified, joint, current, and running claim upon attention, a claim which lodges them together in some sort of intersubjective, mental world" (Goffman, 1981, p. 70–71). The analysis is structured such as to recover the *dynamic* of the unfolding talk, which is to be found at the collective level and theorized as a social phenomenon (fact) (Durkheim, 1919). From this perspective, even the newest of words is inherently a *collective* phenomenon or it is not a word at all (Vygotskij, 1934).

In the following fragment, we see what could have constituted an opening to a game, when Matt playfully picks up a word the teacher has just used ("justify") but which turns out not to be accepted with Denis's return "justify your own justify" (turn 10). Here the verb justify is used in different ways and for different purposes; but there is no indication that the participating students spend any effort at "interpreting" or trying to figure out the "meaning" of others. We can look at the fragment through the lens of the language-games, where the one currently in play realizes the physics curriculum and, in so doing, the official schooling as well. Here, the teacher, passing the group and overhearing Denis say "why" in reply to a statement (Shawn), suggests "you have to justify it" (turn 05). To increase the

content-oriented language and conceptual elaborations, the teacher had earlier introduced

and pinned up three verbs to be used to develop and articulate ideas in the public forum:

"justify," "elaborate," and "explain." Here, the teacher repeats one of these verbs as an

offer/invitation to use precisely here. Denis does take up the offer and, instead of repeating

the interrogative, now uses the verb as an opening to what will have been an invitation |

acceptance move ("of course").

```
Fragment 3 (science classroom 2)
  01  Shawn: yea same weight of an object (0.90) ((points to the
              concept map)) is afFECted BY (0.48) the force of gravity
  02          (0.91)
  03  Denis: ^wHY.
  04          (1.67)
  05  Teach: you have to JUStify it.
  06  Denis: JUStify.
  07  Shawn: of course.
  08  Matt:  <<playful, challenging>JUStify.
  09  Shawn: just-
  10  Denis: <<annoyed>justiFY your OWn justify.>
  11          (0.53)
  12  Shawn: a force
  13  Denis: wait can i look at another question
  14          (0.53)
  15  Shawn: its a measurement of gravity ((points downward)) of force
              in newtons on the object
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In this instance, we observe play; but this play is interwoven with the core notion of the

current curriculum. Thus, considering learning without considering the playful context

within which it occurs would lead to a complete incomprehension of how students become

competent in talking science.

In the following fragment, we have a "serious" discussion about what to do with the

term "friction" and where to place it with respect to other terms in the concept map,

especially with respect to the term "force" (turns 01–17). Then, after what turns out to be

the longest pause in this fragment (turn 18), we find an assertion | counter-assertion pair

of turns, where the first part is about one participant who does not spell it (some term)

right and the (ironical) counter-assertion about the previous speaker being "the best

speller" (every one in this group knows that Rob is one of the lowest achieving student

across subject in that grade). Then there is another counter-assertion, this time directed

against the preceding speaker Matt (turn 20 | turn 21).

```
Fragment 4 (science classroom 2)
   01  Matt:  frictions not force so you cant put it in there as force.
   02  Shawn: friction [decreases acceleration]
   03  Denis:          [we cant go there      ]
                [<<f>we cant go right] there> ((points to map))
   04  Shawn: [a a affects (??)     ] affects
                [the amount of force  ] ((looks at Shawn))
   05  Matt:  [because frictions not] under force so you cant put it
                under force; go like this and then branch.
   06         (0.27)
   07  Shawn: like friction ratio.
   08         (0.71)
   09  Denis: well mass isnt a force stroke,
   10         (0.34)
   11  Matt:  what; (0.43) its part of that (0.39) friction is not part
                of force?
   12         (0.58)
   13  Shawn: friction is not our (selection?)
   14         (0.59)
   15  Rob:   a plus
   16         (1.18)
   17  Denis: ((points to the small piece of paper)) theres a force up
                here of course
   18         (2.23)
→ 19  Rob:   he wont spell it right; (0.51) of course.
→ 20  Matt:  well your the your the best speller;
→ 21  Shawn: so you know how to spell though
   22         (0.20)
   23  Denis: friction
   24  Rob:   yea
   25         (1.12)
→ 26  Shawn: he can spell
→ 27  Rob:   no hes not
→ 28  Shawn: he chooses not to
→ 29  Denis: yeah he does
→ 30  Rob:   hes not (??)
   31  Denis: i made up a new friction
   32  Shawn: <<playfully>friction friction
                      [FRIction ]
   33  Denis: <<sober>[frictio:n]>
   34  Shawn: <<f>friction>> doesnt have
```

We then observe the first part of a move to return to the subject matter talk, paired with an affirmative "yea" (turn 23 | turn 124). But, following a pause, there is turn pair offering | accepting to talk about the spelling competencies of a third person (Matt), followed by several more turn pairs in which we find assertions | counter-assertions (negations) about the spelling competencies. Such instances of plays and contestations concerning the spelling competencies of science students are not infrequent, as in recent studies where such cases are analyzed (e.g., Bellocchi & Ritchie, 2011; Roth, 2013b). As before, there is an opening to return the exchange to the discussion of friction, phrased in terms of having made up a new label for the term friction, now correctly spelled (turn 31). This offer comes to be accepted in the next turn, when Shawn (in part playfully) repeats the term "friction" four times, overlapped once by the articulation of the term on the part of Denis (turn 31/34 | turn 32), which then leads to a verb, and, therefore, to the beginning of a statement between concept terms on which the map is based.

In this fragment, we may notice an instance of a game "flaring up" within another game; or, we might say, the physics language-game is abandoned for the instant and replaced by another one, concerning the spelling capacities of one of the group members, before returning to the game involving physics terms. There is no evidence of any planning involved—a joke or tease would not be a joke or tease if it were planned or explained and the effect of both relies on the suddenty with which it emerges for speaker and listener alike. In fact, there is a potential offer for another game surrounding the playful articulation of the term currently under discussion, but which is not accepted by what can be heard as sober articulation of the friction word. The very nature of such exchanges resides in the unexpectedness of their occurrence, and the uncertainties with respect to their ending. Thus, "even the most ordinary and even the seemingly most routine exchanges of ordinary life . . . presuppose an improvisation, and therefore a constant uncertainty" (Bourdieu, 1980, p. 168). It is this uncertainty that gives rise to the "*charm*, and hence [the] *social efficacy*" of such exchanges. But these exchanges are not appropriately theorized in terms

of conscious awareness, because "practical sense enacts these without representing them or by giving itself partial or inadequate representations thereof" (p. 174). The "motor of the whole dialectic of challenge and riposte', such as observable in the two fragments, 'is not an abstract axiomatics but the sense of honor, a disposition inculcated by all early education and constantly demanded by the group" (p. 176). Challenge and riposte are inscribed in the bodies and gestures, and in the situation as a whole. The practical sense required that operates neither with rules and principles nor with calculations, deductions, or interpretations. These "are in any case excluded by the urgency of the action 'that brooks no delay'" (p.177), so that it is the non-thematic practical sense that leads to the most appropriate response.

These fragments testify to the interplay of different games, some deploying academic language and very different ones blossoming upon it to tease, challenge, ironize, or play in other ways. What the take on a word is spontaneously arises from the social relation, and we would never know where in Vološinov's continuum from dictionary sense to theme any particular word currently falls. The underlying competence for taking the ball and run with it, the familiarity with the language-game-in-play, is learned in participation because it cannot be taught as such (Davidson, 1986). Language unfolds in discourse not to constitute some single "meaning" or the "sharing of meaning." Instead, language-in-use unfolds in situated discourse like a polyphony, in which there are vertical relations between all the instruments in play: "all discourse proves to align itself along the several staves of a musical score" (Lacan, 1966, p. 503). As a result, "there is no signifying chain that does not sustain . . . all attested contexts that are, so to speak, articulated in the vertical to that point" (p. 503), where the horizontal dimension of the point in discourse is the temporal unfolding of speech. It is the analyst's task to show that and how "current speaker's shift from the ordinarily meant meaning of last speaker's statement to an ordinarily excluded one, with humorous intent, can lead to a groan intoned jointly and simultaneously by all other participants and then return to seriousness" (Goffman, 1981, p. 72).

How then should we think about the competence required for distinguishing between the different language-games that come into play, for example, the serious "friction" concerned with finding a place for the term in the hierarchical concept map and the playful one? How should we theorize the distinction between hearing a serious request for justification and an invitation to play that is rejected with a double use in "justify your own justify" (turn 10)? In this respect, Davidson (1986) suggests that all "two people need, if they are to understand one another through speech, is the ability to converge on passing theories *from utterance to utterance*" (p. 445). The question then becomes how one teaches or learns the process of arriving at passing theories. Davidson concludes that "there are no rules for arriving at passing theories, no rules in any strict sense, as opposed to rough maxims and methodological generalities" (p. 446). The passing theories are derived as any other theory, by means of wit, luck, and wisdom. For this reason, "there is no more chance of regularizing, or teaching, this process than there is of regularizing or teaching the process of creating new theories to cope with new data in any field—for this is what this process involves" (p. 446). Whereas this approach is better than others in capturing the continuously changing nature of Vološinov's theme, it overemphasizes the thematic dimension of human existing and acknowledges too little that much of human experience is more like a feel for the game.

Concerning the repeated use of the term friction, "meaning" is not required as a theoretical concept. A search for the "meaning" of a word becomes problematic, for "it is in the chain of the signifier that sense [*sens*][7] *insists*, but none of the elements of the chain *consists* of the signification of which it is capable at that very instant" (Lacan, 1966, p. 502). With respect to the classroom talk presented above specifically and to all talk more generally, any one of those staves can come to be the main melody, and the speakers' competencies is to play in switching between these, making a different part of the musical

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[7] The published translation uses "meaning" instead.

score the lead melody, whereas the other parts continue to play but now are constituting context. The structure of the signifying chain brings to the fore is that "where the language exist, I can use it to signify *something completely different* than what it says" (Lacan, 1966, p. 505). This function, Lacan points out, is much more interesting than thinking about language as revealing or hiding the individual person's private thoughts. "There is no word or construction that cannot be converted to a new use by an ingenious or ignorant speaker" (Davidson, 1986, p. 441). Because of this, pragmatist philosophers employ a much more useful description of such situations. Students work on this map as part of evolving a new language-game. This is why they are in the process of trying out statements with 'friction'. But because the language-game is not yet fixed, any one statement that the students make is one that they "cannot confirm or disconfirm, argue for or against. One can only savor it or spit it out" (Rorty, 1989, p. 18). But "*if* it is savored rather than spat out, the sentence may be repeated, caught up, bandied about" (p. 18). Over time, the statement becomes familiar in use and, eventually, defines and finds a place in the language-game that in part emerges as a result of such repetition, bandying, and being caught up.

6. Coda

Educational classroom research focusing on language-in-use tends to investigate the well-behaved cases (students and language). But it is in the pathological cases—a conversation based on the articulation of one expletive, malapropisms, and metaphor that have little to do with the ways in which dictionaries define them—that we can learn about the real life of language. The cases are pathological because the exchanges involved are not normally if at all discussed in the scholarly literature—at least not in the literature concerned with the language in subject matter fields. Yet it appears that precisely because these cases are dropped and excluded from analysis, existing educational theories of language-in-use are inappropriate, especially with respect to the use of language to express

"meanings." The "pathological" cases discussed above are important, because they are expressions of the social life of the classroom, and, as such, are integral to the issues of a social semiotics. If we were to cut language from the social life of classrooms, we would merely reproduce the most serious of all problems that traditionally have plagued (social) psychology and linguistics (Vygotskij, 1934).

A consequence of the "pathological" cases observed here as in the case of the six drunken workmen discussed by Vološinov (1930) and Vygotskij (1934) is the need of the unit of analysis. Rather than focusing on "meaning" and the literal senses of words, which separates phonetics from semantics, we need to take a unit approach and investigate the function or value of the {sound-word} in and to the social relation in which the (verbal) exchange occurs (Vygotskij, 1934). Because the social relation *is* what later will be a higher psychological function (Vygotskij, 2005), it is impossible to comprehend student learning outside of a full consideration of their needs, interests, and intentions (Vygotskij, 1934). The latter manifest themselves in the non-literal aspects of the {sound-word} unit.

The search for "meaning" is part of a philological approach—equally decried by Bourdieu (1980) and Vološinov (1930)—that is inclined to treat words and texts as if these had no other rationale than to be interpreted. As the example of the uptake of Dostoyevsky's episode involving six drunken workers shows, there is precedence to think language in terms of "pathological" cases, such as when longer exchanges are built on a very restricted vocabulary. In the case of malapropisms, Davidson suggests that this phenomenon is ubiquitous rather than isolated. This has serious consequences for the ways in which we go about describing, analyzing, and explaining language-in-use in classrooms. The fact that there is not more discussion of the phenomenon probably has its source in the self-imposed constraints of scholarly communities, which make it, for example, that "off-topic" talk in science or mathematics classrooms rarely ever, if at all, comes to be analyzed as part of scholarly science or mathematics education journals (Roth 2009). Metaphor is another case where of interest, because it shares parallels with

analogies, an important approach to teaching scientific concepts. But as studies of teaching with analogies have shown, the multiplicitous nature of words and language affords metaphors and analogies that place students "between Scylla and Charybdys" leading them away from what the science curriculum was designed to teach them (Duit et al., 2001).

Davidson's *passing theory* denotes what speaker and recipient have to share, from instant to instant, to allow the successful switching between the different lines of the stave. Such a theory, if it existed, "is 'passing' because it must constantly be corrected to allow for mumbles, stumbles, malapropisms, metaphors, tics, seizures, psychotic symptoms, egregious stupidity, strokes of genius, and the like" (Rorty, 1989, p. 14). Such a theory always is local, and, therefore, not generalizable. Although we learn through experience, passing theories would not be among those, be of a kind of theory within a class that shares family resemblance (despite radical difference being possible). The difficulty arises from the fact that metaphor, as wit, is the precise point where sense emerges from nonsense (Lacan 1966), in fact, where sense and nonsense are combined in a syncope. That is, each word is syncopic in nature, allowing a very different game to be played, as in jazz improvisations, where a mis-take turns out to be the turning point for another take, where the juncture is part of two very different lines of development (Klemp et al., 2008).

The concept of "meaning" is not useful in the context of language philosophy (Vološinov, 1930; Wittgenstein, 1997). I suggest here that is not useful in education because of its orientation to the inaccessible because metaphysical aspects of classroom life. In part, this is so because there is nothing (to be) attached to a word; in part it is so because any word is tied to and reflects life as a whole in the way a raindrop reflects the world (Vygotskij, 1934). As a result, what really matters about the word is its use: "the very sense, the signification of the sign is determined by its use, governed by its relation with others signs of the system. . . . Outside the system, signs make no sense" (Mikhailov, 1976, p. 218). Language is not just a symbol system but directly arises from, and reflects, the social and material relations of people and the world they inhabit. This is why knowing a

language becomes indistinguishable from knowing one's way around the world more generally. In this way, the structure of practical life of society is reflected in the structure of language. By participating in living forms of communication, individuals also appropriate the forms of intercourse; and it is in intercourse (relations) with others that they appropriate the living forms of communication. As a result, a word "means nothing outside the 'language of real life,' outside the developing forms of living, active human intercourse/ communication" (p. 242). In other words, 'The real life of language—this is the real life of the individual in its continued exchange with others and itself' (p. 242).

Language is bound up with social and material life, because it is a living, constantly changing phenomenon. Educational research concerned with language therefore needs to focus on the *dynamic* of classroom exchanges, on the *social* of social semiotics. Here it is not the individual intention that matters—even though individuals may have some private thoughts and intentions—but what plays itself out in the public arenas of social intercourse. To understand the dynamic of the "penis" fragment, it is not what individuals intend that determines the trajectory of the happening but what is out there in the open, available to everyone present. This is not "meaning," which would not be available. Instead, spoken language here is an aspect of real life, the language of real life; and this language of real life is indistinguishable from the real life of language. The grammar of language and the grammar of everyday life also are fused (Mikhailov, 1976). Any consideration of language in educational settings therefore needs to take more than the literal sense ("meaning") of words into account, that is, it needs to investigate the social function of the {sound-word} unit.

To summarize: I propose taking the position that the participants in conversations do not have access to any "meaning" unless this term is used to denote instances where a participant elaborates upon a preceding statement by saying in other words "what she has meant to say." In this case, however, "meaning" would not be different from saying differently what one has previously said in other words. We then do not have to say that

students "construct/make meaning," but instead would simply write that they have said something using different words. This saying is as concrete as any other saying, and, therefore, no recourse to metaphysical concepts and phenomena is necessary.

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Caption

Fig. 1. Pitch, speech intensity, and first three formants (F1, F2, F3) for the 10 occurrences of "penis."