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Chapter XX

INTEREST AND MOTIVATION: A CULTURAL-HISTORICAL AND DISCURSIVE PSYCHOLOGICAL APPROACH

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ABSTRACT

The theoretical concepts of (situational and individual) interest and motivation are of central importance to educational psychologists, because they denote phenomena that are said to mediate cognition and learning, and therefore individual development. In general, interest and motivation are approached predominantly from individualist cognitive perspectives, as entities or processes said to be embodied in the individual mental structure. The method, however, is not without its critics. Thus, the existing approaches to motivation can be seen as tools in the hands of the ruling class and therefore, psychology as a servant to the interests of this class. Whereas scholars may not agree with such analyses, the cultural-historical and sociocultural origins in the work of the Russian social and educational psychologist Lev Semenovich Vygotsky point us to other possible problems with individualist approaches to motivation and interest. According to Vygotsky, all higher mental functions have their origin in inter-human societal relations. That is, therefore, rather than studying forever-inaccessible structures of minds for the situational and individual interests a person develops and their relation to a person's motivations, a sociocultural and cultural-historical approach begins with studying societal relations generally and societal relations in which interests and motivations are (a) the topic of talk or (b) resources in the pursuit of other topics. This, then, leads us to the approach taken in discursive psychology, a relatively new discipline that already has made substantial contributions to the study of cognition generally and to the study of knowing and learning more specifically. In this chapter, we draw on an empirical study of career interests and motivations of high school biology students who were given the opportunity to participate in internship experiences in a university science laboratory. The scientists had offered these opportunities for the express purpose of increasing

enrollments in the university's science faculty. Here we outline and exemplify a discursive approach to studying interest and motivation, which is an important and necessary perspective because participation in any human activity is always mediated societally, culturally, and historically. We show how interest and motivation talk is produced and the intelligibility of such talk shared as cultural resource. We suggest that a discursive approach has significant possibilities for educational psychology, because ontogenetically, we learn what interest and emotion are in and through participation with others in conversations about interests and motivations. Therefore, interest and motivation are phenomena that for any individual are brought about in social interactions and discourse situations rather than phenomena that can be theorized as having their independent origin within the individual human being. We conclude with recommendations for a discursive approach to the study of interest and motivation that parallels a similar approach we take to "purely cognitive issues" such as conceptions and conceptual change.

Introduction

[T]he absence of academic motivation and lack of interest is also likely to be reflected in students' neglect of their studies. Research over the last two decades has indicated that adolescents' academic motivation declines over time. . . . Recent studies show that as children get older, their interests and attitudes toward school in general, and toward specific subject areas such a mathematics, art and science, tend to deteriorate. (Hidi & Harackiewicz, 2000, p. 151)

Interests and motivations have been a major field of studies for educational psychologists, as our introductory quote from a recent review of the literature shows. The field is of interest to all those who would like to increase academic performances and who recognize that there is little that can be done about innate abilities. In this field, interest is defined as an interactive relation between the individual learner and his or her environment or aspects thereof including objects, events, and ideas (Krapp, 2002). Researchers do observe and theorize the structural and dynamic aspects of the phenomenon, but there appear to be few who question the very concepts of interests and motivations. Yet there are critical psychologists who, relating the field of psychology to cultural-historical development of society, show that the very phenomena of interests and motivations support ruling relations that attempt to make others (e.g., students) do what they do not normally want to do (Holzkamp-Osterkamp, 1975). Psychologists critical of their discipline in its more traditional form also show that psychological phenomena are not just in the individual as factors, characteristics, or innate structures. Rather, they recognize that "psychological categories that make up the mental thesaurus can be studied as a kitbag of resources for doing things" (Potter, 2005, p. 740). Thus, "beliefs," "interests," and "motivations" are part of a discursive repertoire that people in a variety of societal situations use to describe others or use to explain their actions: teachers frequently plan tasks that they believe to be motivating students to engage and therefore to learn.

The approach that discursive psychologists (e.g., Edwards & Potter, 1992) take to such topics of interests and motivations—psychological phenomena as practical, accountable, situated, discursive, embodied—is consistent with the cultural-historical approach to

psychology, which is grounded on the premise that all higher-order psychological functions are concretely available in societal hierarchical relations between people (Vygotsky, 1978). It is precisely because of their public, intersubjective nature that interest and motivation can become subjective phenomena. In the course of growing up, children and adolescents learn to talk about interests and motivations and to associate them with particular orientations and situations in their life, associated with particular bodily states (emotions, feelings). Yet we would not be able to identify the behavior of another person as angry without at first taking on our own affect-related sensations the perspectives of others, an outside perspective (Franck, 1981). Only under this condition can we ever associate the embodied behavior of others as indicating anger: the self-presentation of my own body is always intertwined with the representation of bodies and their states in talk. Just as talk about all other mental states e.g., confusion, emotions, feelings—interests and motivations can be considered discursive resources for interacting with others in the pursuit of the overall motive of the particular activity at hand and in the pursuit of the goals that realize this motive. It therefore matters what the goals are, because we expect interest and motivation talk to differ if it occurs as part of one rather than another activity—e.g., a teacher talking to her students about their (career) interests or motivation studying science or interviews with students about this course. Because of the different goals to be realized in a science class or in an interview about learning science at school, the way in which linguistic resources are mobilized differ (Vološinov/Bakhtin, 1973).

The purpose of this chapter is to articulate a discursive approach to interests and motivations that is grounded in a cultural-historical activity theoretic framework that recognizes the public nature of all higher-order psychological functions in societal hierarchical relations. Because these relations are reproduced, sustained, and transformed in conversational situations, interests and motivations become available through the study of talk-in-interaction. Our study focuses on the patterned ways in which talk about phenomena is structured, as genres, with their particular plots and characters. More so, the social and material environment of the interview itself becomes a resource for communicating and talking about interests and motivations.

INTERESTS AND MOTIVATIONS AS RESOURCES IN INTERVIEW TALK ABOUT CAREER GOALS

The discursive psychological approach radically changes the way in which psychologists theorize the phenomena of interest to their field. Thus, instead of presupposing psychological phenomena as existing originally in individuals' minds and instead of treating language as a pathway to these phenomena in people's minds, discursive psychology invites us to rethink these prepositions by looking closely at the psychological discourses of and about topics such as interests and motivations. Why do discursive psychologists propose to rethink the role of interests and motivations as something in individuals' minds? What kinds of potential problems educational psychologists may encounter if they attribute interests and motivations to individuals by requesting participants to "answer" questionnaires or interview questions? In the following sections, we take an exemplary look at a series of interviews in which a researcher interested in the career goals and career planning interviews conducted with a

number of high school science students; these examples allow us to articulate and discuss why and how discursive psychology approaches interest and motivation discourse differently.

"Accessing" Interests and Motivations

We may easily discern in society two different kinds of situations in which participants talk about interests and motivations. On the one hand there are the situations of everyday affairs, at work, at school, around the home, together with neighbors, and so on. On the other hand there are special situations such as (educational) psychology research, where researchers make interest and motivation a topic of their inquiries generally and the topic of their interviews or questionnaires specifically. It should be clear that the two are not inherently reflections of the respective other: Educational psychologists find the former situations and make them the topic of their inquiries; and they may seed the sociocultural landscape with new concepts that are taken up by members of society in general, who come to understand their lifeworlds in terms of these concepts. There immediately arises a potential problem from this relationship, as there may be mediations that are not normally acknowledged in research about interests and motivation. Thus, to make interest and motivation the topic of a research project and to interview students about their interests and motivations with respect to specific school subjects already takes a cultural and linguistic competence. This is true not only for the researcher but also for the research participants such that during an interview about interests and motivations, they each presuppose the intelligibility of their interest and motivation talk on the part of the other. We may therefore ask, what are the competencies that allow researchers and participants to engage in interest and motivation talk, and how do other aspects of the (interview) situation mediate this talk. In Fragment 1, we take a close look on a research interview concerning a high school student's (Jennifer's) career planning to observe how the interviewer and interviewee orient themselves into the interview situation. (Transcription conventions are described in the appendix.)

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Fragment 1
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((Oriented toward others in the classroom, in exaggeration))
          <<rall>its a my interview?>
02
          (5.32) ((Interviewer is getting ready))
03:
    PL: kay i=m gonna take this ((takes a box with green and yellow
          sticky notes)) ((laughter)) i am gonna invite you to think
          about your future, any kind of possibility, about what you want
          to do, career, work, or jobs, and that kinds of things.
04
    J:
          okay?
05
    PΤ.
         kay (.) and if you came out any idea ((takes out green sticky
          notes from the box and put them in front of Jennifer)) you
          could put one career or job (0.18) on each card
06
    J:
          okay.
07
          (0.38)
80
    PL:
         may (0.15) maybe you have some thoughts so you could write
09
          (0.30)
10
    τ:
         okay
11
    PL: and here is a pen
12
         okay i only got one it involves biology kind of. actually i
          have two, you just want my career one then here then?
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13 PL: yes and not only biology but anything else.

Educators and educational psychologists analyzing interview frequently take the content of such interview text as representing a more or less fidele rendering of the thing (referent) that the content denotes. But taking such an approach leaves unaccounted for that the participants, here the interviewer and Jennifer, orient toward one another. They do so not only to speak for one another, to spill words like beans from a pot, but to constitute the situation recognizable as such (Figure 1), and with an eye and ear on possible responses and reactions. That is, the participants talk in the way they do so that after the fact they can legitimately say that they have realized an interview about interests and motivations; and they do so even in such cases where it is the first time they have participated in such an event. As all societal (inherently hierarchical) situations are characterized by the genres that are deemed to be appropriate for the situation, there is no indication why we should not begin with the presupposition that the interview is different from all other speech situations. That is, instead of presupposing that interest discourse in interviews mirrors peoples' interests in their everyday lifeworlds, we presuppose that people orient themselves differently in and for different situations. If the same genres are used across situations, this becomes an empirical matter rather than having to be presupposed.

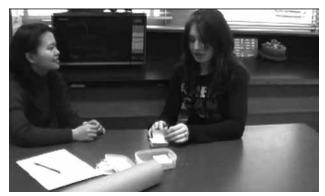


Figure 1. The interviewer (left) and the participating student are seated in the back of a classroom, having previously agreed to meet for an interview to talk about the career interests of the latter. On the table, there are interview protocol sheets, a pen, a box full of green and yellow sticky notes, and a giant rolled paper brought by the interviewer.

In Fragment 1, we see how an interviewer and an interviewee (Jennifer) orient and transit themselves into an unusual event—a research interview about career goals. In turn 01, Jennifer acknowledges the special situation as she turns to her classmates in another part of the room by uttering "it's a my interview." Towards its end, the utterance becomes slower (see the transcription code "rall[entando]") and the pitch rises, as would be characteristic for a question. The overall effect is that the comment stands out, but it does so in a refracted way, denoting the event as something out of the ordinary. That is, by means of intonation Jennifer produces a particular emotive-valuative attribution that marks this situation (Figure 1) as different from what she normally does at this time of the day and in this place (a science classroom). She both participates and takes a reflexive stance to the interview about her life, career goals, interests, and motivations.

As the interviewer readies herself, Jennifer fully orients to this situation, in part mediated by the materials on the table, which mark out the physical arena of the interview context. The interviewer further orients the participant to this physical space by denoting and pointing to these materials ("gonna take this" [turn 03]) and then orienting the participant toward the content to be covered, which she denotes in terms of future jobs, careers, and related topics (turn 03). The two clearly define their roles as they go, as the interviewer makes statements about what is going to happen, which are acknowledged as such in repeated utterance of "okay" (turns 04, 06, 10, and 12). In fact, it is in and through this contribution on the part of Jennifer that the interview can begin in this way, because other actions would set the stage in a different way and might even lead to termination. For example, if Jennifer were to say that she did not feel like doing the interview at that instant, it might be terminated right there and then. Readers may also think of survey researchers who, after having talked to a potential participant on the phone for a while, find themselves with a rejection to their request for participating in their research. Thus, together they co-start and co-produce the interview.

Toward the end of Fragment 1, following the different set up moves on the part of the interviewer, including her preparation of considerable stacks of sticky notes, Jennifer notes that she "only got one," and "it involves biology kind of" (turn 13). Why would she have said that she "only" got one (career goal)? Whatever her private intentions, which we cannot speculate about unless she articulates them for the interviewer and therefore for the public generally as well, we can say that the "only" is heard against something else that is more, involves some quantity, which would not be required in her case. Jennifer's answer here has to be read against what has happened *before* not after this particular instance, because neither she nor the interviewer could have known what would have been said only a few seconds hence, so that at any moment the future of the conversation is open, and any utterance is heard against and with respect to all preceding communicative acts. Here, the "only" can therefore be seen and heard in contrast to the stacks of sticky notes in front of her. The term "only" indicates that the physical environment Jennifer is in (e.g., an interview with stacks of sticky notes) already mediates this interest discourse.

Jennifer then offers a revised description that there were actually two (possibly interests), and then offers up a question, "you just want my career one then here then?" (turn 12). Here, we notice that Jennifer does not simply orient herself in an interview situation but also spends efforts to make sure that what she subsequently produces in the interview is what the interviewer "wants" (turn12). In other words, the confirmative question shows what Jennifer produces later in the interview is not purely her own but already is negotiated with and oriented toward the interviewer. The interviewer reifies the offer (as question) by responding in the affirmative ("yes" [turn 13]) and then utters an invitation to extend the talk by talking about "anything else" not just about "biology" (turn 13). Thus, there is a request here that may have repercussions for the way in which the interview will unfold in that the participant's utterances constrain the extent to which the talk about future goals can unfold— "only one, it involves biology" (turn 13)—and the interviewer's offer to extend the talk to domains beyond biology. Therefore, we should be aware of the fact that interests and motivations "accessed" in research contexts such as interviews do not simply reflect interest and motivations in interviewees' lifeworlds (like objects are reflected in a mirror) but are phenomena interwoven with other aspects of resources in interviews such as the presence (or absence) of the interviewer, questions, tools, and contexts.

Setting and Trajectory as Meaningful

09

10

J:

PL:

okay. not only biology

Interviews take place in physical settings, which in their materiality, come to constitute ground for actions to be meaningful. Thus, the setting may be marked in particular ways and reference to these marked parts of the setting provides a background for the constitution of sense. Because of this, participants in the situation do not have to track in their minds the interview content or rules of process because they can always find the marked elements in their surroundings; they do not even need to remember the pointers or markers, as suggested by a theory of situated cognition in terms of indexes that the mind keeps to things in the world (Barsalou, 1999). Rather, it is sufficient to remember that by looking around one can find relevant things that are part of the process of realizing the current activity, the interview about interests and motivations. Take the following situation where, after Jennifer has identified two interests on the available green sticky notes, the interviewer asks her to note some of her dislikes and provides the participant with another sticky note pack, this one of yellow color.

Fragment 2 and this one were for your dislike ((Figure 2a)) 01 PL: 02 J: ^okay. 03 PL: ^okay. 04 (0.60)05 J: just for biology or what? 06 PL: no, anything, 07 J: okay. 80 your [disliking] and your [likes]. J: [((places finger on yellow stack Figure 2c)) [((places finger on green stack))

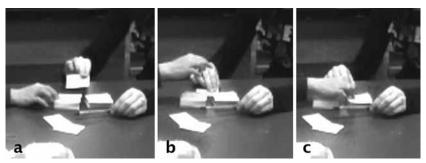


Figure 2. The interviewer, to the left, (a) points first to the pad with yellow sticky notes, then, (b) in a trajectory that takes her hand high above the notes, (c) comes to point to the other pad of sticky notes. The difference between likes and dislikes thereby comes to be physically and perceptually available.

In this situation, the physical space and some of the materials come to be marked in a particular way: here the yellows sticky notes come to be associated with dislikes, whereas the green sticky notes with the positive aspects of (Jennifer's) life. This is clearly evident from the events in Fragment 3 below, where the interviewer merely points to the yellow stack and, with rising intonation, which culturally competent speakers of English hear as a question,

utters "and this one." Without any further clarification, Jennifer then immediately picks up the conversation following "this one" with talk about "dislikes."

Sense and meaning therefore cannot be sought solely in the words that are produced for the purpose of constructing an analyzable text that researchers subsequently use as data sources for their research. Rather, interviewers and interviewees both come to the interview with resources (e.g., language) and produce resources (marked spaces, written text, mind maps, ephemeral talk) that subsequent talk and action take into account or as background against which the new talk becomes intelligible, meaningful, plausible, sensible, and so forth. Interview process, interview setting, and interview content thereby come to be closely, irremediably, and irreducibly intertwined: we cannot understand one without the other. Interview content, the text transcribed and attributed to the individual interviewee, here Jennifer, can be extracted only with a penalty: the text becomes literally decontextualized from the situation *for which* it has been produced and which only came into being because of the participants' speech actions.

The interview is a process that unfolds in time as it produces text. It is a situation often described as "laying a garden path in walking," because it simultaneously produces the text the production of which constitutes the intent of arranging and conducting the interview (process). Processes unfold in time so that what becomes available at a later stage takes into account and occurs on the evolutionary surfaces of what has happened before. Thus, once stacks of yellow and green sticky notes come to be marked in a special way, they can subsequently be remarked and re-marked. But the reverse is not possible. This temporal unfolding is not something generally taken into account in interest and motivation research, which assumes that the transcripts constitute a text that has the characteristics of a written text that exists in the present in its entirety, and which therefore can be studied like a coherent static system rather than as an unfolding process. This, however, is inconsistent with the cultural-historical approach that recognizes the developmental dimensions of thinking and speaking and the mutually constitutive relations between them (e.g., Vygotsky, 1986), a relation that constitutes the historical and contingent character of thought expressed in words at all time scales. Thought and word develop and mutually constitute one another on microgenetic, ontogenetic, and phylogenetic (cultural-historical) time scales. Because of this continuous development, what is said toward the end of the interview cannot be analyzed at the same level as what has been said at the beginning; rather, the latter is a developmental successor of the former, it is less articulated and articulate, underdeveloped, more general, and more abstract.

Emergent Phenomena

Educational psychologists generally assume that psychological phenomena they pursue exist as structures of students' minds. Thus, for example, those in the field who do research on science learning and scientific understanding may focus on *conceptions* and *conceptual change*. These conceptions are thought to be structures of the mind that are to be changed in and through teaching. But do students need to have extant cognitive structures to be able to talk about a phenomenon? There are studies showing that this is not the case and that people participate in conversations about phenomena that they have not thought about before (Roth, 2008). This is no different from talk about interests and motivations, as seen in the following

fragment, where a student begins to talk about dislikes although she has not talked about them before as something salient in her thinking about her life goals generally and about her career goals specifically.

options open and try everything. right.

To invite Jennifer to address her dislikes (turn 01), the interviewer only uses the gesture (pointing to a yellow sticky stack) and indexical words (this one) and Jennifer recognizes that the person in front of her asks a question "(do you have) any dislike?" How can Jennifer articulate "this one" as "any dislike" without receiving a rejection from the interviewer? Here, the two develop a shared space, not only a social space but also, and literally so, a physical space, where different parts are marked in such a way that pointing to these places becomes a constitutive part in a meaning whole. That is, the interview has evolved into another stage where the meaning of gestures and colored sticky notes are shared and are ready to be drawn on as collective and intelligible resources. Also, in her turn, Jennifer utters with rising intonation, which we again hear as a query, "any dislikes?" (turn 02). We can hear this as a translation of the preceding communicative action, "and this one?," that is, as an articulation of the sense in which the previous action was perceived (involving hearing and seeing). But this is not a simple translation of a question into another question, for the repetition of the same word—even if it were to be precisely the same word—would no longer have the same sense (Bakhtin, 1986). Here, the "any dislike?" can be heard simultaneously as articulating the sense in which it has been perceived and as a move that seeks confirmation whether this is what the offered query was about. Jennifer then, without pausing, launches into an utterance that will constitute the second part of a question-answer pair.

Jennifer comes to what turns out to be a temporary endpoint after having written notes on seven green sticky notes; she had not written at all on a yellow note. It is at this instance that the interviewer points to the yellow stack. After the events in Fragment 3, the interviewer provides more time for Jennifer to think ("you can take some time to think about it") and then points again to the yellow stack; and it is only at this point that Jennifer notes, "so dislikes, um, tuitions may be." She laughs, the interviewer utters "okay," and Jennifer then notes on a yellow sticky "tuition fees & student loans relating to any post secondary education (I hope to get scholarship)." After repeated requests from the interviewer, Jennifer finally notes down "her" dislikes, though she had not noted any before. Why Jennifer did not note the dislike at the first place but produce it after being queried by the interviewer? Can we say that Jennifer "naturally" had dislikes? It was noticed that people can participate in conversations about things that they have never thought about before, and they do so in competent ways; they do so with the resources that the language and situation provides them with (Roth, Lee, & Hwang, 2008). Thus, children and students may talk about the relationship between the sun and the earth, stating, for example, that the former moves around the earth and pointing to the facts that the sun is rising in the morning and setting in the evening. In the same way that it would be dangerous to attribute cognitive frames and theories following such talk about the

sun and earth, it would be dangerous to attribute dislikes to Jennifer in the context of life and career choices as if the dislikes were innate and facets of her character.

In the present episode, Jennifer did not speak about dislikes on her own—and even if she had done so it would have been for the recipient and anticipating her response, which is an indication of the effect-dimension of the utterance. Thus, we observe repeated offers by the interviewer to the interviewee to articulate dislikes. It is not that Jennifer does not know dislikes or has been unable to articulate them—she does so competently after repeatedly being solicited to do so. But in the first round, the production of the sticky notes, Jennifer does not write on a yellow sticky and therefore, does not articulate any dislikes. In the subsequent exchanges, both verbal and nonverbal, repeated offers were made for producing something that could subsequently be categorized as dislikes. Initially Jennifer states not to have any and wanting to keep her options open, but then, she offers possible candidates for the category: tuition fees and student loans. Can we say that the dislikes are merely an effect of the interview? The fact that Jennifer produces the utterance in which tuitions are the content grounds the fact of this particular dislike in her life and life conditions—a poor or working class student may not even consider going to university and a student from a wealthy home may not have to worry about tuition fees at all. Thus, the particular topic is best understood as arising from the dialectic of the structural constraints of the situation, the possible genres, language, etc., and the specific life conditions of this participant.

Fragment 3 also shows how participants provide one another with reasons for particular choices or decisions they make or positions they take—all communication is recipient designed, so that the audience becomes a constitutive aspect of the determination of the genre itself (Bakhtin/Medvedev, 1978). Thus, after articulating the sense of the question she heard, Jennifer initially states that she does not really have any dislikes ("um not really" [turn 02]). She then suggests that in the future she might develop more dislikes (school subjects?) but that at the moment "[she] want[s] to keep all [her] options open and try everything" (turn 02). Here she provides a rationale for not disliking (school subjects): it allows her to keep her (career?) options open. In this way, she can "try everything" and then make a (more informed?) decision about which subject matters she likes and which ones she does not. The rationale here is produced for the interviewer as a specific other, another person in particular, but she produces, in and through the use of language generally, a *culturally* possible rationale, that is, a generally intelligible and reasonable rationale. For the rationale to make sense to any specific and therefore generalized other, it inherently has to be part of the collective domain. Furthermore, when we look closely at the particular words Jennifer uses, "keep all my opinions open and try everything," the terms of all and everything indicate extreme expressions that serve as extreme-case formulations (Pomerantz, 1986) as a persuasive way to legitimate her position (i.e., having few dislikes). If interviews were like windows onto minds, why would Jennifer spend any effort in using these extreme words to justify her position to the audience in the interview? The phenomena above all indicate that Jennifer's rationale cannot be something merely singular and subjective; in being produced for the generalized other, from whom the language and its means and contents of expression have come to her, she concretely produces (realizes) and therefore reproduces a cultural possibility. Not only can interests and motivations be articulated in words—which makes the former

¹ In technical terms, this effect is called the *perlocutionary* dimension of the speech act, of which the utterance (locution) and the speech intent (illocution) constitute the other moments.

inherently social and societal phenomena—but also human beings are predisposed to give reasons (grounds) for their interest-related and motivational predilections.

In this instance, the likes and dislikes are treated not in an absolute way but as constitutive of possible questions and answers with respect to careers. Thus, in the light of talk about careers, Jennifer responds to the question about dislikes in terms of subject areas that she is taking in school. She does not yet have dispreferred areas, as this would diminish her career options. Thus, although she may have dislikes, in fact, many dislikes in life generally, the dislikes she talks about here, or absence thereof, are in respect to careers, career options, and having the widest possible range of actions. The possibilities that arise from such an open stance come to be articulated later in the interview:

Um and if I decide after my bachelor's of science major in biology that marine biology isn't the place I want to go. I come from I would go down to teaching and I would want to be a teacher of biology and pee-ee. . . . they are my favorite courses and I find that I wouldn't want to be teaching courses with provincial exams because I would rather teach something I wanted to teach rather than um teaching to lead up to an exam that I don't write. So um that was the main point of that. And I jus don't want to go into anything that has to do with becoming an English professor, or English teacher. I just don't want to go into English it wouldn't be fun at all.

In this situation, Jennifer and the interviewer have come together to conduct an interview about the former's career interests and goals, and about the different aspects of her life that motivate her choices and actions. As they have not done this before, and in fact, as it was the first time for Jennifer to participate in a research interview of this kind, the two initially also face the problem of how to act to make the conversation what it recognizably becomes: a research interview about interests and motivations. It is not so that both enter a box called "interview" and that this makes them act in ways appropriate for interviews; rather, the interview process develops out of the initial transactions not unlike the proverbial snowball becoming in the process of rolling and making the context for its own historical trajectory. To each interview there is a trajectory, where the participants evolve the parameters, the particular genre. This genre—here around the idea of doing an interview about the interests and motivations of high school students in a joint biology and career preparation course—like "every significant genre is complex system of means and methods for the conscious control and finalization of reality" (Bakhtin/Medvedev, 1978, p. 133). That is, what the reality outside the interview is and can be is a function of the particular genres that are admissible in and to an interview context.

Psychological Phenomena, Grounds for Action, and Accountability

One often-overlooked aspect of actions, interactions, and relations in educational context is the fact that human beings—here students, teachers, administrators—do not act and talk in a willy-nilly fashion, completely singular, and disconnected from the talk and actions of others. Because our own bodily states and perspectives are interlaced with the perspectives of others and with the language that we share (Franck, 1981), interests and motivations can be mobilized as rationales for actions and talk. Rather than being willy-nilly—i.e., groundless

and without ground—all actions are such that people can provide reasons ("grounds") for them, deriving from the fact of the inherent accountability of (social) action. This accountability is precisely what allows human beings to attribute to one another intentions, motivations, and interests and what allows them to use intention, motivation, and interest talk for the purposes at hand: providing reasons for actions and dispositions.

The interview situation with its declared intent of talking about future goals also frames possible and intelligible forms of rationales. Thus, in the context of a conversation about future possibilities, life, life styles, and careers, it makes perfect sense to talk about keeping options open and to try a variety of courses to identify possible interests and careers, which then orient the establishment of goals that motivate what Jennifer will do—at the college or university—and how she will do them. This context shapes what future contents and genres the interview might take. Thus, interviews with factory workers in their late 50s might not at all bring up the topic of career options and dis/likes at all, for at that stage of life careers come to a close and dis/likes have formed; on the other hand, it might come up in conversations with university professors who decide to stay in their positions long after the previously mandatory retirement age of 65. The topic therefore mediates the genre and the genre mediates the nature of the topic. *This* interview therefore is mediated in its content by the particulars of Jennifer and the stage of life she is in. Both interviewer and interviewee are oriented toward that stage of life and produce a narrative account of career that is irremediably shaped by this orientation (Bakhtin/Medvedev, 1978).

In the end, the interviewer and Jennifer produce a two-dimensional array of the greenand yellow-colored sticky notes, standing for the likes and dislikes the latter had at the moment of the interview (Figure 3). The representation takes the form of a mind map, in which the term "goals" constitutes the overall classifier, "careers" and "living status and lifestyle" denoting the next level of organization.

Here, then, the established and previously published interview protocol prospectively organized what the two were doing to produce sticky notes, which would then feature, as part of an organized structure, that is, as items on a mind map about goals. The interviewer who "follows" the protocol—developed by an educational and counseling psychologist who has done years of research in the area of career counseling-attempts in her utterances and actions to work toward a result such that in the end what has happened is a description of events that can be said to have realized and are consistent with the protocol. But whether this goal can be achieved is an empirical matter and in the practical situation requires the collusion of the interviewees who do not know the specific desired outcomes that have to be such that they constitute usable data in the researcher's lab. (In university tenure committee meetings, for example, everybody knows what the expected outcome is so that all have an idea of what a correct procedure and final outcome is and therefore everybody can judge whether the goals have been achieved.) But the interviewee's actions are required in the production of the interview as an interview, which adds to the event yet another moment of unpredictability. The map therefore is an unpredictable product co-produced in and through the interview as a whole instead of a predetermined copy from the interviewee's mind. Thus, rather than treating interests and motivations as inner entities that drive behavior, we see the psychological phenomena as integral moment of discourse practices that are performed (rather than preformed) as resources to and products of interactions materially (externally) available to all.

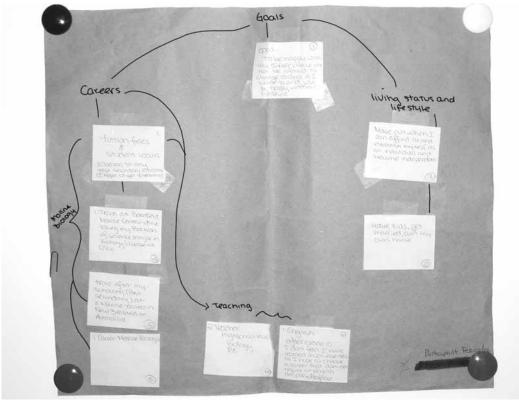


Figure 3. The two yellow-colored (right-most in bottom row, top-most in left column) and seven green-colored sticky notes are placed on a brown sheet of paper, hierarchically organized, linked, and subordinated to main concepts (goals, careers, living status and lifestyle, marine biology, teaching).

It is in the same sense that we see "attitude" as constitutive of a set of heterogeneous evaluative practices that are used in different settings for different purposes rather than to see attitude as static in-the-head entities that are ready to be spilled onto Likert scales for psychologists (Potter, 1998). For instance, when people have make one or other comment (assessment) during a conversation, the respective interlocutor often simply articulates a similar view in return (e.g., A: it is a great challenge, isn't it? B: yes, the challenge is terrific!). In the conversation, can we say that both A and B have positive attitudes? Does B really have a "natural positive attitude" or does he just avoid offending A (i.e., "attitude" is performed to achieve a social action)? Thus, to better understand psychological phenomena, we always have to take a conversational situation as a whole instead of simply attributing interests or attitudes to individuals. Moreover, how can it be that the interviewee produces a map that she has never produced before and also valuable for the interviewer? Are there not pre-existing cognitive frames or maps required for producing anything like a map? But this question becomes irrelevant when we think of the nature of the means interviewers and interviewees have available: The only means available to the interviews are the languages and genres that they are familiar with, which in the conversation with the interviewer, are constrained by the goal of achieving the interview as event and the interview text as outcome.

THE MODEL OF THE TEXT

To better appreciate and understand the relationship between interests and motivations as articulated in interviews and as aspects of individual/collective life, we draw on the literature concerned with the interpretation of texts (e.g., Ricœur, 1991). Texts refer to the world. In spoken discourse, such as the interviews concerning interests and motivations in the present chapter, this means that what the dialogue ultimately refers to is the *situation* common to the interlocutors.

This situation in a way surrounds the dialogue, and its landmarks can all be shown by a gesture, by pointing a finger, or designated in an ostensive manner by the discourse itself through the oblique reference of those other indicators that are the demonstratives, the adverbs of time and place, and the tense of the verb. (Ricœur, 1991, p. 148)

In oral discourse, therefore, reference is ostensive. We have already shown this irremediable feature of reference to the context when the interviewer, in Fragment 3, points to the yellow stack and Jennifer, without having to think about or interpret the gesture, understands it to be about dislikes. What research about interests and motivations tends to drop are all references and all possible signs to the interview as event; and such research subsequently retains only those aspects of the interview situation as a whole that are thought as having been said. In fact, the interview also, and collaboratively so, produces a text that is said to stand for something outside the text, the interests and motivations of high school students concerning life and career in situations other than the interview. This relation cannot ever be direct such that the interview text always is refracts the reality it is said to be about (Bakhtin/Medvedey, 1978). That is, whereas some of the text is directly concerned with its own production, other aspects of it are concerned with the production of a secondary text, the interview about interests and motivations. But this text concerning interests and motivations more or less will have to stand on its own, a text among other texts about interests and motivations, meaningful in its relations to all other, similar texts within this culture. Viewed in this way, the text (about interests and motivations) opens up references to the world as such, no longer tied to the local particulars, but rather realizing and articulating possibilities that exist at the cultural level as a whole. The attributions made in the interview texts are not free or belong to individuals, because individuals, to be understandable, have to fit certain culturally shared patterns of talking about them and the situations that they find themselves in. That is, these discursive patterns—i.e., genres—are about characters and plots. In this section, we provide examples for the constitutive nature of the interview context and process on the content of the interview, its topics, which in the present situation are interests and motivations. We subsequently articulate the textual nature of the recorded interview (transcript) and then turn to one of the consequences of interviews as texts: characters and plots as organizational features of talk about psychological phenomena.

Text Produces *Context*

Educational researches often only report people's "answers" from questionnaires or interviews without describing the contexts where people answer these questions. That is, they

usually only report "expected (desired) data" whereas contextual descriptions of research such as present tools, researchers, environments, etc are normally ignored. However, different material contexts can in fact radically mediate people's discourse (e.g., Schoultz, Säljö, & Wyndhamn, 2001). We noticed in our interviews that the presence of tools on the table such as stacks of sticky notes and the product of map may mediate how interviewees articulate their interests and motivations. As illustrated in Fragment 1, at the beginning of her interview Jennifer had fully oriented herself to the interview context (e.g., uttering the term "only" as to against stacks of sticky notes in front of her). The mediational effect of contexts is especially evident when we look closely at how interviewees make their notes on two different colored sticky stacks. For example, in Fragment 4, the interviewee (Mandy) has noted five dislikes on yellow sticky notes and then confirms with the interviewers that if it is okay to add an extra question mark on the fifth note "?clinical doctor MD."

Fragment 4

```
01
    M:
          can i put a question mark on this one? ((points to a yellow
          sticky inscribed with "?clinical doctor MD")) because i=m not
          sure i want to do that, i dont [think
02
    PL:
                                          [`um 'hmm
03
    M:
          [i would.
04
          ['um 'hmm (5.27) so you: mean this one is between (1.06) both?
    PL:
          ((fingers point to both yellow and green sticky stack))
05
    M:
          yea that was kind of between both, like i am interested in
          medical (0.37) but i am not sure if i would want to work in
          like a clinic with just like (0.18) kind of the average like
          co::ld kind of (0.21) problems.
```

Mandy asks if she can to put a question mark on a yellow sticky written with "?clinical doctor MD," because, as she formulates, she is not sure if she wants to be a clinical doctor (turn 01-03).2 The interviewer first confirms Mandy's question "um hmm," and then, after a long pause (5.27 seconds), speculates "so you mean this one is between both" (turn 04) with her fingers pointing to the two stacks. Here, the interviewer responds to Mandy's question as if she noticed that Mandy has difficulty categorizing the note "clinical doctor MD" into likes or dislikes. Mandy reifies the interviewer's question "yea" and recaps her words "yea, it is kind of between both." Further, Mandy provides more explanations about the action of adding a question mark. On the one hand, she wants to work in a medical context, but on the other hand, she is not sure if she wants to work in a clinic where she would be treating plane ordinary colds (turn 05). Therefore, adding a question mark on a yellow sticky note means that the written words are no longer pure dislikes but are something mixed, in between. Here, we notice that Mandy is concerned about dividing her choices into two opposite categories forced by the two differently colored sticky note stacks that the interviewer brought to the interview. That is, these differently colored sticky notes for interviewees such as Mandy are not regular and neutral papers but are marked with bias, as she recognizes that choices noted on a yellow sticky would be recognized afterwards as her negative interest. Fragment 4

² Here is one of the examples where we attribute uncertainty to the person. We do so because Mandy *formulates* why she asks a question, and thereby makes available the reason for asking this question. This situation is notable because in many situations human beings do not provide reasons for their questions and statements. From a methods perspective, this is another example of how we only work with whatever participants make available for one another, and therefore, for the analyst. We do not work with *inferred* thoughts, reasons, mental states, etc.

therefore shows that these different colored sticky notes already presuppose a particular discourse that the interviewer and interviewee would use. That is, to talk about interests in a dichotomous and oppositive way that is consistent with the meaning carried by different colored sticky stacks. Otherwise, if the interviewee did not follow this category, she would need extra justifications such as Mandy's question ("can I put a question mark?") to mediate the production of misunderstanding. That is, the researcher's choice of using colored sticky notes prior to the interview already constrained and mediated the possible interest genres.

Mandy's question mark request also indicates that interviewees' interests in the natural and social world are quite different from interviews might otherwise illustrate. The fact that interviewees were invited to write whatever their likes and dislikes are appears to be a more open way of recruiting interviewees' statements (e.g., compared to questionnaires). However, these two categories already simplify and reduce complex forms of being-in-the-world into a binary category system and binaries may not organize our lives, shown by the way in which Mandy has difficulties fitting her predilections into a dichotomous category. Discursive psychologists have raised the question of the problematic reductionism existing in psychological research, which normally uses experiments, questionnaires, tests, or interviews to detect people's complex relationship with the natural world and then transforms and reduces data sources into factors or causes to explain peoples' behaviors (Edwards & Potter, 1992). It is dangerous therefore to reduce peoples' complex relationship with their lifeworlds to interpret individual differences or predict people's later actions. We must keep in mind that people in different situations have different cultural recourses to orientate their actions. Interest talk such as that employed in interview situations cannot simply reflect interests discourse in other contexts, because they have their own complex mechanisms of unfolding.

It can also be noticed that in the different stages of the interview, the sticky notes have mediated students' interest discourse in different ways. In the beginning stage of the interview, students produced a dichotomous discourse mediated by two colored sticky notes to articulate their interests and motivations. For instance, in Fragment 4, Mandy's question mark request for her fifth yellow note allows us to observe that she was oriented to follow this dichotomous category for her first four notes because she simply noted down without any special request. When students finished the map that required students to group likes and dislikes in terms of whatever reason would work for students. This ordering of the notes on their map transformed them into another function that in turn mediated students' interest talk. Thus, in Fragment 5, Mandy completes her map and starts to articulate her reasons for grouping different sticky notes.

```
Fragment 5
```

```
those three ((Figure 4a)) are=um (0.33) all kind of
01
    M:
          biologically (0.99) related.
02
          ['um 'hmm (0.49) you dont like biology?
     PT.:
03
     M:
          NO I DO:: um
04
     PL:
          ((laughs))
05
          um just not that, like I have biology over here too. ((Figure
          4b))
06
     PL:
          ^okay.
07
          so i guess it just more like those ((Figure 4c)) specific
          things in biology didnt really interest me.
```



Figure 4. The interviewee, to the right, (a) points first to a group of three yellow sticky notes (biological related careers) to explain the group name "biology", then, (b) points to a group of five green sticky notes (medical/health related careers) when she articulate that she do like biology. Finally, she comes to point back (c) to the three yellow sticky notes.

Mandy points to a group of three yellow sticky notes ("?clinical doctor MD," "Marine biology," & "Vet") at the corner of the map and explains that these three "are kind of biologically related" (turn 01). In response to Mandy's explanation, the interviewer then points to this group with her both hands and seeks clarification, "you don't like biology?" (turn 02). Here, the words on the yellow sticky notes carry negative valence recognized by both participants. The interviewer therefore can reasonably ask the question "you don't like biology?" in the situation. Mandy rejects this statement and ascertains that she in fact does like the subject ("no, I do" [turn 03]) in a louder voice than during previous talk, thereby making stand out—i.e., emphasizing, from Greek phainesthai, to appear—that she "does" like biology. After receiving the answer from Mandy, the interviewer slightly laughs as if there is a something unusual (turn 04). Mandy then points to another group of five green sticky notes ("Medical/medicine," "doctors without borders," "specialized doctor," "W. H. O. world health organization," and "Disease research/control") located in the opposite corner of the map with utterances "like I have biology over here too" (turn 05) to point to what she has written on the green sticky notes biology-related careers—the ones that are marked as being positive interests. That is, these green sticky notes are her evidence that supports that she indeed likes biology. Then, Mandy's hand points back to the group of three yellow sticky notes and justifies why she does not like all of biological related careers: "just those specific things in biology don't really interest me" (turn 07).

Here again, the sticky notes mediate how the interviewer can ask a bi-valent question that makes sense to the interviewee. To respond to the question, Mandy draws on the available resources in front of her, the biology-related careers on green notes, to prove that she does like biology although she also writes the names of some biology-related careers on yellow sticky notes. That is, she uses the green sticky notes as a rationale to buttress her position. Hence the product of the interview, the map, has become a visual and communicative resource for both to make comparisons by pointing back and forth. Mandy's actions show that not just narrative experiences in her lifeworld (e.g., family influences) may serve as rationales or resources to justify her interest, but these notes have evolved into another level that can serve as a different kind of rationale to justify a position. This is especially evident when the interviewer accepts Mandy's justification "okay" without a pause (turn 06) as if these notes had indeed become shared discursive resources for both. This phenomenon supports the view that in the trajectory of the interview process, resources such as gestures or tools have developed a different sense and meaning for both the interviewer and interviewee (e.g., Fragment 2).

In this case, a tool available in the setting mediated both content and process of talk. This mediational effect may be drastic as shown by a study where the introduction of a globe into an interview situation radically changed the conceptions children expressed and articulated about astronomical phenomena (Schoultz, Säljö, & Wyndhamn, 2001). Rather than talking about the earth as if it were a flat plane with the sun moving around it, the children showed how a rotating earth would receive sunlight on its different sides. That is, the physical resources at hand closely mediated the topics of research studies. This phenomenon then leads us to question: "If interests, motivations or conceptions belong to individuals, why would psychological phenomena radically change just by entering an artifact into the interview context?" To better understand interests or motivations discourses, we therefore must not attribute the psychological phenomena solely to individuals because the interests reported from research interviews are the interviewee's and not the interviewee's at the same time. It is the same in Jennifer's case, the very structure of the representation that the two develop as Jennifer's life goals (Figure 3) is a product of the interview and therefore cannot be reduced to the mind and personality of Jennifer; nor can it be reduced to the interview protocol.

Context Produces (the Interview) Text

As the interviewer and interview collude they produce both the interview as a situation and the recorded interview as a text. This text reflects both the content of the conversation (i.e., the text about students' interests and motivations) and the continual work required to make this situation an interview (i.e., the text that makes the context). If this additional work were not done, mutual alignment could not occur and the desired content, and interview about interests and motivations, would not be captured in and by the text. The text therefore refers us to two situations, the one in which it was produced—i.e., the context—and the one that some of the textual content is said to refer to. Furthermore, the text that results from the interview process is material through and through. It becomes a data source precisely because of this material nature. But this material nature also constitutes and subtends its ideological nature. The first principle from which "the study of ideology must proceed is the principle of the material and completely objective nature of ideological creation as a whole. Ideology exists completely in the external, objective world and is completely accessible to a unified and essentially objective method of cognition and study" (Bakhtin/Medvedev, 1978, p. 8). From a cultural-historical, discursive perspective ideological products and the ideal meanings associated with them are not to be searched and found within a person, sequestered underneath the skin that is said to constitute the divide between the inside and the outside, the intrapsychological and the interpsychological. Meanings are "not in the soul, not in the inner world, and not in the detached world of ideas and pure thoughts, but in the objectively accessible ideological material-in the word, in sound, in gesture, in the combination of masses, lines, colors, living bodies, and so on" (p. 8). The relationship between the text and the lifeworld of the interviewees therefore cannot be simple (i.e., a reflection), if not for the simple reason that the two pertain to two different but different yet connected parts within the unity of social life.

In this regard, the social connections which implement meaning are also varied. That is, the aggregates of all the actions and interactions elicited and organized by ideological meaning are also different. This explains the various relationships of ideologies to the surrounding reality and the special laws for the refraction of reality that are proper to each ideology. (p. 12)

In this quote, the authors point out the differences in the meaning of ideological materials—including words, sounds, and gestures—when the situation is changed, which for these authors included the fullness of concrete material life and the same life as depicted in written materials. The interview text cannot be understood outside the unity of the situation that produced it, and its relations to other parts of social life therefore have to be empirical matters.

The interview is meaningful in its entirety. The very construction of the auto/biographical text that results from the interview process is the motive that makes the interview meaningful as event. More so, the object in itself has to be intelligible, constituting a narrative of someone's interests and motivations has to be intelligible *as* a motive for the interview about interests and motivations to make sense. This motive, however, does not come from either *this* interviewer or *this* (these) interviewee(s). Rather, it is something that already exists as possibility at the collective level; and it has been realized as such by others. Even when the very first social scientist began to conduct research into the interests and motivations, the object/motive of his or her research already had to be a possibility, both intelligible and accountable in terms of familiar genres and repertoires.

To truly understand the interview text, we therefore must seek to understand it from the inside, the laws of its production in and through the interview situation, the narrative possibilities of language and associated culture, the particulars of participants (age, race, culture, gender), and their life stages. That is, we must take an emic approach that understands psychological phenomena in and through participants' dispositions and practices rather than an etic approach that is aimed to interpret psychological phenomena in terms of outsiders' theories or accounts.³ More so, other than a written text, the transcribed interview about a topic of interest-here interests and motivations-needs to be understood from the perspective of a first-time-through event, because the participants did not and could not know the landscape of the content that the entire interview would produce and cover. Thus, even if the participants returned to issues already talked about to elaborate, deepen, verify, and ascertain what has been said, the interview text could not be understood as the result of some stable character or protagonist—in our examples, Jennifer—who makes available some stable and (at least momentarily) unchangeable core of herself. On the contrary, we see these stable patterns as cultural and familiar resources that participants may take for granted in their conversations.

In the present situation, the inner laws include those of the production of a coherent narrative about interests and motivations, which includes intelligible ways of accounting for social actors and events. Thus, interviewers will not just ask *any kind* of question, but instead ask questions that aim at the production of a *coherent* account of the life and career interests of students such as Jennifer and Mandy (e.g., a bi-valent question about interests in Fragment 5). The two students, as everyone else participating in this aspect of our research, contribute to this motive of producing intelligible accounts of their lives and visions of their futures,

³ The terms *emic* and *etic* are common method-related notions in anthropology to distinguish, respectively, insider perspectives from outsider perspectives on a culture.

which are made plausible *because* of the interest and motivation concepts that the speakers mobilize in support of their goals. Thus, for Jennifer the goal is a life independent of her family and the creation of her own family. Getting a job that meets her interests in marine environments, their fauna and flora, provides a narrative coherence that is plausible to listeners in general (interviewer, analysts, our research group). That is, it is not just any talk that achieves the interview about interests and motivations, but the interview as process is intertwined with the particular object/motive of and for the process: a text that has an internal coherence telling a life, life goals, interests and motivations in an intelligible and plausible way. The interview, as process, is oriented toward and organized by the production of an intelligible narrative about interests and motivations; and the narratives about interests and motivations are oriented toward making the interview a successful societal activity. The production of each mediates the production of the other. That is, the interview is not unlike the situation in which novelists find themselves: producing texts that have narrative coherence because of the mutual conjunction, coordination, and articulation of specific characters and specific plots.

Characters and Plots: Constraints on Possible Life Narratives

In everyday culture we articulate human lives generally and our own lives particularly in terms of characters and plots (Roth, 2007). Who we are and what kinds of situations we find ourselves in become intelligible because characters and plots are cultural possibilities that are realized in different but intelligible ways. Plots provide for narrative coherence and constitute "a synthesis of the heterogeneous, in order to speak of the coordination between multiple events, or between causes, intentions, and also accidents within a single meaningful unity. The plot is the literary form of this coordination" (Ricœur, 2004, p. 243). Plots are filled with characters, a term that denotes both a type of being and the set of lasting dispositions by which a person is recognized. It is because of the notion of character that individual identities come to be stabilized. Thus, "[b]y means of this stability, borrowed from acquired habits and identifications—in other words from dispositions—character assures at one numerical identity, qualitative identity, uninterrupted continuity across change, and finally, permanence in time which defines sameness" (Ricœur, 1992, p. 122). Auto/biographies are intelligible and plausible because of the intelligibility of the narrative cohesion of plots (dangerous encounters, favorite situations, familial relations) and characters (heroes, underdogs, good samaritarians). These plots employ specific chronotopes—literally time-spaces—such as the family/home, encounters, life course and career (Bakhtin, 1981); and it is through the cultural-historical (shared) nature of these text-internal chronotopes that auto/biographies in turn are shared.

The character and plot—and everything else that comes with narratives including the genres, expressions, structural possibilities, and chronotopes—are constrained by and a constitutive moment of the interview. As objects of the intention for the interview, we no longer think the contents—i.e., interests and motivations—as something lying outside the system of the means of representations, the unfolding interview and the material traces it leaves in the mechanical record and its subsequent transformations. "Content necessarily has a constructive function within the closed unity of the work, the same function as all the other elements conditionally united in the concept of form" (Bakhtin/Medvedev, 1978, p. 48).

Interests and motivations, as content, have a constructive function within the closed unity of the interview, which will be appreciated in a positive manner—i.e., as successful—precisely when they fulfill particular narrative functions in the overall constitution of the life and work of the research participant.

Plots and characters are not singular phenomena but inherently societal and linguistic resources that are intelligible and plausible for all conversation participants in any concrete situation. This is so because to make something anticipated in the research design as an interview about interests, motivations, career, and life possibilities, both parties to the event have to collude. And this collusion presupposes intersubjectivity. In part, this collusion involves the production of utterances that reproduce their respective roles as interviewer and interviewee, with their anticipated division of labor, according to which the interviewer asks questions and the interviewee responds to them. But the making of these interviews in the anticipated ways also requires the content to take the anticipated form, drawing on familiar chronotopes, plots, and characters. And because participants always talk for the other, anticipating their responses in their utterances and taking into account what they and others have said before, what is being said has to fall into specific genres. The languages used as part of these genres, their possibilities, and their forms are ideological, societal hierarchical through and through (Vološinov/Bakhtin, 1973). Thus, for Jennifer the overall organization of the plans for her future is to be successful, and this means a specific form of life: "I wanna be successful and in my mind it is moving out and becoming an individual, getting married, having kids, and living on my own," a typical middle-class genre about life after leaving the birth family. To be intelligible, it does not suffice that the recipient of the talk is familiar with the English language and knows the 25 words in the utterance. It does not suffice to know at least implicitly English grammar to understand the relations between the different words, the clauses, the subject and predicate. What is required in addition are the relations between plot and character of the person being talked about, which here is one of the participants. That is, to better understand what the interview text provides us with we need to render the situation stranger than it normally is, as a situation analogous to the writing of novels and stories, that is, to the production of narrative forms (genres).

The interview can be understood in a way similar to the act of writing a story and the recorded (and transcribed) interview constitutes the final text. The relation that this text has with the remainder of the culture generally and to the life of the individual particularly is not simple and linear. In fact, it relates to material and economic life in a way similar to that of the character and plot of a novel to the life outside it. (It is for this very reason that psychoanalysis and Alcoholics Anonymous function as re-orderings and new understandings of life through the reorganization of life narratives, in which case there is a mediation of external chronotopes by text-internal internal chronotopes.) Thus, when Jennifer talks about her plans, she accounts of herself in terms of a character that fits into specific culturally enabled plots, and both character and plot have to take intelligible and meaningful content and form. In the following, Jennifer talks about training at the marine station in Bamfield, wanting to do a bachelor of science, majoring in biology at the local university, doing postsecondary training in New Zealand or Australia (popular in the area where the research was conducted because of the cultural similarities between Canada and the other countries). Here, the chronotope is "the life course of becoming a marine biologist," which comes with specific places, trials and tribulations, and courses and programs to be followed. She does not merely envision or want to make these already and inherently intelligible choices, but she also has

grounds for these choices, which also are intelligible and meaningful in the context of the particular chronotope. Thus, going to train at the Bamfield marine center (Canada) and to pursue subsequent training in similar centers in New Zealand and Australia "would give [her] more experience." And this experience is necessary to "lead up to becoming a marine biologist."

Okay well I put them together because they all have career aspects to them like training at Bamfield and I want to take bachelor or science, major in biology at u-vic and that leads up to after I do my schooling I would do my post-secondary training at some center in either New Zealand or Australia. And that would give me more experience. I would probably have to get my PhD as well to do that. And that would all lead up to becoming a marine biologist and hopefully I would be hired by one of the two places I would be training at.

Here, Jennifer repeats a plot pattern related to a professional personnel training situation ("training at Bamfield" & "training at some center in either New Zealand or Australia") and its similar characters ("[people who] major in biology" & "a marine biologist"). That is, the plot of training personnel allows Jennifer fitting herself into its storyline and relative characters; at the same time, it allows Jennifer to use the cultural plot for communicating her interests to the interviewer. Again, and especially in an increasingly globalizing world, we need to keep in mind that a genre is specific to a culture and its ideology, and that a story line that makes sense does not necessarily make sense if the narrative were to be translated into another language such as Japanese. This is so because genres and chronotopes are culturally specific, and the genres and chronotopes for constituting life histories are no different (e.g., Roth, 2005).

The particular life choices arise from the life and experiences of participants. These, in turn, provide intelligible grounds for explaining choices, interests, and motivations. Thus, when the interviewer asks Jennifer why marine biology is her primary choice, Jennifer responds:

I guess because I have grown up on the coast and have always been at the beach and stuff and I just think it is cool because it is a whole different world the marine life. It is so different from land life but at the same time it has a lot in common. I think especially because there is a lot more we don't know about marine life.

In this situation, Jennifer draws on a particular repertoire, experiences during childhood as determinants of subsequent career choices and trajectories. This repertoire is a common one for telling auto/biographies in the sciences, both in the positive sense that parents influenced or supported choices and in the negative sense that some career was pursued despite the resistance on the part of the family or some of its members (Lee & Roth, 2004). This (cultural) repertoire within the chronotope of the family, which specifies members of the family as (causal, mediational) influences on (emerging, existing) interests, is also evident in the following excerpt.

I mean my mom is a nurse and with her whole family we have always been very biological, we have like biology in the family, nurses and doctors. It's just been kind a family thing that has been passing down. So because of my mom I learn a lot of stuff about biology, like human biology and animal biology because she grew up on the coast as well. So she was

constantly interacting with the field and my grandparent have a waterfront house. So we have been down there looking at the ocean and stuff. So we have come to learn about a lot of that stuff through common sense and I guess she just really got me started on that. And because she is a nurse I know so much about nursing that she has just taught me over the years.

Here, growing up near the ocean, having grandparents with a waterfront home, having a mother who has grown up near the ocean all pertain to a narrative repertoire that makes having interest in marine biology intelligible and plausible (reasonable). It is not something that is particular to Jennifer, but rather, as a repertoire and possible plot, constitutes an inherently plausible trajectory (a constitutive moment of the chronotope *life course*) for her own character in a plot that she currently narrates for the researcher.

Other experiences that are both intelligible and "good" reasons for explaining interests and motivations derive from experiences, themselves accounted for in the admissible languages and genres of the situation. Thus, Jennifer uses the account of a field experience in the nearby, world-renowned marine station (Bamfield) as mediating her interests and motivations,

I absolutely loved it, last summer I was really upset when I had to go home. The first day I got home I just sat around and moped all day. I missed it so much. And I guess I thought it was such a good experience it so many ways. I learned so much from Bamfield that it really inspired me to become a marine biologist and to see what they were all doing around there, they were all just, it was just so cool because they all loved biology. I felt really accepted there because they all did, they like the same thing I do so it was just really cool.

This experience "really enhanced" her interest in becoming marine biologist, from initially being something that might be "really cool" to becoming something describable by "I was like, I want to be a marine biologist."

I guess Bamfield really enhanced it and I really really wanted to before that so I wasn't really sure if that was a good field for me but after being at Bamfield, being in biology, being in science ten I got really really interested in it and it was a good introduction for me. So I started to realize that there is a lot more I don't know about the ocean and I would really like to find out about it. So I decided that that was maybe the way I wanted to go. So I find it really interesting I watch movies about it I look on the Internet about it. It just boggles my mind.

The idea of *choices* inherently comes with alternatives among which selections can be made, and these alternatives are as intelligible and meaningful generally as the main goals—it would not make sense to say something unless it can be presupposed to make sense and to be intelligible to the other, which inherently means not just one other but in fact the generalized other. This precise point is salient in the interview with Jennifer, who, at one point, reiterates the goal to be independent from but linked to her family; and part of being on her own is having a family, "have kids, and do the whole married thing." In this situation, "doing the whole married thing" makes thematic the cultural dimensions of having a baby and getting married: it is a thing, a generally understood pattern, that young (middle-class) people enact and become involved in at a particular stage in life, and which they may include among their aspirations at an earlier point in time. This pattern is itself cultural an historical, as the

members of the "flower power" generation often did not get married but had children nevertheless (sometimes with very unusual first names such as "Moon Unit").

Having the possibility of choice itself is part of a Western life trajectory (i.e., the life course chronotope), where the protagonist character goes down one path but leaves open another: "I just want to be happy with my career choice and I don't want to feel stuck in my career cause I can always change cause I have two lined up here. And I just want to be happy with my lifestyle. Make sure that, I guess my main goal would be overall happiness." In other cultures and at different societal hierarchical levels, choice may not be a relevant discursive repertoire and part of a life narrative, especially in cultures where girls and young women are subject to pre-arranged marriages but also in Western culture when individuals say that they had done this or that because (one of) their parents had said so. That is, depending on culture and life stage, the chronotope family is different and has a different topology, different gradations and graduations, but always remains intelligible within the particular culturalhistorical context. In the cultural-historical context in which Jennifer lives, however, it is intelligible and plausible to talk about choice. Thus, when pressed, Jennifer states that the two choices she envisions at the moment, biologist and teacher, are but initial choices and that there may be other interests cropping up in the future, such as going into medicine, but even in this instance, the chosen career path should "have to do with either biology or teaching."

These are my two main but I think if I had a long time to think about it and put my mind to it. I've been told to be a teacher since elementary school and marine biology I have been thinking about for years too. I guess this is all I have gotten so far. I guess if I didn't go into this it would probably be some branch of teaching or biology in some way. So if I decide to go into more medicine I could do that. But it would definitely have to do with either biology or teaching.

Here, too, the repertoire of influences in or since childhood is mobilized to account for the particular interests and motivations Jennifer now articulates as orienting her life. In summary, therefore, interviewers and interviewees are bound by constraints by what they can say without transgressing the boundaries of the particular situation, in the present instance, an interview about goals, interests, and motivations. In the literature, it is commonly not assumed and not even made thematic that such interviews are achievements that require the collaboration and collusion of all participants. This very collusion leads to the fact that the work of making the interview as a recorded product becomes invisible. That it is actually an achievement is revealed when interviews turn out to be something different, unanticipated by the researcher who designed the experiment. Thus in one instance in one instance that we reported, the research assistant was instructed to invited scientists to sessions the purpose of which was to produce think-aloud protocols of experts that might serve for the subsequent design of high school curriculum (Roth & Middleton, 2006). As we reported, however, mediated by the insistent and persistent attempts of some participants, the interviewer began providing answers and feedback, allowing the think-aloud protocol to turn into a tutoring session. Again, it took both types of participants, research assistant and participants, to coproduce the event and its historical trajectory to become something other than the research design had anticipated.

The Interview as Text-Producing Self-Re/Producing Context

The present analyses exhibit how the interview is a special situation, one among the many that make society and the world in the way we know it. Interviews are part of our cultural landscape (Figure 5), and, in their contributions to particular systems of activity (e.g., educational research), contribute in more or less direct way to the production and reproduction of society. Our everyday knowledgeability is an important resource for making the interview into what it is (Figure 5, broken arrow). The interview is a cultural-historical phenomenon, the external chronotope with respect to the narrative about the life, interests, and motivations of our student participants. The talk not only produces text about the topic but constitutes the very situation. As other societal situation, interviews require the collusion, collaboration, and mutual orientation of the participants. This "mutual orientation of people defines each act of cognition, and the more complex, differentiated, and organized this mutual orientation is, the deeper and more important is the resulting comprehension" (Bakhtin/Medvedev, 1978, p.13). In the context of the present chapter, the person in the world generally and her interests and motivations more specifically (Figure 5, solid arrow) constitute the contents of the interview (Figure 5, parabolic funnel), the intention of which is to produce a text from which students' career interests and motivations are to be constructed as social-psychological phenomena (Figure 5). This text itself becomes part of society in that it constitutes the data from which educational psychologists reconstruct interests and motivations.

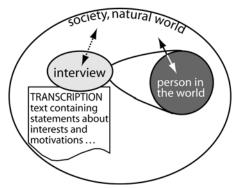


Figure 5. The relationship of interview to its object, the person in the world, her interests and motivations, and the constitutive relations between interview and world.

The interview constitutes an ideological environment, and as all ideological environments, constitutes the "realized, materialized, externally expressed social consciousness [of the thereby] given collective" (p. 14). Here, the social consciousness cannot be understood independent of the individual consciousness in the same way that the social consciousness cannot be understood independent of the individual consciousness (in itself a form of social consciousness [Franck, 1981]) that implements and realizes it. Thus, "the individual consciousness can become a consciousness only by being realized in the forms of the ideological environment proper to it: in language, in conventionalized gesture, in artistic image, in myth, and so on" (Bakhtin/Medvedev, 1978, p. 14). This ideological environment is in a constant dialectical process of generation such that "every act of his consciousness and all the concrete forms of [man's] conduct outside work . . . are immediately oriented in the

ideological environment, are determined by it, and in turn determine it, while only obliquely reflecting and refracting socio-economic and natural existence" (p. 14). That is, what is said in the interview (the internal chronotopes) cannot be understood as the (linear, photographic, mirrored) image of the interviewees' lifeworlds, including their interests and motivations (the external chronotopes), but rather reflect the social reality only in some oblique, refracted, and ideologically mediated way.

The complex relations between society as a whole and one of its constitutive parts was articulated, with respect to the arts, by Bakhtin/Medvedev (1978), who warned researchers of the dangers that breaking out particular human pursuits and regarding them as in some ways independent of the world as a whole.

The work cannot be understood outside the unity of literature. But this whole unity and the individual works which are its elements cannot be understood outside the unity of ideological life. And this last unity, whether it is taken as a whole or as separate elements, cannot be studied outside the unified socioeconomic laws of development. (p. 27)

In the process, the arts, research interviewing, or any other special pursuit in a constitutive relation with socioeconomic life as a whole do not loose their individualities. To the contrary, individuality of some pursuit, research and interviewing, can be completely discovered and understood only in and through the transactional processes. We must not forget the double relation linking the interview and the ideological environment in that the latter (Figure 5, solid arrow), in and through the person in the world, becomes the content of the former (Figure 5, broken arrow), and it is the former that constitutes part of the societal and natural world.

In educational and psychological research, as in the arts, there exist naïve notions about the relationship between the content of the interview/art work, on the one hand, and those parts of the natural and social worlds that are denoted:

According to the naïve notion that the visual arts reflect or reproduce nature, the means of representation have a merely technical (in the bad sense) and purely auxiliary character. They are subordinated to the object being represented and are evaluated according to how they suit it. Thus the means of art are only evaluated as they relate to the extraartistic values of nature or the historical reality which they reproduce. (Bakhtin/Medvedev, 1978, pp. 46–47)

In educational and psychological research, the same phenomenon addressed in this quote with respect to the content of an artistic production often occurs with respect to the production of interviews, the contents of which are evaluated with respect to a historical and biographical reality outside of the interview situation. In the same way that Medvedev/Bakhtin make thematic the relationship between the content of art—here the text about interests and motivations—and the remaining, extra-artistic reality of which the arts are a constitutive part, we have to make thematic the relationship between the interviews about interests and motivations, which are but a part of the extra-research reality of which interviews are constitutive parts. Paraphrasing Bakhtin/Medvedev we suggest that it is naïve to think that the interviews reflect or reproduce (social, material, psychological) nature and that language, as means of accessing the phenomena of interest, has a merely technical (in the bad sense) and purely auxiliary character. Thus, textbook instructions for interviewing tend to

suggest minimizing the influence of the researcher on the situation, without realizing or making explicit that without the researcher present, the interview would not be an *inter*-view (from Old French *entrevoir*, *entre*-, between, + *voir*, to see). Even in cases where participants are asked to fill out questionnaires or to write unstructured texts (responses, essay) about the phenomena of interest, the writer would be oriented toward a particular recipient and the goals and intentions that he or she has articulated during the invitation of the research participant. Much like classical art criticism thought that the arts are subordinated to the object being represented, modern researchers subordinate the means (open or structured interviews, questions) to the object being represented in the resulting text, here, talk about interests and motivations. The general methodical question asked in the peer-review process and in scholarly discussion pertains to the degree to which the interview has been able to elicit the true interests and motivations, and therefore, the degree to which the method was adequate to the reality of the interests and motivations.

The language of the interview situation and the possibilities it offers to express the world constitute means of representations, devices. With respect to the interview, these devices do not constitute some value external to the interview and a value for its own sake: "The means of representation, the 'devices,' do not represent some extraartistic value for its own sake. Instead, they make the work of a self-contained whole and make the phenomenon being represented into a constructive element of this whole" (Bakhtin/Medvedev, 1978, p. 47). In the same way that Bakhtin/Medvedev articulate the issue for the arts and the artistic work, we propose considering the interview situation as a self-contained whole—nevertheless related to the world in its entirety—in which the phenomenon represented, interests and motivations, are constructive moments of this whole. In the present instance, the whole is the interview and the material traces it leaves in the mechanical (video) record and the transcriptions subsequently produced from it. That is, the phenomenon represented in interview talk—in our examples the career interests and motivations students express—are constitutive moments of the interview as a societal phenomenon sui generis.

The relationship between the interests and motivations articulated in an interview and any interests and motivations apparent to the individual in other life situations is oblique rather than direct. At best we might say that in the interview situation, everyday interests and motivations are ideologically refracted (Bakhtin/Medvedev, 1978). The relationship between Jennifer as constituted in the interview and the person in her everyday life is the same way that a particular kind of person in a novel—a protagonist representing the nouveau rich, the author's double in an autobiography—is a constructive but ideologically refracted moment of the art work rather than an unmediated reflection of reality. Who Jennifer generally and her interests and motivations specifically can be in the interview situation is subject to the (autobiographical) genres possible for such types of situations and the constructive purposes for the story as a whole. The possibilities for construing a character, with interests and motivations, are subject to certain constraints that have to do with the narrative possibilities of characters and plots available to a particular culture and language. Bakhtin/Medvedev already framed these constraints for the artistic work: "The object perceived from the point of view of this representational system, as a possible constructive aspect of it, for the first time becomes

⁴ We use the notion of *moment* rather than that of *element*, because the latter implies that the whole we are interested in, the interview situation, can be reduced to certain elementary structures, from which the

an object of artistic perception" (p. 47). That is, interests and motivations, viewed from the perspective of the interview and the linguistic and graphical representations that it makes available and possible, come to be understood *as objects* of the perception by the means of the interview.

CODA

In this chapter, we show that the interview situation, both with respect to process and product, is constitutive of the psychologists' phenomenon of interest and motivation. What the research on interests and motivations can reveal is only obliquely related to social life in general and has to be understood within the unity of the interviews that produce the recorded texts that subsequently are used as data sources for the construction of interests and motivations as research outcomes. Our position is radical in a scholarly context that normally takes the elicitation of interests, motivations, cognitions, emotions, and so on in interview situations as unproblematic as long as the means are judged sufficient: the interview is a special situation and its products (interview) do not directly reflect the reality of the phenomenon in other contexts; and, in turn, the requirement for narratives to have characters, plots (the content), and chronotopes becomes a constitutive moment of the interview. Our position is as radical as it was for a cultural-historical, materialist dialectical literary criticism during the early part of the 20th century. Thus, the constructive function of the interview in the reality of interests and motivations is as salient as the constructive function of the arts in our understanding of the world that we inhabit: "The primacy of the constructive function radically revolutionizes this notion. The object of representation—the natural or historical phenomenon—is now evaluated in terms of the means of representation, i.e., in terms of its constructive role in the closed unity of the work, in terms of its constructive expediency" (Bakhtin/Medvedev, 1978, p. 47). As in the analogy of the artistic phenomena, interests and motivations exist in the way they do for researchers, in research reports, and subsequently in the educational fields where the research findings subsequently come to be applied in the way they can be articulated in and through the interview. That is, the interview situation is constitutive of what interest and emotion can be and are in the way that they are detected and described—e.g., by teachers, guidance counselors, school nurses in the world outside the interview situation. Interests and motivations are bound up with the plots, characters, and chronotopes possible, plausible, and intelligible in the context of the interview, where interviewer and interviewee talk to, with, and for the benefit of the other.

The relationship is not unidirectional, however, as the researcher's and the research participant's everyday competencies in interest and motivation talk mediates how the interview as process unfolds and the objective trace the process leaves in the recorded and transcribed interview text. Both interviewers and interviewees do not talk like monads in some box labeled "interview," but they make interviews in and through their talk in addition to constituting the topic. The topic, however, must not be understood outside the interview text that the interview process produces. That is, we must not take the text produced during the interview outside the context that led to its production. Paraphrasing Bakhtin/Medvedev

we might say that the interview text—in the same way as the outcome of any other form of work—cannot be understood outside the unity of the interview and the research that it realizes. "But this whole unity and the individual works which are its elements cannot be understood outside the unity of ideological life. And this last unity, whether it is taken as a whole or as separate elements, cannot be studied outside the unified socioeconomic laws of development" (p. 27).

This double relation is also a reason to be concerned when the production of the interview and the resulting text is not taken into account in the construal of interests and motivations. In this case, educational psychologists and other researchers in the field either come to reap what they had earlier sown or simply reify the "commonplaces of ordinary existence or official representations, often inscribed in institutions and thus present both in the objectivity of social organizations and in the minds of their participants" (Bourdieu, 1992, p. 235). The very possibility for the existence of the phenomenon in the social world also comes with a danger for the researcher, who might take the preconstructed, which can be found everywhere, and who might merely operationalize and thereby reify the concepts. The educational psychologist, in the same way as the sociologist,

is thus settled with the task of knowing an object—the social world—of which he is the product, in a way such that the problems that he raises about it and the concepts he uses have every chance of being the product of this object itself. (This is particularly true of the classificatory notions he employs in order to know it, common notions such as names of occupations or scholarly notions such as those handed down by the tradition of the discipline.) (Bourdieu, 1992, p. 235)

The self-evident character of the concepts and the phenomena that (unreflective and unreflexive) researchers denote arises from the fit between objective structures embodied in the societal relations that members of society continually produce and reproduce, on the one hand, and the subjective structures that allow them to see the objective structures for what they are, on the other hand. This homology of the objective and subjective structures is the very reason that shields the former from questioning by the latter. It is precisely because interest and motivation talk are prevalent in society that educational psychologists can study these phenomena, and they can do so because (a) the interests and motivations constitute objective social facts and (b) they themselves have acquired the competencies to detect interests and motivations in everyday talk. Our method was developed in part to counter the danger that arises from simply reifying the phenomena that we see because we have been previously shaped by these very phenomena. Instead, discursive, critical, and cultural-historical psychologists focus on how such things as interests and motivations are mobilized as resources during and for the purposes of talk-in-interaction.

The approach that we describe here allows researchers to make thematic the differences between interests and motivations that exist when these are objects of educational psychological research (e.g., talk at a conference, talk in research articles such as the ones cited here by Suzanne Hidi or Andreas Krapp), when they constitute the topic of talk in interviews (e.g., the ones from which the present episode were extracted), or when they are used as discursive resources in everyday life situations, such as when high school or university students talk with their peers about what they want to do after graduation. Our approach is intended to provide a set of tools that allow educational psychologists to better

understand interests and motivations, not as internal features of some person, but as resources for the conduct of social life. Interests and motivations no longer are the free-floating phenomena that they have been—as something that comes to be attached to or is had by singular individuals—but that are societal phenomena through and through. This understanding opens up a new horizon that allows us to rethink our relationships with others, with the society, and with the whole lifeworld in a more sophisticated way and so problems—such as using the idea of individual interests as a tool for the producing the ruling relations of society—can be better addressed.

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APPENDIX TRANSCRIPTION CONVENTIONS

In this chapter, we draw on transcription conventions common to conversation analysis enhanced by transcription features specific for researchers interested in marking prosody (Selting et al., 1998). The transcription is neither grammatical—see punctuation—nor consistent with spelling rules but attempts to exhibit the sounds as produced.

Feature in context	Explication
(0.25)	Time in hundreds of seconds
(.)	Pause less than 0.10 seconds
((draws line))	Double brackets surround transcriber comments.

hh, uh	Outbreath, each "h" corresponding to 0.1 seconds.
survi:ve	Colon indicates lengthening of phoneme, each colon corresponding to 0.1 seconds.
r=one	Equal sign means "run-in" of the phonemes or "latching" of different speakers, meaning no pause between phonemes.
004	<u> </u>
084 < <p>point [he:re]</p>	Square brackets in consecutive turns indicate extent
085 [than with]	of overlapping speech, features.
;.,?	Punctuation marks indicate movement of pitch toward end of utterance segment, down, strongly
	down, up, and strongly up, respectively
< <rall>first></rall>	"rallentando," increasing speech rate.
`b `clear, ^okay	Diacritics indicate movement of pitch: downward, upward, and up-downward contour of syllables that follow.
OR	Capital letters indicate louder than normal speech.