

Psychotherapy Research, 2014

Published online: 11 Feb 2014

<http://www.tandfonline.com/doi/full/10.1080/10503307.2013.879619>

Prosody and empathic communication in psychotherapy interaction

Elina Weiste & Anssi Peräkylä

Finnish Centre of Excellence in Research on Intersubjectivity in Interaction,

University of Helsinki

Abstract

Objective: To investigate the prosodic aspects of therapists' empathic communication.

Method: 70 audio-recorded sessions of cognitive psychotherapy and psychoanalysis were analysed using conversation analysis.

Results: Two interactional trajectories where the therapists either validated the clients' emotions or challenged them were identified. The difference between these trajectories was not evident in the lexical composition of the therapists' formulations that initiated the trajectory. However, the prosodic features of the formulation already anticipated the direction of the trajectory. The formulations leading up to the validating trajectory were characterized by prosodic continuity and formulations leading up to the challenging trajectory by prosodic disjuncture. The choice between continuous and disjunctive prosody was a key resource for therapists in the construction of formulations as either validating or challenging.

Conclusions: The present article emphasizes the relational aspects of psychotherapy communication by considering the prosodic features of the therapist's talk in relation to the prosody of the client.

Keywords: emotion in therapy; psychoanalytic/psychodynamic therapy; cognitive behavior therapy; qualitative research methods

Introduction

In both clinical theory and empirical research, it is often pointed out that *how* therapists speak to the client is as important as *what* they say (e.g. Bachelor, 1988; Knoblauch, 2000; Rogers, 1957; Shapiro, 1968; Tepper & Haase, 1978). Prosody – the musical attributes in speech such as *pitch* (the perception of the relative frequency of voice), *intonation* (emerging pitch movement during voiced talk), *pitch accent* (a pitch movement on a stressed syllable), *rhythm* (organization of speech into regular intervals of time) and *loudness* (perception of the overall vocal intensity with which speech is produced) (Couper-Kuhlen & Selting, 1996; Sczcepek Reed, 2011) – is a key part of this ‘how’. However, the prosodic aspects of therapists’ speech have been surprisingly seldom the topic of psychotherapy research (for important exceptions, see Knoblauch, 2000; Rice & Kerr, 1986; Rice & Wagstaff, 1967). In this study, we will explore the topic by utilizing conversation analysis. Conversation analysis (CA) is a qualitative method for studying social interaction. It focuses on the sequential organization of naturally occurring interaction, seeking to explain how participants in interaction achieve action, meaning and intersubjective understanding through the composition and placement of their utterances (Shegloff, 2007). In CA, prosody is seen as one of many sets of non-verbal resources and practices through which participants interactively produce talk-in-interaction (Shegloff, 1998, p. 235). The prosodic features of speech are studied in relation to the prosodic features set by the previous speaker and in the sequential contexts in which they emerge (see e.g. Couper-Kuhlen & Selting, 1996; Sczcepek Reed, 2006; Wells, 2010).

In the present study, we will examine the prosodic aspects of the therapist’s utterances that convey empathy, i.e. show the therapist’s understanding and appreciation of the client’s emotion. It is generally agreed that the empathy of the therapist plays a key role in producing the beneficial effects of psychotherapy (e.g. Elliott, Bohart, Watson, & Greenberg,

2011; Horvath, 2001; Lambert & Barley, 2001; Marziali, Marmar & Krupnic, 1981). In their recent meta-analysis of the relation between empathy and psychotherapy outcome, Greenberg and his colleagues (2011) found that empathy is a moderately strong predictor of therapy outcome. Especially the clients' perceptions of feeling understood by their therapists firmly relate to outcome. Thus it is crucially important for psychotherapists to make efforts to understand their clients, and to demonstrate this understanding through responses that address the perceived needs of the client (ibid., p. 47).

In psychotherapy research, empathy is often broken down to two aspects: the cognitive side of understanding the client's experiences, and the more direct emotional process of experiencing the client's feelings (see e.g. Bohart & Greenberg, 1997; Greenson, 1960; Rogers, 1975). This more direct aspect of empathy is often linked to non-verbal communication. For example, in an early study by Fiedler (1950, see also Rogers, 1957) items such as "*the therapist's tone of voice conveys the complete ability to share the patient's feelings*" scored high in the judges' ratings of an expert therapist's work. Since then, several studies have stated that non-verbal factors are crucial in producing empathy (e.g. Doodley, 1978; Fretz, 1966; Shapiro, 1968; Tepper & Haase, 1978). In a classic study, Haase and Tepper (1972, p. 219) showed that in communicated empathy, verbal and non-verbal elements (vocal intonation and facial expressions) operate as a complex system, highlighting the overwhelming importance of non-verbal cues in the communication process.

Barret-Lennard (1981) has presented an operational definition of empathy in a cyclical model of empathic interaction, where interpersonal empathy is considered a sequential process of three phases: the therapist's "*resonation*" with the client's experiences (the therapist's experience), *expressed empathy* (the therapist's communicating of empathy) and *received empathy* (the client's experience of being understood). Bachelor (1988) has further extended the concept of received empathy and found four distinct styles of client-

perceived empathy: 1) *cognitive empathy* (recognizing the client's experience, state or motivation), 2) *affective empathy* (participating in the client's ongoing emotional state), 3) *sharing empathy* (disclosing personal opinions or experiences bearing on the client's ongoing communication) and 4) *nurturant empathy* (the therapist's supportive, security-providing or totally attentive presence). Furthermore, several studies have emphasized the behavioural aspects of empathy (expressed empathy), and various models for the therapist's empathic communication and their relation to client's ratings of how their feelings are understood have been developed (e.g. Barkham & Shapiro, 1986; Elliott et al., 1982). However, defining, coding and rating prosodic features in therapists' talk have turned out to be complicated. For example in a study by Elliott et al. (1982) the voice quality component did not reach adequate reliability, due to too subtle cues, as raters used their global impressions of the counselor. To conclude, earlier research clearly shows the importance of the non-verbal aspects of empathic communication in psychotherapy, but the systematic study of prosodic elements in therapists' responses has turned out to be difficult with quantitative methods.

In recent years, interaction that can convey empathy have also been of interest in the field of conversation analysis. Several CA studies have suggested that *formulation* is one conversational action that regularly serves as a vehicle for empathetic responses (see e.g. Beach & Dixon, 2001; Hepburn & Potter, 2007; Pudlinski, 2005). In a formulation, one speaker (in this case, the therapist) shows his or her understanding of the other's (in this case, the client's) preceding utterance by proposing a rephrased version of it (see Heritage & Watson, 1979, p. 129). In the present study, our focus is on the therapist's formulative utterances.

While prosody in empathetic communication has avoided the gaze of psychotherapy researchers, both experimental psychological studies and interactional studies of everyday conversation offer a wealth of observations on prosody in emotional communication. There is a long tradition of experimental research into the vocal communication of emotions in

psychology (see Scherer, 2003, for an overview), as there is in phonetic-phonological research (see Couper-Kuhlen, 1986, for an overview). Psychological research on the vocal expression of emotion has specified the acoustic patterns that subjects in experimental settings associate with different emotions, also showing differences between the accuracy of acoustically based emotion recognition (e.g. sadness and anger are recognized more accurately than disgust and joy) (see Goudbeek & Scherer, 2009).

Within the last fifteen years, the study of prosody has also become a central area in CA (e.g. Barth-Weingarten, Reber & Selting, 2010; Couper-Kuhlen & Ford, 2004; Szczepek Reed, 2011). Research in this field has started to specify the role of prosodic resources in expressing emotion in naturally occurring spoken interaction (see Peräkylä & Sorjonen, 2012). Some studies, using everyday conversations as data, have systematically investigated the *prosodic design of empathic utterances* (see e.g. Couper-Kuhlen, 2012; Selting, 1994, see also Heritage, 2011 for empathic moments in interaction). Most recently, Couper-Kuhlen (2012) explored verbal and prosodic means of conveying empathy in response to the display of anger and indignation in every-day complaint stories. She noted that verbal expressions of empathy (such as verbal claims of understanding) were accompanied by prosodic matching (i.e. the second speaker mirroring the prosodic features of the previous speaker's utterance) or upgrading (i.e. the second speaker increasing the intensity of the rise in pitch presented in the first speaker's utterance), while "non-empathetic" verbal responses (such as factual follow-up questions) were prosodically downgraded (i.e., produced in less intensity or a lower pitch).

In a recent study published in Finnish, Stevanovic and Kahri (2011) elucidated some CA insights into the relational aspects of prosody. While their focus is not explicitly on empathy, their results address closely related phenomena. In their view, utterances that respond to a co-interactant's utterances can either foreground the respondent's own agency (*me-actions*) or they can foreground the initial speaker's agency (*you-actions*). Prosody is a key resource in establishing an utterance as a *me-* or *you-*action. *You-*actions are produced

with a lower intensity and voice and more level intonation than the previous speaker's turn, and they typically continue the intonation and/or rhythm of the previous turn. With that kind of prosodic design, the actor stays focused on his/her partner. *Me*-actions are produced with a higher voice, louder volume and more variation in the intonation than the previous speaker's turn. Furthermore, there is typically dissimilarity between the turns in intonation and/or rhythm. With that kind of prosodic design, the actor, according to Stevanovic and Kahri, foregrounds his/her own agency.

Present study

In the present study, we seek to extend the insights of recent conversation analytical research on prosody to the study of psychotherapy. The novelty of our approach, in comparison to previous psychotherapy process research, lies in our effort to study the prosody of the therapist and client *in a relational way*: by considering the prosodic features of the therapist's talk in relation to the prosody of the client, and vice versa. We will focus on formulations which have been identified as conversation actions that can deliver empathic responses (see e.g. Beach & Dixon, 2001; Hepburn & Potter, 2007; Pudlinski, 2005). In our study we will ask the following question: (1) Which interactional trajectories appear in the therapist's empathic formulations? (2) How are these distributed? (3) What are the prosodic features of the therapist's empathic formulations – as seen in relation to the prosody of the client's preceding utterance?

Method

Conversation analysis was founded by Harvey Sacks in the 1960's. It is based on a theory of human social interaction inspired by Erving Goffman's (1983) idea that face-to-face interaction comprises an autonomous order of social organization. CA is closely connected to ethnomethodology (Garfinkel, 1967), which seeks to explain the processes of inference upon which the everyday social order is based. CA was first developed in the study of everyday conversation, but it has since been applied to a wide spectrum of institutional interaction, and

also in recent years increasingly to psychotherapy (Drew & Heritage, 1992; Peräkylä, Antaki, Vehviläinen & Leudar, 2008). Conversation analysts qualitatively examine video or audio recordings of naturally occurring interactions to unravel the practices through which the meanings of social actions are constructed in a moment-by-moment process. A key idea is to see utterances in their sequential context, i.e. to study the ways in which utterances arise from previous utterances and how they control subsequent utterances (e.g. Maynard & Peräkylä, 2003; Schegloff, 2007). In psychotherapy research too, the contribution of CA has been in understanding psychotherapeutic interaction sequentially, in showing the ways in which anything that a therapist or a client does, is performed and understood in the context of the previous speaker's turn (Peräkylä, 2013). CA studies of psychotherapy have revealed the recurrent sequences of utterances through which therapeutic work is accomplished (ibid.). The current study will expand the scope of CA in psychotherapy by studying prosody in psychotherapy interaction.

Analytic strategy

Conversation analytic research procedure starts from transcription (see Hepburn & Bolden, 2013; Jefferson, 2004 and transcription symbols in a footnote). Besides displaying the words that are said, the transcription also indicates the intonation and the voice qualities of the speakers, the pauses within and between utterances, as well as overlapping talk. Thus, the level of detail in transcripts makes it possible for readers who are familiar with this notation to “hear” how the words and utterances are said. In many more recent studies – as in the study reported here – the transcription of intonation has been supplemented by acoustic software that measures the prosodic parameters of key sections of the data under examination.

In the analysis of data, the transcripts and acoustic measurements are used alongside the original audio/video recordings. The analysis procedure continues with recurrent listening to the data and the identification of reoccurring interactional patterns e.g. specific types of

sequences or features in the composition of utterances in the data (see Sidnell, 2013). After the identification of such patterns, all instances are collected from the data at hand. Then they are qualitatively analysed case-by-case to specify the nature and variation of the phenomenon in question. Attention is paid to the content, lexis and prosodic design of the utterances and the implications for social action and social relations that these have.

In the present study, during the first stages of the data analysis, selected segments of the recordings (involving clients' emotional descriptions and the therapists' responses to them) were regularly investigated in group meetings (data sessions) attended by the members of the research group led by the second author. In the data sessions, a consensus of the analysis on such segments was sought among the trained CA researchers. This is a standard CA means of quality assurance for data analysis. However, the standard CA methodology does not require analyses of all of the data instances by more than one trained analyst (for a general outline of analytic procedure in CA, see Sidnell, 2013). The validity of the analysis is controlled, ultimately, by presenting instances of the data in this research report, and by demonstrating the interactants' own interpretations (made public in their actions) concerning the meaning of the preceding talk (Peräkylä, 2011/b; Sacks, Schegloff & Jefferson, 1974; Sidnell, 2013).

Data

The data for this study come from four different dyads; one therapist with two clients from psychoanalysis and one therapist with two clients from cognitive psychotherapy. The first psychoanalytic dyad (PSA1) recorded 20 consecutive sessions approximately three years after starting the therapy. The second dyad (PSA2) recorded 21 sessions but one of the recordings was mainly failed. These recordings also took place approximately two to three years after starting the therapy. In Finland the average length of psychoanalysis is five to six years so these recordings are from the "middle part" of the therapy process. As one

psychoanalytic session lasts 45 minutes the psychoanalytic data examined for this study involve approximately 30 hours of interaction.

To increase the generalization of our findings, we also used data from another therapist, who represents a different therapy approach. The first cognitive therapy dyad (CT1) recorded 57 sessions. These recordings cover a time period of last 18 months of a therapy process of two years. The second cognitive therapy dyad (CT2) recorded 113 sessions during a time period of two years and nine months. In this study, we calculated the “middle point” of both of these therapies and included that session and seven consecutive sessions before and after that session (15 sessions from both CT dyads). As one cognitive therapy session lasts 60 minutes the cognitive therapy data examined for this study involve totally 30 hours of interaction. Thus, we have the same amount of data from both therapy approaches and also approximately from the same part of the therapy processes. The data were collected in Finland between 1999 and 2009 by the research group lead by the second author at University of Helsinki. Outcome data for the results and success of the therapy processes are not available from any of these therapies.

The therapists were well-trained, experienced private practitioners. The cognitive therapist (female, in her fifties) is a longstanding member of the Finnish Association for Cognitive and Behaviour Therapies. This association includes both behaviourally focused and more constructivist strands of cognitive therapy, and it is a member of the European Association for Behavioural and Cognitive Therapies (EABCT). She also has long experience in training cognitive therapists. The psychoanalyst (male, in his sixties) is a longstanding member of the Finnish Psychoanalytic Society. This association includes both the classical Freudian and neo-Freudian (such as object relations or self-psychological) psychoanalytic schools and is a member of the International Psychoanalytic Association (IPA). Apart from his psychoanalytic practice, the psychoanalyst in our data has served as a trainer of family

therapists. These therapists were recruited to the study due to their connections to the academia and research friendliness.

We asked the therapists participating in the study to recruit clients suffering from mood or anxiety disorders who were not psychotic. The therapists also considered the effects that the recording would have on the therapy and recruited clients whose therapy would not be disturbed by the recording of the sessions (for example, by excluding clients with a paranoid personality). Both of the clients in cognitive therapy were women in their twenties who suffered from depression. In addition, one also suffered from panic attacks (CT1). During the therapy process her problems were discussed in terms of lack of security and inversion of aggression (from other people to the client herself). The other client's (CT2) therapy process was focused on the critical and unaccepting relationship that the client had towards herself and other people. In psychoanalysis, one of the clients (PSA1) was a man in his forties and the client (PSA2) a woman in her sixties. As is typical for psychoanalysis, the discussions did not focus as much on particular symptoms as on the life histories and current everyday experiences of the clients. Difficult childhood events were investigated in both psychoanalyses: for one client the death of a sibling and for the other separation from her biological parents. The repercussions of these events in the clients' current experience, feelings of insecurity or difficulties in grieving, were repeatedly discussed in the sessions. Informed consent was obtained from the clients and the therapists. All names and other details making possible the identification of the participants have been altered in the text and data excerpts.

Analytic procedure

The analysis of the data was carried out through four stages. The first author, audited by the second author, is responsible for all of these stages.

First stage: Unitizing sequences of therapeutic talk

In order to study the prosodic aspects of the therapists' empathic responses, we first needed to find "empathic sequences" in our data. To find such sequences, we focused on utterances in which the client expresses an emotional experience. In those utterances the clients *express "here and now" emotions* (i.e. by crying), or they *describe how they feel about somebody or something*. Thus, the selection of the sequences was first based on the content of the client's utterances. When we examined the therapists' responses to the client's emotional experience, we found that the therapists recurrently *formulated* the clients' emotions i.e. showed understanding of the client's previous turn by proposing a version of it (Heritage & Watson, 1979; for an overview of formulations in psychotherapy, see Antaki, 2008; for other types of therapist response to the client's emotional experiences see Voutilainen, Peräkylä & Ruusuvuori, 2010/a).

Second stage: Selecting sequences elaborating on client emotions

In the second stage of analysis, we collected all the sequences in which the client described an emotional experience and the therapist formulated that emotion. Such formulations were identified on the basis of their content (the client's emotion as its referent) and lexical construction. The lexical construction of the formulations shows that the therapist paraphrases what the client is feeling (*you're feeling X, so you feel X, so that you're X*). At this stage of the analysis, the formulation sequences were also grouped on the basis of the emotions that the clients conveyed in their descriptions.

Third stage: Orienting towards the meaning of emotions

In the third stage of analysis we explored how the participants oriented themselves to the meaning of the sequences comprised of the client's description of emotions and the therapist's formulation sequences. At this stage of the analysis, we focused on what happened

immediately after these sequences by examining the clients' responses to the formulations and the therapists' utterances that following those responses. In these utterances, the therapists make something out of the formulations by developing the topics (i.e. the client's emotions) further (see Peräkylä, 2011/a). In the results section below, we will begin by describing two different interactional trajectories through two data examples of how the clients orient to the therapists' formulations and what the therapists do after the clients' responses. These examples were chosen because they illustrate the phenomena that were found through the data in a clear and accessible way. After that we will show the distribution of these trajectories across our data.

Fourth stage: Analysing prosodic aspects

In the fourth stage of analysis, we uncovered the prosodic features of each of the trajectories. To verify our initial hearing-based judgments of the prosody of the participants' talk, PRAAT 4.4.28 software was used to measure, compare and represent prosodic events in given conversational contexts. PRAAT is scientific computer software for the analysis of speech in phonetics which generates a graph of waves indicating intonation, intensity and other complex details (Boersma & Weenink, 2013). All the pitch contours produced by PRAAT have been manually checked.

The most important parameter in our analysis is *intonation*, which PRAAT presents as a wave form, based on the vibration of opening and closing cycles of the vocal folds in the larynx per second (see also Szczepiek Reed, 2011). The pitch contours that are presented in this paper are plotted on a logarithmic scale. The plots are, however, scaled in Hertz (Hz) for ease of reference. Pitch values are interpreted in the light of a previous speaker's turn, also considering the speaker's individual pitch range, i.e. the pitch span between the speaker's lowest and highest pitch values, defined on the basis of a representative sample of approximately 3 min of each speaker's talk. The speaker's voice range (physiologically

determined pitch span) is also considered, for instance, paying attention to the gender of the speaker. Because we have both male and female participants, we have used different scales for each gender to ensure the comparativeness of the figures. The pitch scale is 100-300Hz for woman and 50-150Hz for men, which is one octave lower than the “female scale”. Both scales are selected to cover the individual pitch ranges of all male or female speakers in our data. In the figures below, *intensity contour* is also presented, to show the variation in loudness of the voice measured in decibels (dB) during the time of the given turn. However, because loudness is generally agreed to be a difficult prosodic parameter to analyse, both because of the technical implications (varying distances from the microphones) and because of the challenges in separating its perception from other features, this analysis is ancillary for indicating changes in pitch (see *ibid.*, 180).

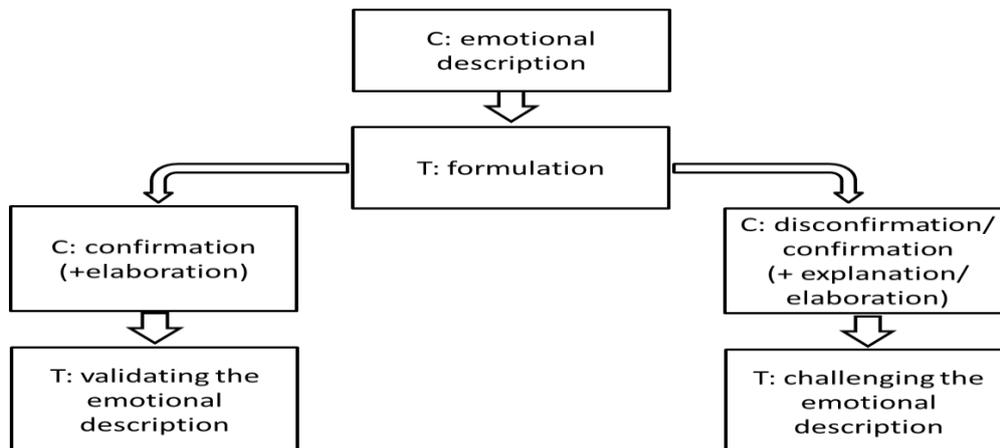
In the results section below, we will show two prosodic patterns that we found occurring with the interactional trajectories. We will describe these patterns through the same data examples that we first use to illustrate the trajectories. The data are transcribed according to CA conventions (Hepburn & Bolden, 2013; Jefferson, 2004), but for the sake of readability, we have simplified the notation of the excerpts presented in this paper. The excerpts have been translated from Finnish by the authors. In the PRAAT figures, the original Finnish transcriptions are provided alongside the English translations. The translations in some of the figures deviate from the translations presented in the excerpts: in that they are word-by-word (even if the word order in Finnish differs from the English translations) to show the exact location of the prosodic features in question.

Results

Diverging trajectory

Two different interactional trajectories resulted from the therapists' formulations of the clients' description of emotions. The difference between the trajectories became evident as the sequences unfolded and concerned the way in which the therapists spoke about the clients' emotions after the clients had responded to the initial formulations (see Table 1). In the first type of trajectory the therapists confirmed and elaborated upon the clients' perspective on their experiences, thereby validating their emotions. In the second type of trajectory, the therapists changed the perspective in their subsequent talk so that rather than attending to, and validating, the clients' description of emotions *per se*, they evaluated or even challenged what the clients had said (for the difference between therapist's supporting and challenging strategies, see Ribeiro et al., 2012).

Table 1 Two diverging trajectories



In the following sections we will show one data example of both of these trajectories.

Validating trajectory

In the validating trajectory, the therapist's formulation of the client's emotion is first followed by the client's confirmation, whereafter in his/her next utterance the therapist stays focused on client's emotion, treating the emotion as legitimate and understandable, thereby validating it. The emotions that were validated in our data were sadness, shame, fear and anxiety. The following excerpt is example of the validation of sadness.

The example excerpt comes from cognitive psychotherapy. The client has very emotionally talked about her horse, which she needed to give away. The impression given by the audiotape is that she is in tears and trying to pull herself together to be able to continue the talk. Thus, the sad feeling that the client is expressing in that moment is very evidently present in the situation and thus observable to the therapist. Before the excerpt shown below, they have talked about the new owners of the horse. The client has explained how she chose the owners very carefully because the horse was so difficult to handle. In the first lines (1-3), the client refers to the new owners.

¹Excerpt 1 CT2

1 C: otherwise there could be problems if (.) if (.)
 2 the person is not so (0.2) good with horses (.) th-

¹ T:	Speaker identification: therapist (T), client (C)
→	Line containing phenomenon discussed in text
[]	Overlapping talk
(0.0)	Pause: silence measured in seconds and tenths of a second
(.)	A pause of less than 0.2 second
°word°	Talk lower volume than the surrounding talk
.hh	An in breath
#word#	Spoken in a tearful voice
((word))	Transcriber's comments
<u>word</u>	Accented sound or syllable
-	Truncation
:	Lengthening of a sound
?	Final rise intonation
,	Final level intonation
.	Final falling intonation

- 3 (.) .hh the person who would get one ((horse)) °so°,
- 4 (0.2)
- 5 T: mmm,
- 6 (2.2)
- 7 T:→ so the biggest sorrow is that you, (0.2)
- 8 .hh °have° (0.2) lost her that °you can't be with her°.
- 9 C: yes. (0.4) °°#that's the way it is#°°.
- 10 (6.2)
- 11 T:→ °and she was like a force of life°,
- 12 (4.2.)
- 13 T: °°in a [way°°.
- 14 C: [#yes (.) and she was a part of (.)
- 15 my °dreams° ((continues))

The therapist first receives the client's description with *mm*-particle (line 5) and then formulates the client's sorrow by describing her loss (lines 7-8). The formulation is audibly affective: the therapist pauses her speech, inhales deeply (line 8) and uses an extreme-case formulation (Pomeranz, 1986), *the biggest sorrow* (line 7). The client minimally confirms the therapist's formulation with a *yes*-particle (line 9). After a short gap she whispers silently "*that's the way it is*", whereby she seems to convey the feeling of being unable to change the situation and the unfairness of her loss. During the long pause (line 10), the client is audibly crying, which suggests that she has perceived the therapist's turn as a sign of validation and

thus permission to cry (see Hepburn & Potter, 2007). In line 11 the therapist explicitly validates the client's loss by stating that the horse could have been seen as a "*force of life*" for the client. The validating turn is built as an extension of the client's turn by using *and*-preface at the beginning of the turn. Through this utterance, the therapist invites the client to continue her reflections on her experience (see Voutilainen et al., 2010/a). In line 14, the client continues, in tearful voice, by describing her dreams connected to the horse.

To sum up, in this section we have analysed a formulation sequence where the therapist validated the emotional experience described by the client. The therapist's formulation was first followed by the client's confirmation, after which the client remained in the same emotional state (as indicated by her crying). Thus, it seems that the client heard the formulation as a sign of validation of her emotions. After the client's response, the therapist, in her next utterance, indeed validated the client's emotions.

In the next section, we will show an example of therapist's formulation that is lexically rather similar to the one we have just seen (showing the therapists' understanding of the client's emotions). However, as we will demonstrate the trajectory of interaction that this formulation initiates lead not to the validation of the client's emotions but to the evaluation and challenging the client's interpretation of those emotions.

Challenging trajectory

In the previous case, the therapist first formulated the client's emotion and then, after the client's confirming response, stayed focused on that emotion, thereby validating it. In the following case, the therapist also receives the client's description of her emotions by formulating the emotion that the client has expressed. After the client's response of confirming or rejection, the therapist, however, takes a direction different from the one seen above by evaluating or even challenging the client's description and understanding of her emotions. The client's emotional descriptions that were challenged in our data were sorrow,

anger, anxiety and fear. In the following excerpt, the therapist explains the client's experience as being fear, although the client's previous description is mainly about sorrow.

In Excerpt 2 (taken from psychoanalysis), the client has, in a very emotional way, described her experiences relating to a recently deceased family member, remarking on the good intentions she thought this person had. The therapist has validated the client's experience, using wording, however, that the client considered as *too* positive. The therapist has subsequently used another word choice referring to the previous situations by saying that “*you felt it as a bit of exaltation*”² (the client refers to this in line 4). After that the client has continued her description about a dream in which she thought that the dead relative was represented in the form of a noble animal. The first lines (1-5) are the last part of the client description.

Excerpt 2 PSA2

- 1 C: that he was a human being of course I don't want to
 2 (0.3) so (0.7) he was not a saint (0.5) sometimes he
 3 had really stupid ideas, (0.4) that no no, (0.5)
 4 I don't want to exalt him like you just .hh I mean
 5 like (0.5) to exaggerate but (.) for me he was.
 6 (0.4)
- 7 T:→ so that you are afraid of that exaltation.
 8 (1.4)
- 9 T: that is a one (0.5) [observation here,
 10 C: [well y:es. (0.3) yeah?
 11 (1.5)
- 12 C: well, (1.0) .hhh well perhaps I mean that (1.0) that

² The Finnish word *hymistellä/hymistely* is translated in here as *exalt/exaltation* although the original Finnish word contains also a nuance of deliberately seeing only the good sides of the issue at hand.

13 when people are dead (0.5) so then (0.6) everyone is
 14 just exalting them that (0.3) a bit like they were
 15 some kind of (0.4) divine beings (0.3) one could
 16 think sometimes when people speak about them,
 17 (0.4)
 18 T:→ could it nevertheless be so that you are referring to
 19 (0.4) then (.) what comes to your mind maybe is (0.4)
 20 your mother's way (0.3) of relating to (0.3) like
 21 (0.3) with unreserved adoration to .hhh let's say
 22 to gypsies and other of the kind.

In her previous turn the client has described her feelings regarding the recent death of her family member. In her description she has displayed sadness and grief. The therapist, however, formulates (line 7) the client's feeling as being afraid of exaltation. In line 8, the client remains silent, which might already indicate that she relates to the formulation as being somehow problematic. In line 9 the therapist notices the client's lack of agreement by positioning himself as an observer without primary access to the client's experience. The client's response in lines 10-16 is still produced with several markers which indicate that the client regards to the therapist's formulation as problematic (indicated by the turn beginning *well* / Finnish *no*³, the hesitation like lengthening vowels, pauses and sighs, lexical markers of uncertainty and providing an explanation of her earlier description, see Pomeranz, 1984). In lines 18-22 the therapist connects the client's fear of exaltation to the client's mother. Thus, in Excerpt 2 the therapist approaches the client's description of her emotions differently from the previous excerpt. The therapist does not preserve the client's perspective on the described emotion, which would thereby validate it; rather, he states his own interpretation of it.

³ Raevaara (1989) has stated that in Finnish *no*-particle in the beginning of the reactive turns is related to the expressions of avoidance and/or disagreement.

To conclude, we have described two rather different trajectories of interaction ensuing from the therapists' formulations. The difference became apparent in the therapists' utterances after the clients' responses to the formulations. In the *validating trajectory*, the therapists validated the emotion that the client had expressed by retaining the client's perspective and staying focused on it. The clients respond to these formulations as permission to stay with the feeling. Thus, we have suggested that in these sequences the therapist delivers empathic responses. In the *challenging trajectory*, the therapists changed the perspective so that rather than attending to the client's description of emotion *per se*, they evaluated and even challenged what the client had said. With the formulations that initiated a challenging trajectory, the clients often only partially agreed or even disagreed, thereby indicating their orientation to the therapist's attempt to introduce a challenging rather than validating stance.

The analysis so far has considered diverging formulation trajectories without reference to their distribution. Next we will move on to show the frequency of both types of trajectories in our data.

Distribution of trajectories

After a detailed description of the trajectories, we examined their distribution across our data of 70 therapy sessions. The results are presented in Table 2.

Table 2 Distribution of diverging trajectories

	Validating trajectory	Challenging trajectory	Other	Total
Cognitive psychotherapy	18	13	7	38
Psychoanalysis	16	12	5	33
Total	34	25	12	71

From our data, we found 71 sequences in which the therapists formulated the clients' description of their emotions: In 48% of those sequences, the therapists validated the

clients' emotions and in 35% the clients' emotional descriptions were challenged. The validating and challenging trajectories were rather evenly divided between the two types of psychotherapy: 18 validating sequences came from cognitive psychotherapy and 16 from psychoanalysis. Furthermore, 13 challenging sequences were from cognitive therapy and 12 from psychoanalysis.

12% of the formulation sequences in our data did not belong to either of the trajectories (group "other" in Table 2). In these sequences the therapist considered the client's description incomplete, and instead of validating or changing the client's perspective he/she invited the client to continue the description. However, because our concern is the therapist's empathic utterances, those sequences were not examined in this study.

The trajectories differed in how the clients responded to the therapists' initial formulations. In validating trajectory, the clients mostly agreed with the therapist's formulations (n=30), in only four sequences the response was a disagreement (for instance it changed the direction of the formulation with particles like *but/or/however* or contained hesitation, lexical markers of uncertainty, long explanations and so on, see Pomeranz, 1984). In contrast, in the challenging trajectory 19 cases contained responses of disagreeing, while six agreed with the therapist's formulation.

There was also a difference in the emotions that the clients conveyed in validating and challenging trajectories. In the validating trajectory, the emotion that the clients and/or the therapists most often (n=22) referred to was sadness. In addition, a few cases of shame (n=3), disappointment (n=3), fear (n=2) and anxiety (n=2) were formulated. In the challenging trajectory the client's emotions were discussed most often in terms of anxiety (n=13), anger (n=6), fear (n=4) and sadness (n=2). We do not have cases in our collection where the client expresses anger and the therapist validates it (however, these kind of sequences can also be

managed through other interactional means, see e.g. Voutilainen, Peräkylä & Ruusuvuori, 2010/b for validating and arousing the missing anger of the client).

So far we have described the difference between the validating and challenging trajectories. In the next section, we will move on to look at the prosodic features of these trajectories.

Prosodic features in diverging trajectories

After identifying the trajectories, we analysed the prosodic features of each instances in our data. Our focus is not on statistical differences but on a qualitative analysis of how prosody can be used as a resource in the display of empathy in psychotherapy interaction. The prosodic features of validating and challenging trajectories are presented in Table 3.

Table 3 Prosodic features of validating and challenging trajectories

Prosodic features compared to the client's preceding talk	Validating trajectory	Challenging trajectory
Continuing the intonation / rhythm	Yes	No
Pitch level	Lower	Higher
Pitch span	Narrower	Wider
Intensity	Quieter	Louder

In the validating trajectory the prosody of the therapist's formulation contained at least two of the following features: it continued the intonation / rhythm of the client's preceding turn, it was produced with a lower and/or quieter voice and the pitch span was narrower than in the client's previous turn. We call this pattern *prosodic continuity*. When the therapist evaluated or challenged the client's emotional descriptions there was a discontinuation in intonation and rhythm, the therapist's voice was higher and/or louder and the pitch span wider than in the client's previous turn. We call this pattern *prosodic disjuncture*. In the following, we will consider these prosodic patterns in more detail.

Prosodic continuity

In this section we will demonstrate the prosodic features of the instance of a validating trajectory that was analysed above. As we will indicate, these prosodic features create the impression that the therapist has not started anything new but rather is aligning herself with, and is receptive to, what the client has done. The focus lines of the prosodic analysis of Excerpt 1 are provided below.

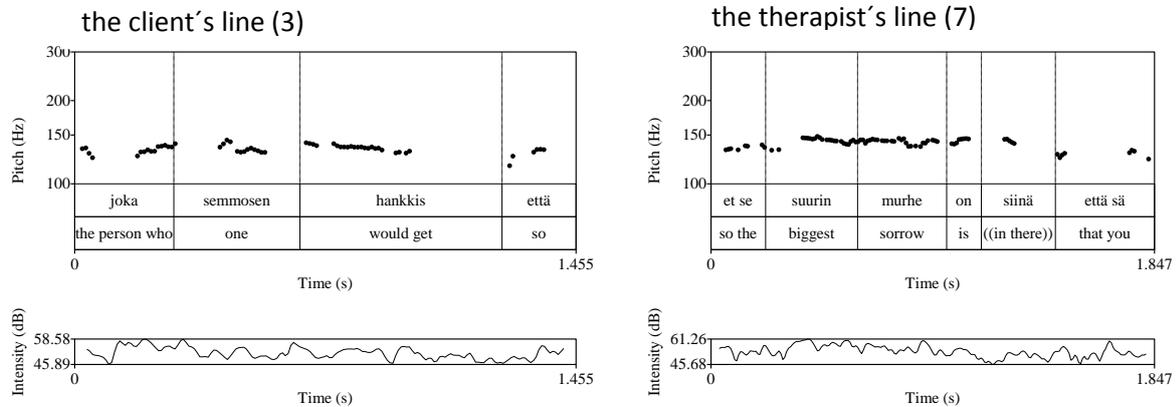
Excerpt 1 CT2 lines 3-7

3 C: (.) .hh the person who would get one ((horse)) °so°,
 4 (0.2)
 5 T: mmm,
 6 (2.2)
 7 T: so the biggest sorrow is that you, (0.2)

The pitch in the therapist's formulation (line 7) continues the pitch level of the last sound in the client's turn in line 3 (see Figure 1). The pitch span is very similar in both of the turns and it is also very narrow, approximately 3 semitones in both of the turns. The therapist's pitch is low compared to her individual pitch range (122-240Hz), and she almost reaches her baseline. For an adult woman this can be considered very low, the voice range of women is typically between 140 and 400Hz (see Szczepek Reed, 2011, p. 80). The therapist's validating utterances in lines 11 and 13 are produced so quietly and in such a whispering voice that PRAAT was unable to capture the intonation of these turns.

Figure 1

The intonation and intensity contours in the client's line (3) and the therapist's line (7) in Excerpt 1



To sum up, in this section we have shown an example of the prosodic analysis of the validating trajectory. The therapist's orientation to "stay with the client's feeling" was first manifested in the therapist's formulation, and it became even more evident in the therapist's following validating utterance. In both of the turns, similar prosodic design (a low, quiet and level voice, matching the features from the client's turn) was used, creating the impression of prosodic continuity between the client's talk and the therapist's utterances.

In the next section, we will move on to describe the prosodic features of therapist formulations which lead not to the validation of the client's emotions but to the evaluation and challenging the client's interpretation of those emotions.

Prosodic disjuncture

Formulations which initiate the challenging trajectory are sequentially and lexically rather similar to the one we have just seen (showing the therapist's understanding of the client's emotion) but the prosody of these sequences is different. We will analyse the prosodic features of the previous instance of a challenging trajectory in Excerpts 2.

Excerpt 2 PSA2 lines 5-7

5 C: like (0.5) to exaggerate but (.) for me he was.

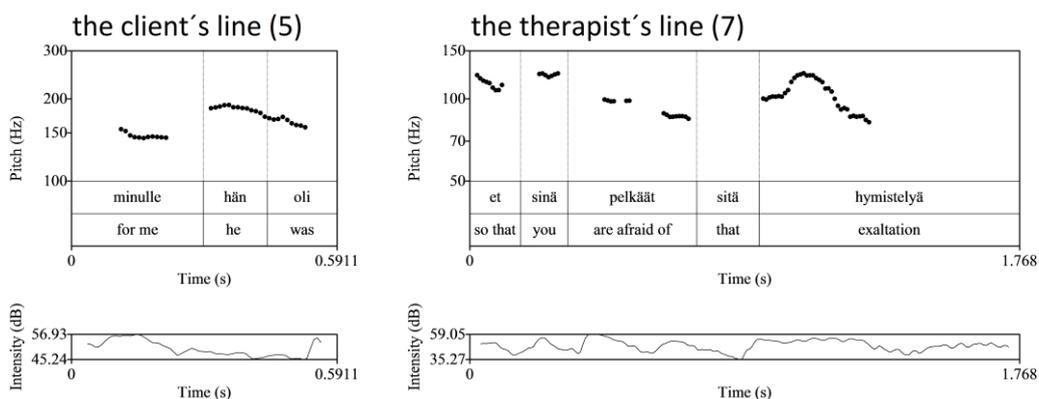
6 (0.4)

7 T: so that you are afraid of that exaltation.

The therapist's formulation is produced with a *relatively* higher voice (male therapist, 82-124Hz) compared the client's previous turn (female client, 144-230Hz, Figure 2) and his voice is also high compared to his individual pitch range (68-153Hz). The pitch span is also wider in the therapist's turn (7ST) than in the client's turn (5ST) and the intensity is stronger. These prosodic features might have something in common with the *high onsets* that Couper-Kuhlen (2004, p. 336) has suggested as cues that the turn is beginning a new course of action or activity. In our case, these prosodic cues might indicate that the therapist is not only responding and confirming the client's account but initiating his own project that takes distance from the client's preceding turn.

Figure 2

The intonation and intensity contours in the client's line (5) and the therapist's line (7) in Excerpt 2



The therapist's next turn in line 18 exhibits similar prosodic features to his formulation in line 7.

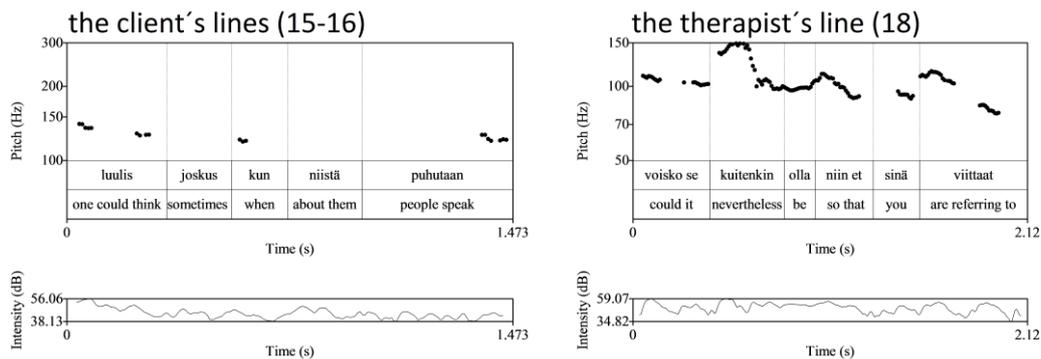
Excerpt 2 PSA2 lines 15-18

15 C: some kind of (0.4) divine beings (0.3) one could
 16 think sometimes when people speak about them,
 17 (0.4)
 18 T: could it nevertheless be so that you are referring to

The beginning of the therapist's turn is relatively higher than the client's voice in her previous turn in lines 15-16 (see Figure 3). The pitch span is wider in the therapist's turn (11ST) than in the client's turn (3ST), and the intensity of the therapist's turn is also stronger.

Figure 3

The intonation and intensity contours in the client's lines (15-16) and the therapist's line (18) in Excerpt 2



To conclude, the therapist's evaluative stance towards the client's description of her emotions is also first audible in the prosodic disjuncture between the formulation and the client's prior talk. These same prosodic features are also found from the therapist's account after the client's response, in which he expounds his interpretative stance. The prosodic features of the therapist's utterances in the challenging trajectory seem to indicate that rather than aligning with and receiving what the client has said the therapist is starting something new or taking a new direction.

Summary of results

In order to understand the significance of prosody in empathic communication in psychotherapy, we examined sequences in which the therapists formulated the clients' descriptions of emotions in sessions of psychoanalysis and cognitive psychotherapy. In such formulations, the therapists rephrased what the clients had just asserted about their emotions, thereby demonstrating their understanding of the clients' emotions. The formulations were followed by two different trajectories of interaction: one validating the client's emotional description and the other evaluating and challenging it. The difference between these two trajectories was not evident in the lexical composition of the therapist's formulation that initiated the sequence: in both trajectories, the formulation named the client's emotion in common psychological vocabulary. However, as we have shown in our analysis, the prosodic features of the initial formulation already anticipate the direction of the sequence.

The formulations leading up to the validating trajectory were characterized by prosodic continuity: the therapist's intonation continued the intonation / rhythm of the client's preceding turn, and the therapist also lowered his/her voice, spoke quietly and used level intonation. The clients treated these formulations as a signs of validation and permission to "be with the feeling". Formulations leading up to the challenging trajectory were characterized by prosodic disjuncture: there was a discontinuation in intonation and rhythm between the client's and therapist's turns, the pitch span in the therapist's turn was wider and the therapist spoke with voice that was higher and louder than the client's prior talk. The clients oriented to these formulations as being somehow problematic and typically rejected them or confirmed them only partially.

Discussion

In our study we have shown a sequential place and set of parameters for prosodic choices that accomplish psychotherapeutic acts, in our case the formulations that ensue from the client's emotional descriptions. We have described two alternative interactional trajectories in which the therapist either validates or challenges the client's emotions. The prosodic features of the therapist's formulation incorporated his/her choice of trajectory in an anticipatory way, before the trajectory was manifested in the therapist's actual words. Thus, it appears that the choice between continuous and disjunctive prosody is a key resource for therapists in the construction of formulations as either validation or challenge.

Arguably, validation and challenging the client's experience are two key actions in psychotherapy (see e.g. Ribeiro et al., 2012; Voutilainen, 2012), as correctly timed both are needed for enhancing psychotherapeutic change (see e.g. Beck, Rush, Shaw, & Emery, 1979, p. 48; Greenberg & Safran, 1987, p. 172; Lomas, 1987, p. 73). By showing how prosody contributes to validation and challenge, we have revealed one way in which prosody is an integral part of meaning making and relational work in psychotherapy. We have shown how in formulations of emotion, continuing the intonation contour of the client's talk, combined with a low and quiet voice, is a way for the therapist to preserve the client's perspective, and respond empathically to the client's emotional descriptions of their difficult experiences. Thereby, our analysis provided a detailed description of the therapist's "empathic tone of voice".

As we pointed out at the beginning of this article, clinical theories (e.g. Bohart & Greenberg, 1997; Greenson, 1960; Rogers, 1975) and empirical research (e.g. Bachelor, 1988) often divide a therapist's empathy into a cognitive understanding of the client's experiences and the emotional process of actually experiencing the client's emotions. We also stated that the emotional aspect of empathy is often linked to non-verbal communication. On

the basis of our data analysis, we can now specify how this happens. We have shown that those formulations that are lexically constructed to show that the therapist understands the client's emotion, *and* exhibit prosodic continuity with the client's talk, seem to convey the emotional aspect of empathic communication. Through continuous prosody, the therapist seems to tune him/herself to the client's emotions. Importantly, the participants themselves treat formulations with continuous prosody as actions conveying the emotional aspect of empathy: the clients by allowing themselves to "be with the feeling" after such formulations, and the therapists by carrying on the trajectory by explicit validating utterances after the clients' responses. In contrast, when the expression of understanding is conveyed by verbal means alone (without prosodic continuity), participants do not orient to the therapist's utterance as one that conveys the emotional aspect of empathy even though the utterance might very well convey cognitive empathy.

Early interaction researchers have considered the matching of vocal expressions as one of the crucial vehicles for bonding, attachment, intimacy and other positive emotional experiences between babies and their caretakers (e.g. Beebe, Rustin, Sorter, & Knoblauch, 2003; Stern, 1985). Even though bonding, attachment and intimacy are also known to be highly relevant for psychotherapy (e.g. Horvarth, 2001), practices of vocal matching have remained largely neglected by theorists in adult psychotherapy research (Beebe et al., 2003, p. 810). Thus, this research makes an important contribution to the case that vocal matching (together with other prosodic elements) plays an essential role in shaping the client's interpretation of the kind of empathy that the therapist's utterance conveys.

In her study on anger and indignation in storytelling episodes in everyday conversations, Couper-Kuhlen (2012) argued that the utterances of the listeners that lexically convey empathy typically also involve prosodic matching and/or upgrading (i.e., produced in more intensity and a higher pitch, see also Ogden, 2006). Therefore, matching and upgrading

could be considered as a prosodic means of expressing empathy. Our results are partially in line with those of Couper-Kuhlen, as in our data, the matching of the client's intonation was indeed a key feature of formulations that initiated the validating trajectory (conveyed the emotional aspect of empathy). However, the formulations that were part of the validating trajectory did not upgrade but, rather, downgraded the intensity and pitch of the client's talk. This difference could possibly be related to the specific emotions that are expressed: in Couper-Kuhlen's study, they were anger and indignation, whereas in our data the client's emotions that were validated related mainly to sadness. Thus, the ways of displaying empathy might depend on the emotions that are expressed in the first turns. On the other hand, the general frame of interaction in psychotherapy talk may involve a reflexive dimension that is absent from storytelling in everyday conversation; this reflexive dimension may favor the downgrading of pitch and intensity as a means for conveying emotional empathy. At least Fitzgerald and Leudar's (2010) findings on active listening in person-centered psychotherapy support this idea. In their study, the therapist's "empathic continuers" were characterized by a low voice which resonated with the client's emotions.

In our data, the therapists also seem to react differently to expression of different emotions: for instance expressions of sorrow were typically validated, whereas expressions of anxiety were evaluated or challenged (see also Voutilainen, 2012). This is in line with Greenberg and Safran's clinical theory (1987), which proposes that the therapist needs to validate and support client's expressions of primary emotions (like sorrow in our data) in order to promote adaptive problem solving and integrated functioning. In contrast, secondary or instrumental emotions (like anxiety in our data) are generally confronted or interpreted in order to challenge their utility or reveal their meaning (*ibid.*, pp. 172, 191). In Excerpt 2 the client was sad, and the therapist responded with a challenge (we only had two of these kinds of examples in our data). The clients oriented to these formulation as being very problematic, which might indicate moments of poor therapist tracking.

The prosodic features of the formulations examined in this article have many similarities with the prosody of “*you-actions*” and “*me-actions*” described by Stevanovic and Kahri (2011). In our data, the prosody of the formulations that lead up to the validating trajectory is largely similar to the prosody of what Stevanovic and Kahri call “*you-actions*”, whereas formulations that lead to the challenging trajectory exhibited prosodic characteristics of “*me-actions*”. Stevanovic and Kahri did not discuss their results primarily in terms of emotion or empathy; rather, they focused on the ways in which prosody conveys the distribution of *agency* in interaction. However, it can be suggested that issues of agency and issues of empathy are intertwined: in the validating trajectory, the client’s agency is highlighted, while the challenging trajectory highlights the therapist’s agency. Perhaps more importantly, bearing in mind that Stevanovic and Kahri examined data from various everyday and institutional settings and found similar patterns from different settings, it can be suggested that the prosodic resources of expression we have found in our data might not be specific to psychotherapy. Rather, we would like to propose that in formulation sequences, therapists are probably using generic ways of encoding emotion in spoken interaction.

It is worth of pointing out that our data came from two different types of psychotherapy: cognitive psychotherapy and psychoanalysis. We found no major differences between these approaches in the use of the prosodic means of expression described in this article. It should be borne in mind, however, that our data only came from one therapist from either approach. Therefore, it would be important to establish the generality of our findings with more data involving several practitioners. Another limitation of this study is the lack of outcome data for the therapy processes. We have focused on experienced therapists, but information on the outcome of the therapy processes would have given us more insight into what good therapists do well. Moreover, the data of this study is only from the middle part of the therapy processes. Therefore, clarifying the ways in which prosodic continuity and

disjuncture are organized in other stages of therapy would be important in future research in order to grasp their importance in the overall therapeutic process.

Acknowledgements

Many thanks to Melisa Stevanovic, Mikko Kahri, Mika Simonen, Timo Kaukoma, Liisa Voutilainen and Pentti Henttonen for their comments on an earlier version of the manuscript, to Maxi Kupetz for listening to the data, to Maari Kivioja and other transcribers of the data, and to participants of the sociology data sessions at University of Helsinki during 2011-2012. Research was funded by the Academy of Finland (Project 1132303).

References

- Antaki, C. (2008). Formulations in psychotherapy. In A. Peräkylä, C. Antaki, S. Vehviläinen, & I. Leudar (Eds.), *Conversation Analysis and Psychotherapy* (pp. 26-42). Cambridge: University Press.
- Bachelor, A. (1988). How client's perceive therapist empathy: A content analysis of "received" empathy. *Psychotherapy*, 2, 227-240.
- Barckham, M., & Shapiro, D. (1986). Counselor verbal response modes and expressed empathy. *Journal of counseling psychology*, 33, 3-10.
- Barret- Lennard, G. (1981). The empathy cycle: Refinement of a nuclear concept. *Journal of counseling Psychology*, 28, 91-100.
- Barth-Weingarten, D., Reber, E., & Selting, M. (Eds.) (2010). *Prosody in interaction*. Amsterdam: John Benjamins.
- Beck, A., Rush, J., Shaw, B., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

- Beach, W.A., & Dixon, C.N. (2001). Revealing moments: formulating understanding of adverse experiences in a health appraisal interview. *Social Science and Medicine*, 52, 25-44.
- Beebe, B., Rustin, J., Sorter, D., & Knoblauch, S. (2003). An expanded view of intersubjectivity in infancy and its application to psychoanalysis. *Psychoanalytic Dialogues*, 13, 805-841.
- Boersma, P., & Weenink, D. (2013). Praat: doing phonetics by computer [Computer program]. Version 5.3.23, retrieved 26 February 2013 from <http://www.praat.org/>
- Bohart, A., & Greenberg, L. (1997). Empathy and psychotherapy: an introductory overview. In A. Bohart, & L. Greenberg (Eds.), *Empathy reconsidered* (pp. 3-32). Washington DC: American Psychological Association.
- Couper-Kuhlen, E. (2012). Exploring affiliation in the reception of conversational complaint stories. In A. Peräkylä, & M-L. Sorjonen (Eds.), *Emotions in interaction* (pp. 113-146). New York: Oxford University Press.
- Couper-Kuhlen, E. (2004). Prosody and sequence organization in English conversations. The case of new beginnings. In E. Couper-Kuhlen, & C.E. Ford (Eds.), *Sound patterns in interaction* (pp. 335-376). Amsterdam: Benjamins Publishing.
- Couper-Kuhlen, E., & Ford, C.E. (Eds.) (2004). *Sound patterns in interaction*. Amsterdam: Benjamins Publishing.
- Couper-Kuhlen, E., & Selting, M. (Eds.) (1996). *Prosody in conversation. Interactional studies*. Cambridge: University Press.
- Couper-Kuhlen, E. (1986). *An introduction to English prosody*. London: Edward Arnold.

- Doodley, G. (1978). Preliminary validation of a non-verbal description from for help-intended interactions. *Psychotherapy: Theory, research and Practice*, 15, 140-144.
- Drew, P., & Heritage, J. (Eds.) (1992). *Talk at work. Interaction in institutional settings*. Cambridge: University Press.
- Elliott, R., Filipovich, H., Harrigan, L., Graynor, J., Reimschuessel, C., & Zapadka, J.K. (1982). Measuring response empathy: The development of a multicomponent rating scale. *Journal of counseling psychology*, 24, 379-387.
- Elliott, R., Bohart, A. C., Watson, J. C., & Greenberg, L. S. (2011). Empathy. *Psychotherapy*, 48(1), 43-49.
- Fiedler, F.E. (1950). A comparison of therapeutic relationship in psychoanalytic, non-directive and Adlerian therapy. *Journal of Consulting Psychology*, 15, 436-445.
- Fitzgerald, P., & Leudar, I. (2010). On active listening in person-centred, solution-focused psychotherapy. *Journal of Pragmatics*, 42, 3188–3198.
- Fretz, B.R. (1966). Postural movements in a counseling dyad. *Journal of counseling psychology*, 13, 335-343.
- Garfinkel, H. (1967). *Studies in Ethnomethodology*. Englewood Cliffs, N.J.: Prentice-Hall.
- Goffman, E. (1983). The interaction order. *American Sociological Review*, 48, 1-17.
- Goudbeek, M., & Scherer, K. (2009). Vocal expression of emotion. In D. Sander, & K. Scherer (Eds.), *The Oxford companion to emotion and the affective sciences* (pp. 404-406). New York: Oxford University Press.
- Greenberg, L., & Safran, J. (1987). *Emotions in Psychotherapy: Affect, Cognition, and the Process of Change*. New York: The Guilford Press.

- Greenson, R.R. (1960). Empathy and its vicissitudes. *International Journal of Psycho-Analysis*, 41, 418-424.
- Haase, R.F., & Tepper, D.T. (1972). Non-verbal components of empathic communication. *Journal of counseling psychology*, 19, 417-424.
- Hepburn, A., & Bolden, C.B. (2013). The conversation analytic approach to transcription. In J. Sidnell, & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (pp. 57-76). Malden, MA: Wiley-Blackwell.
- Hepburn, A., & Potter, J. (2007). Crying receipts: Time, empathy and institutional practice. *Research on Language and Social Interaction*, 37, 251-290.
- Heritage, J. (2011). Territories of knowledge, territories of experience: empathic moments in interaction. In T. Stivers, M. Lorenza, & J. Steensing (Eds.), *The morality of knowing in conversation. Studies in interactional sociolinguistics* 29 (pp. 159-183). Cambridge: University Press.
- Heritage, J., & Watson, R. (1979). Formulations as conversational objects. In G. Psathas (Ed.), *Everyday language. Studies in ethnomethodology* (pp.123-162). New York: Irvington Publishers.
- Horvath, A.O. (2001). *The Alliance. Psychotherapy*, 4, 365-372.
- Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In G. Lerner (Ed.) *Conversation analysis: Studies from the first generation* (pp. 14-31). Amsterdam: Benjamins Publishing.
- Knoblauch, S. (2000). *The musical edge of therapeutic dialogue*. Hillsdale, NJ: The analytic Press.

- Lambert, M.J., & Barley, D.E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy*, 4, 357-361.
- Lomas, P. (1987). *The limits of interpretation*. London: Penguin Books.
- Marziali, E., Marmar, C., & Krupnic, J. (1981). Therapeutic alliance scales: Development and relationship to psychotherapy outcome. *American Journal of Psychiatry*, 138, 361-364.
- Maynard, D. W., & Peräkylä, A. (2003). Language and Social Interaction. In J. Delamater (Ed.): *Handbook of Social Psychology* (pp.233-257). New York: Plenum Publishers.
- Ogden, R. (2006). Phonetics and social action in agreements and disagreements. *Journal of Pragmatics*, 38, 1752-1775.
- Peräkylä, A., & Sorjonen, M-L. (Eds.) (2012). *Emotion in interaction*. New York: Oxford University Press.
- Peräkylä, A. (2013). Conversation analysis in psychotherapy. In T. Stivers, & J. Sidnell (Eds.), *Handbook of conversation analysis* (pp. 551-574). Oxford: Blackwell.
- Peräkylä, A. (2011/a) After interpretation. Third position utterances in psychoanalysis. *Research on Language and Social Interaction* 44 (3), 288-316.
- Peräkylä, A. (2011/b). Validity in Research on Naturally Occurring Social Interaction. In D. Silverman (Ed.), *Qualitative Research* (pp. 264-382). Third Edition. London: SAGE.
- Peräkylä, A., Antaki, C., Vehviläinen, S., & Leudar, I. (Eds.) (2008). *Conversation analysis and psychotherapy*. Cambridge: University Press.

- Pomeranz, A. (1986). Extreme case formulations: A way of legitimizing claims. *Human Studies*, 9, 219-229.
- Pomeranz, A. (1984). Agreeing and disagreeing with assessments: some features of preferred/dispreferred turn shapes. In J. Atkinson, & J. Heritage (Eds.), *Structures in Social Action* (pp. 57-101). Cambridge: University Press.
- Pudlinski, C. (2005). Doing empathy and sympathy: Caring responses to troubles telling on a peer support line. *Discourse Studies*, 7, 267-288.
- Raevaara, L. (1989). *No*-vuoronalkuinen partikkeli [*No*-turn beginning particle]. In A. Hakulinen (Ed.), *Suomalaisen keskustelun keinoja I* (pp. 147-161). Kieli 4. Helsingin yliopiston suomenkielen laitos.
- Rice, L.N., & Kerr, G.P. (1986). Measures of client and therapist vocal quality. In L.S. Greenberg, & W.M. Pinsof (Eds.), *The Psychotherapeutic Process: A Research Handbook* (pp. 73-105). New York: The Guilford Press.
- Rice, L.N. & Wagstaff, A.K. (1967). Client voice quality and expressive style as indexes of productive psychotherapy. *Journal of consulting psychology*, 31, 557-563.
- Ribeiro, E., Ribeiro, A.P., Gonçalves, M.M., Horvath, A.O., & Stiles, W.B. (2012). How collaboration in therapy becomes therapeutic: The therapeutic collaboration coding system. *Psychology and Psychotherapy: Theory, Research and Practice*, 86(3), 294-314.
- Rogers, C. R. (1975). Empathic: An unappreciated way of being. *The Counseling Psychologist*, 5(2), 2-10.
- Rogers, C.R. (1957). The Necessary and Sufficient Conditions of Therapeutic Personality Change. *Journal of Consulting Psychology*, 2, 95-103.

- Sacks, H., Schegloff, E. A., & Jefferson, G. (1974). A Simplest Systematics for the Organisation of Turn-Taking for Conversation. *Language*, 50, 696–735.
- Schegloff, E.A. (1998). Reflections in studying prosody in talk-in-interaction. *Language and speech*, 41, 235-63.
- Schegloff, E.A. (2007). *Sequence organization in interaction. A primer in conversation analysis* (Vol. 1). Cambridge: University Press.
- Scherer, K. (2003). Vocal communication of emotion: A review of research paradigms. *Speech Communication*, 40, 227–256.
- Selting, M. (1994). Empathic speech style – with special focus on the prosodic signaling of heightened emotive involvement in conversation. *Journal of Pragmatics*, 22, 375-408.
- Shapiro, J. (1968). Relationship between visual and auditory cues of therapeutic effectiveness. *Journal of clinical psychology*, 24, 236-239.
- Sidnell, J. (2013). Basic conversation analytic methods. In J. Sidnell, & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (pp. 77-99). Malden, MA: Wiley-Blackwell.
- Stern, D. (1985). *The interpersonal world of the infant: a view from psychoanalysis and developmental psychology*. New York: Basic Books.
- Stevanovic, M., & Kahri, M. (2011). Puheen musiikilliset piirteet ja sosiaalinen toiminta: Kohti prosodian sosiologiaa [Social action and the musical aspects of speech: Towards a sociology of prosody]. *Sosiologia*, 4, 285-308.
- Szczepek Reed, B. (2011). *Analyzing conversation. An introduction to prosody*. Basingstoke/Hampshire: Palgrave Macmillan.

Szczepek Reed, B. (2006). *Prosodic orientation in English conversation*.

Basingstoke/Hampshire: Palgrave Macmillan.

Tepper, D.T., & Haase, R.F. (1978). Verbal and non-verbal communication of facilitative conditions. *Journal of counseling psychology*, 25, 35-44.

Voutilainen, L. (2012). Responding to emotion in cognitive psychotherapy. In Peräkylä, A. & Sorjonen, M-L. (Eds.), *Emotion in Interaction* (pp. 235-255). New York: Oxford University Press.

Voutilainen, L., Peräkylä, A., & Ruusuvuori, J. (2010/a). Recognition and interpretation: Responding to emotional experience in psychotherapy. *Research on Language and Social Interaction*, 43, 85-107.

Voutilainen, L., Peräkylä, A., & Ruusuvuori, J. (2010/b). Professional non-neutrality: criticising the third party in psychotherapy. *Sociology of Health & Illness*, 32 (5), 798-816.

Wells, B. (2010). Tonal repetition and tonal contrast in English caretaker-child interaction. In D. Barth-Weingarten, E. Reber, & M. Selting (Eds.), *Prosody in Interaction* (pp. 243-262). Amsterdam: Benjamins Publishing