

Voutilainen, L., Henttonen, P., Stevanovic, M., Kahri, M., & Peräkylä, A.

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## Nods, vocal continuers, and the perception of empathy in storytelling

### Abstract

In her influential paper on stance, alignment, and affiliation in conversational storytelling, Tanya Stivers argued that two basic conversational means of receiving a story, nods and vocal continuers, differ in their function: whereas vocal continuers display *alignment* with the telling activity, nods, during the mid-telling, convey *affiliation* with the storytellers' affective stance. In this paper we elaborate these insights on the basis of a quantitative study informed by conversation analysis. Using a database of 317 stories told in Finnish, we analyzed how story recipients' nods and continuers in different phases of storytelling (before and after the story climax) predict naïve raters' judgments of the story recipients' *empathy* toward the storyteller. We found that vocal continuers accounted for the perception of empathy during mid-telling, whereas the effect of nods remained weak. The study offers further support to the notion of structural organization of storytelling, and suggests that the significance of vocal continuers as a vehicle of empathy may be greater than has been generally thought of.

**Keywords:** affiliation, alignment, empathy, storytelling, conversation analysis

## Introduction

Sharing experiences, emotions, interests and attitudes is one of the basic motives of human communication, and storytelling is one of the basic means of doing it (Tomasello, 2008). This is evidenced also in conversation analytic (CA) research, which has described storytelling as a recurrent context for participants' reciprocal displays of emotion. The storyteller reports a series of events in a way that conveys an affective stance to what is being told (Stivers, 2008). The events are thus not neutrally reported but offered as, for example, sad, funny, surprising, delightful, devastating, or ambivalent. Furthermore, there is a normative preference for the story recipients to respond in ways that endorse the stance of the storyteller (Jefferson, 1978; Stivers 2008; Ruusuvuori & Peräkylä, 2009; Selting 2010; Couper-Kuhlen, 2012; Kupetz 2014; Voutilainen et al., 2014; Peräkylä et al, 2015). As a result, the participants end up sharing something from their lives.

There is a long line of interactional research arguing that the storyteller's and story recipient's actions are structurally organized with respect to their timing. Storytelling progresses in distinct phases. Sacks (1974) suggested that there are three basic sequences within a story: preface, telling sequence, and response sequence, while Labov and Waletzky (1967) distinguished six phases, some of which are optional. The division of labor between the storyteller and story recipient varies by the phase of the telling. In initiating a story in what Sacks (1974) called preface and Labov and Waletzky (1976) abstract, the teller gets the floor for an extended sequence of talk, in which the recipient typically refrains from taking a longer turn. Eventually, when the story gets to its climax or completion (called resolution by Labov and Waletzky, 1967), a full response from the recipient is relevant. In other words, during the telling before the climax, it is interactionally preferred that the recipient supports

the process of telling by responding minimally, whereas s/he is expected to provide a full response after the climax/resolution (Labov & Valetzky, 1967; Sacks 1974; Jefferson, 1978; Stivers, 2008).

The phasic organization of storytelling shapes the opportunities and expectations regarding the participants' displays of emotional stance (Sacks, 1974; Jefferson, 1978; Stivers, 2008; Kupetz, 2014). The preface/abstract often foreshadows the teller's stance to the events soon to be reported. During the actual telling before the climax, the teller can convey his or her stance through various means, including marked lexical and syntactic choices, sensitive to the context of the telling (Stivers, 2008:38). During the climax, the prosodic means of expressing affect become particularly salient (Selting, 2010).

As pointed out above, the storyteller's stance is preferably supported by the story recipient. While such support is relevant throughout the storytelling, the site for the most overt reciprocal display of stance is the story climax (Stivers, 2008; Selting, 2010; Kupetz, 2014; Peräkylä et al, 2015). At this point, the hearer can endorse the teller's stance through various means, including claims of understanding (Couper-Kuhlen, 2012:122), assessments that are congruent with the teller's stance (Couper-Kuhlen, 2012:123), claims of sharing the teller's experience (Heritage, 2011), response cries (Goffman, 1978; Heritage, 2011; Couper-Kuhlen, 2012:132–133), and facial expressions (Kupetz, 2014; Ruusuvuori and Peräkylä, 2009; Peräkylä et al., 2015).

Responding to a story is not, however, only about sharing the teller's stance. Stivers (2008) made an influential distinction between two functions of recipient responses. One function is *alignment with the teller's activity* of storytelling, which involves that the recipient “supports

the structural asymmetry of the storytelling activity” (p. 34) by withholding efforts to take the floor until story completion. The other function involves *affiliation*, whereby the recipient “displays support of and endorses the teller’s conveyed stance” (p.35). Moreover, Stivers demonstrated that two types of responses, *nods* and *vocal continuers*, differ in their functions and preferred placement in this regard: vocal continuers indicate alignment with the storytelling activity while *nods* indicate access to the teller’s stance and in such way do affiliative work. This is particularly clear during what Stivers calls the mid-telling, i.e., telling before the climax/resolution. In this location, vocal continuers (minimal response tokens such as *mm hm* and *uh huh*) indicate that the recipient is following the story, while *nods* convey that the recipient endorses the teller’s stance to which the teller has provided access. Importantly, however, Stivers showed that *nods* function in an affiliative way only before the climax; in response to the story climax, they are not sufficient to endorse the teller’s stance but more elaborate responses are needed. This is evidenced by the storytellers’ efforts to pursue a more pronounced response in the face of the recipient merely nodding.

Thus, on the basis of earlier CA research on story reception, and Stivers’ argument in particular, we may conclude that (1) there are different types of responses associated with different functions during storytelling (alignment vs. affiliation) and that (2) the fulfillment of these functions is dependent on the location of these responses within the storytelling activity. In the current paper, we employ quantitative methods to test and further elaborate these observations (cf. Peräkylä et al., 2015). In the design of the current study, we were interested in what Stivers called affiliation: the recipient’s displays of support and endorsement of the teller’s conveyed stance.

For this quantitative study, we needed a measure of affiliation. Assuming that affiliation is something oriented to by the participants of conversation, we considered it to be noticeable also for any other members of our culture observing the interaction. Therefore, we decided to use naïve raters to assess affiliation. To instruct our observers, we needed a vernacular, short hand expression for what is involved in affiliation. We ended up using a description that included the term “empathetic” (*empaattinen*), alongside a Finnish vernacular term the meaning of which is, as far as we can see, the same (*myötäelävä*), and short clause describing affiliative stance. We considered that this description would approximate what professional conversation analysts call affiliation (cf., however Heritage, 2011; Kupez, 2014). Hence, even if *empathy* is also a psychological term with a rich research tradition (e.g. Eisenberg & Fabes, 1990; Singer, 2006), we use it as a lay category. We invited naïve raters to assess how empathic the story recipient was in each story, expecting that the affiliation conveyed by the recipient will be reflected in the raters’ perceptions of empathy in the recipient.

The measurement of the story recipients’ empathy made it possible for us to examine quantitatively how the different recipient actions— nods and vocal continuers— influence the degree of the recipients’ empathy as seen by others. Furthermore, we examined how the empathic function of these two recipient actions varied at different phases of the story. In other words, we examined whether nods or continuers before and after the story climax (as coded by CA researchers) affect the overall impression of empathy during a story (as assessed by the naïve raters). While our question draws heavily from Stivers’ paper, it is important to note that we make a more general assumption about the relation between continuers, nods, affiliation, and alignment than in Stivers’ original argument. Our paper tests how these tokens generally correlate with the impression of empathy during the different phases of storytelling, but does not differentiate the storyteller’s actions prior to the nods and

continuers. Thus, we ask if nods and continuers as such differ with regard to empathy in the context of storytelling, and if they differ in the same way or in different ways, in different story phases.

The hypotheses of the study were:

- 1) nods during the story build-up increase the rated empathy, but nods during the story climax do not, and that
- 2) the effect of continuers on rated empathy is smaller than that of nods.

## **Method**

### **Storytelling data and coding**

The stories investigated in this study come from a data set of 20 recordings of 45–60 minute dyadic conversations in a quasi-natural setting. The participants were female university and polytechnic students from Greater Helsinki area who were recruited to this study and did not know each other beforehand. The participants were instructed to talk about *happy events* and *losses* in their lives in a freely chosen way. The language of the conversations was Finnish. The participants sat in armchairs facing each other perpendicularly. The conversations were videotaped with three cameras (one facing each participant, and the third giving an overall view). For purposes of another study, psychophysiological activation (e.g. heart rate and skin conductivity) was recorded from both participants during the conversations (see Voutilainen et al., 2014; Peräkylä et al., 2015). Thus, the setting where stories were told was not

naturally-occurring, but the interaction was natural in the sense that it was not instructed in other ways than that the participants were given the general topic of life events.

From the video recordings, all the instances of storytelling were first coded by two CA researchers (Voutilainen & Kahri). Our coding scheme was based on the CA understanding of storytelling and it was built collaboratively in data-sessions. The coding progressed in two stages: in the first, we singled out the stories and coded for their key properties, and in the second, we coded the recipient actions. The first stage of the coding included the identification of the stories and the three story phases: build-up, climax and evaluation, as well as the determination of the beginning and end points for each story and story phase (evaluation was treated as optional, as every story did not have a separate phase that could have been considered as evaluation). For the present study, the boundaries of the climax were particularly important. As the beginning point of the climax we considered the onset of the utterance in which the storyteller conveyed the affectively loaded point of the story (the so-called ‘punchline’). In a number of cases, the storyteller delivered several affectively loaded utterances, hearably conveying the ‘point’ of the story, and we included all of them in the climax. As the end point of the climax we considered the end of the turn where the recipient received the teller’s (last) utterance that conveyed the point; in cases on no uptake, the utterances where the storyteller pursued the point (without moving towards what the coder could have taken as the evaluation phase), as well as the recipient’s responses to them, were also included in the climax. What we coded as “build-up” corresponds to story preface and mid-telling in Stivers’ terms and what we coded as “climax” corresponds to story completion.

During the first stage of coding, we also coded the story valence. Given that the participants were instructed to talk about happy events and losses, our data involved a lot of stories where

the storyteller's stance toward the reported events was either happy or sad. It was also very common for the participants to tell stories with an ambivalent stance: they expressed both positive and negative emotions toward the same events (see Voutilainen et al., 2014). For the current study, however, the coding of valence is relevant only in the sense that it indicates that what we coded as a story involved, by definition, an affective stance (positive, negative, or ambivalent); the valence of that stance as such was not investigated in this study. To test the reliability of our coding, seven out of 20 discussions were randomly selected and coded for stories twice. Each double-coded conversation was converted into one-second segments, to which the coded values (story valence or absence of story) were assigned and a weighted kappa coefficient (Cohen, 1968) was calculated. Mean kappa value was 0.55 (0.50–0.67, SD=0.05), which, according to Landis and Koch (1977), indicates moderate agreement. Kappa value is influenced by prevalence effect in the data, making large kappa scores hard to attain (Sim & Wright, 2005). The prevalence effect (calculated as the ratio of most prevalent code to all code instances) was 0.85. Correcting the kappa values for prevalence increased mean kappa score to 0.67.

The second stage of the coding targeted the story reception. While this study focuses on nods and continuers, the coding included also other responses. For each story, 10 recipient actions were coded. These were meant to cover the “repertoire” of actions that Finnish story recipients have at their disposal for behaviorally showing that they are attending to, understanding, and/or affiliating with what is being told to them. The coded recipient actions were: (1) *continuers*, (2) *epistemic news-markers*, (3) *affective minimal responses*, (4) *response cries*, (5) *verbal responses not affiliating with the teller's stance*, (6) *verbal responses affiliating with the teller's stance*, (7) *nods*, (8) *sequentially adequate affiliative changes in face* (e.g., smiles), (9) *sequentially adequate epistemic changes in face* (e.g.,

expressions of surprise or astonishment), and (10) *sequentially adequate affiliative gestures* (e.g., head shakes). For the present purposes, the coding of nods and vocal continuers—categories (1) and (7)—is particularly relevant. What we coded as a nod involved a vertical head movement down and then back up, or up and back down. The coding of vocal continuers was more intricate in that they needed to be separated from affective response tokens, including epistemic news-markers, affective minimal responses and response cries. *Epistemic news-markers* treated a just-preceding item in the storyteller’s talk as newsworthy. They involved a specific particle, such as *ahaa*, which could be translated “I see”. An emphatic prosodic contour with a specific (rise-)fall pitch movement could make also other vocalizations, such as  $\uparrow mm$ , recognizable as epistemic news-markers. *Affective minimal responses* conveyed emotional stance towards the events that are being told. They were distinguishable from continuers primarily by their affective prosodic design: they were typically produced in the lower part of the speaker’s voice range and involve a decrease in pitch and a reduction in loudness towards the end of the response token. *Response cries* were conventional forceful expressions of surprise, disbelief or revulsion such as *oho* / “oh”, *eikä* / “oh no” or *huh* / “wow”. Importantly, only if the coder found that a token was none of the former, it was coded as a *continuer*. Thus, in our coding, continuers were non-affective by definition. As continuers were coded tokens like “mm” “mm-hm”, and response particles *Nii* and *Joo* when they were given as neutral registerings of information that return the turn at talk to the co-interactant. The story reception was coded separately for each story phase. To minimize the bias arising from the fact that the stories in our data were of various lengths, we only coded whether or not a given item (such as nod or continuer) occurred during a given phase of a given story. In other words, two or more occurrences of the same item during a story phase (e.g., two or more nods during the build-up of a particular story) did not change the coding from what it was at the first occurrence of the item—a compromise where some

subtleties, such as the difference in meaning between single and rapidly repeated continuers, fell out of the scope of the study. In this study, we thus compare story phases with one or more continuers or a nod to story phases without any continuer or nod, with regard to the impression of empathy that they convey. The coding was sensitive to the timing of the responses only regarding the story phase: within the story phases both on-time and late responses were coded similarly. A total of 35% of the responses were double coded. Kappa coefficient was calculated separately for all the responses. Mean of kappa values was -0.61 (SD=0.15, 0.38-0.71; Prevalence-adjusted kappa value was 0.79. The kappa value for nods was 0.67 and for continuers 0.71.

To illustrate the coding of stories and their reception, we will present two examples with different amounts of recipient responsiveness. The extract 1 shows an example of a story where a nod and a continuer occurred. The tokens that were coded from each story phase are marked in the margin of the transcript (with line numbers).

### Extract 1

1	<p>A: <i>no siis (0.4) on mulki tota (.) .mthh (0.4)</i>  PRT PRT be SG1-ADE-CLI PRT  well I mean (0.4) I've too (.) tskhh (0.4)</p>	<p><b>Buildup</b>  – Nod (l. 4)</p>
2	<p><i>no (.) mun yks kaveri (.) lähti vaihtoon Italiaan</i>  PRT SG1-GEN one friend leave-PST exchange-ILL Italy-ILL  well (.) a friend of mine (.) went to exchange to Italy</p>	
3	<p><i>jossain vaihees ja löys sielt miehen ja jäi sinne</i>  somewhere stage-INE and find-PST there-ABL man-GEN and stay-PST there</p>	

at some point and found there a man and stayed there

←B.NODS→

4 .hhh (.) ja siis jotenki niinku aluks me pidettiin  
and PRT somehow PRT beginning-TRA PL1 keep-PASS  
.hhh (.) and so at the beginning we kept

5 tosi paljon yhteyttä mut sit se ↑on jotenki jääny  
really much contact-PAR but PRT DEM be somehow leave-PPC  
in touch a lot but then tha:t ↑has somehow stopped

6 ja sit se sen mies on pikkasen är:syttävä .hhh (.)  
and PRT DEM DEM-GEN man be little annoying  
and then that man of hers is a bit annoying .hhh (.)

7 tai >jotenki et< aina ku ne suomessa (.) .hhh (.)  
or somehow PRT always when DEM-PL Finland-INE  
or >somehow that< always when they're in Finland (.) .hh(.)

8 jos se on sen (.) miehen kanssa niin se ei voi  
if DEM be DEM-GEN man-GEN with PRT DEM NEG can  
if she's with that (.) man of hers so she can't

9 jättää sitä miestä sekunniks minnekkään ja se mies  
leave-INF DEM-PAR man-PAR second-TRA anywhere and DEM man  
leave that man behind for a second and that man

10 on kauhee jotenki (.) .mhhh (.) huomion kipee  
be terribly somehow attention-GEN sick  
is terribly somehow (.) .mhhh (.) attention-seeking

11     (.) ja (.) sit (.) m- tota (.) sillee >jotenki et<  
          and     PRT                 PRT                 PRT                 somehow PRT  
          (.) and (.) then (.) m- so (.) like >somehow<

12     sen    on pakko olla    koko ajan    osallisena    keskustelussa  
          DEM-GEN be must    be-INF whole time-GEN taking-part-ESS conversation-INE  
          he just has to be part of the conversation all the time

13     ja    jotenki et .hhh (.)  
          and somehow PRT  
          and somehow that .hhh (.)

-----  
14     sit   mä oon    vähän sillee  
          then sg1 be-1 little PRT  
          then I'm a bit so that

15     et y:::a::::rrrhh .hhh=  
          PRT  
          like y:::a::::rrrhh .hhh=

## Climax

16 B: =nii.=  
          PRT  
          =yeah.=

– Continuer (l. 16)

17 A: =mut tota .hh (0.4) nii (.) no (.) emmä    tiiä ja  
          but PRT                         PRT             PRT             NEG-SG1 know and  
          =but then .hh (0.4) so (.) well (.) I don't know and

18 *sit se on jotenki (.) >sillee et< (.) aina välillä*  
PRT DEM be somehow PRT PRT always sometimes  
then it's somehow (.) >so that< (.) every now and then

19 *mä yritän jotain meilailla sille mut ei se sit (.)*  
sg1 try-1 something email-INF DEM-ALL but NEG DEM PRT  
I try to email her a bit but then she doesn't (.)

20 *m- vastaa se mun kaveri jotenki se on vähän huono*  
reply DEM sg1-GEN friend somehow DEM be a.little bad  
m- reply that friend of mine somehow she's not so good

21 *pitää yhteyttä ni*  
keep-INF contact-PAR PRT  
at keeping contact so

-----  
22 *sit se on kans vähän sillee*  
PRT DEM be also a.little somehow  
then it's a bit somehow

## Evaluation

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23 *(.) .mhhh harmi (.)*  
pity  
*(.) .mhhh a pity (.)*

The participant A tells about losing contact with a friend. In the build-up phase, the recipient responds with a nod (line 4), when the teller introduces the friend and the scene where the friend found a man from abroad and stayed there. This nod conveys affiliation with and access to the stance that this telling of the friend's life change conveys (Stivers 2008). In the

climax phase, when the teller animates her irritation with her friend's boyfriend, the recipient responds with response particle *Nii* that is coded as a neutral continuer on the basis of prosody (line 16), treating A's turn as incomplete, after which the teller moves towards closure of the telling. In this story, the nod in build-up and continuer in climax were the only responses to the story. Usually in the data the story recipients are more active, and also here, after the coded story, the recipient responded with a second story. In any case, this data extract illustrates a story from which a nod in build-up and a continuer in climax were coded.

The Extract 2 below shows an example of a story where nods and continuers occurred as a part of more active story reception. The tokens that were coded from each story phase are listed in the margin of the transcript. As indicated above, only one occurrence of an item was coded.

## Extract 2

1 A: *mä (.) mul on >tai siis lähinnä sen takia et mä olin:<*  
 sg1 sg1-ADE be or PRT mostly DEM-GEN because.of PRT sg1 be-PST-1  
 I (.) I've >or you know mostly because I was:< on I

2 A: *mä tulin: tiistai iltana Yllä:kseltä mis mä olin*  
 sg1 come-PST-1 Tuesday evening-ESS PlaceName-ABL where sg1 be-PST-1  
 came on Tuesday evening I came from Ylläs where I'd been

← B SMILES →

3 *kuus päivää? tai [siis (.)*  
 six day-PAR or PRT  
 for six days? or [you know (.)

## Buildup

- Continuer (l. 17)
- Epistemic news-marker (l. 4)
- Neutral verbal response (l. 7)
- Nod (l. 7) 14
- Affiliative change in face (l. 3)

4 B: [(↑°uuu°)

5 A: *no ensinnäkin tää on (.) mä oon meiän niinku*<  
PRT firstly DEM1 be SG1 be-1 PL1-GEN PRT  
well first of all this is (.) I'm like our<

6 A: >*mäent* < *meil on siis nää killat?*  
SG1 NEG PL1-ADE be PRT DEM-PL1 guild-PL  
>I don't k < we have like these guilds?

←...B NODS...→

7 B: ↑*joo tiiän.*  
PRT know-1  
↑yeah I know.

8 A: *niinku.*  
PRT  
like.

←...B NODS...→

9 B: ↑*joo.*  
PRT  
↑yeah.

10 A: *ni meil on kröh paperi insinööri- kilta mihin*  
PRT PL1-ADE be paper engineering guild which-ILL  
so we have krhm the paper engineers' g- guild to which

11 *mä kuulun ni mä oon siel niinku (0.3) meiän nn siel*

sg1 belong PRT sg1 be-1 there PRT PL1-GEN there  
I belong so I'm there like (0.3) our n: in the

12 *raa:dissa elikkä niinku meiän, .hh*  
council-INE PRT PRT PL1-GEN  
co:uncil so that our, .hh

13 B: ↑aa.

14 A: *mul on niinku virka?=siis tämmönen,*  
sg1-GEN be PRT position PRT this.kind.of  
I have a kind of position?=like this,

**←.....B NODS.....→**

15 B: ↑*joo? joo.*  
PRT PRT  
↑*yeah? yeah.*

16 A: *meiän siäl (0.3) hh >meil (oli) kaikkii näit<*  
PL1-GEN there PL1-ADE be-PST all-PAR DEM-PL1-PAR  
in our (0.3) hh >we (had) all these<

17 B: (*joo.*)  
PRT  
(*yeah.*)

18 A: *virka >mä oon tavallaan niinku< ulko-*  
position sg1 be-1 in.a.way PRT foreign  
position >I'm in a way< the minister of foreign

19 *ministeri?*= *mut mä oon niinku tämmönen*  
minister but sg1 be-1 PRT this.kind.of  
affairs? =but I'm like this person in charge of

20 *ulkovastaava on meil se termi.=ja mä pidän niinku*  
out.responsible be PL1-ADE it term and sg1 hold-1 PRT  
international relations as we say.= and I sort of

**B NODS**



21 *huolta kaikist meidän vaihto opiskelijoista?*  
care-PAR all-PAR PL1-GEN exchange student-PL  
take care of all our exchange students?

22 (.)

**B SMILES**



23 A: *.hhh ja sit mä olin niitten kaa siel Ylläksellä.*  
and PRT sg1 be-PST DEM-PL-GEN with there PlaceName-ADE  
.hhh so and I was then with them there at Ylläsh.

24 B: ↑uuuh,

25 A: *oli siel kemialaisiiki ja oli sikki[läisiiki vähän.*  
be-PST there chemist-PL-PAR-CLI and be-PST eeg-member-PL-PAR-CLI a.little  
there were some chemists and electr[ic engineers too.

26 B: *[oliiks iso porukka,*  
be-PST-Q big group  
*[was it a large group,*

27 A: *meit oli viistoista.*

PL1-PAR be-PST fifteen

we were fifteen.

28 (.)

### B NODS

29 B: ↑joo.

PRT

↑yeah.

30 A: *ni siel oli [(.) ihan <sairaan kivaa>*

PRT there be-PST PRT sick-GEN fun-PAR

so that was [(.) like <ridiculously great time>

31 B: [( ) kiva.

nice

[( ) nice.

### B SMILES

32 A: *ja sit mä oon vieläki jotenki hhe ihan niis maailmois*

and PRT SG1 be-1 still somehow totally DEM-PL-INE world-PL-INE

and then I'm still somehow hhe in those worlds

### B SMILES

33 *et mä en oo viel flas↑keutunu maan pinnalle.*

PRT SG1 NEG be yet land-PPC earth-GEN ground-ALL

I haven't landed yet back to earth.

34 B: *[kävitsä siel (.) Hovissa.*

visit-PST-2+SG2 there Name-INE

## Climax

- Continuer (l. 44)
- Epistemic news-marker (l. 50)
- Response cry (l. 51)
- Neutral verbal response (l. 34)
- Affiliating verbal response (l. 31)
- Affiliative change in face (l. 32)
- Epistemic change in face (l. 36)

[did you visit that (.) hovi. ((restaurant))

35 A: *[tai palautunu todellisuuteen.*

or return-PPC reality-ILL

[or back to reality.

**B'S SURPRISED FACIAL EXPRESSION**



36 A: *ai pohjanhovissa.*

PRT Name-INE

you mean pohjanhovi.

**B SMILES**

37 B: *[joo.=*

PRT

yeah.=

38 A: *=joo käytiin,*

PRT visit-PASS

=yeah we did,

39 A: *nhe he*

40 B: *onks siel to:inenki se on se [Pohjanhovi halli ja*

be-Q there another-CLI DEM be DEM Name hall and

is there another it's the [Pohjanhovi hall and

41 A: *[joo.*

PRT

[yeah.

42 B: *sit on [se [Pohjanhovi*  
PRT be DEM Name  
then there's [that [Pohjanhovi

43 A: *[joo [niit on [kaks*  
PRT DEM-PL-PAR be two  
[yeah [there are [two of them

44 B: *[joo.*  
PRT  
[yeah.

45 A: *ni kyl me käytiin siel vanhas nii.*  
PRT PRT PL1 visit-PASS there old-INE PRT  
and so we visited that old one so.

46 B: *joo.*  
PRT  
yeah.

**B SMILES**



47 A: *ja käytiin moottorikelkkailemassa ja?*  
and visit-PASS drive-snowmobile-INF-INE and  
and we went snowmobile driving and?

48 A: *mh tuota (.) lautailemassa tietty kahten päivän ja.*  
PRT board-INF-INE of.course two-ESS day-ESS and

mh I mean (.) snowboarding of course on two days and.

49 A: [tällast näin ni  
this.sort.of-PAR PRT PRT  
[this sort of thing so

50 B: [↑no noni,  
PRT PRT  
[↑well oh my,

51 B: wa:u

52 A: voi että siellä oli kivaa.  
PRT PRT there be-PST fun-PAR  
my how it was fun.

The participant A tells about a pleasant skiing trip with her fellows from a student association. The recipient responds with nods and continuers, among other ways of responding. Here nods and continuers co-occur in reception of information (lines 7, 9, 15 and 29), and a solitude nod occurs in a place where the teller mentions that in her position in the student association, she takes care of younger students (line 21). For the purposes of the current study, it was coded that (one or more) nods and continuers occurred in build-up and a continuer occurred in climax.

### **Rating the recipient empathy in the stories**

To investigate how the story recipients' actions are associated with how empathetic the recipients appear, the stories coded from the video-recorded data were assessed by three

independent naïve raters coming from the same social group as the participants in the videos as the research subjects (students in higher education). The raters viewed the stories from a computer screen in a randomized order. Using a 9-point Likert scale ranging from 1 (lowest empathy) to 9 (highest empathy), they assessed the degree to which the recipient of each story was empathetic toward the teller—not in separate story phases but in how she received the story as a whole. Raters were not supposed to analyze the empathy in any technical way but simply to rely on their intuitive impressions. In the coding instruction, the Finnish vernacular word *myötäelävä* (*myötä*=along, *elävä*=living) was used along with the word empathy. To describe the target of the coding, we also used the phrase “she as it were shares in the teller’s emotions”. While the rating focused on empathy in the *recipients*, it was inevitably also sensitive to the *tellers’* way of constructing the story. The raters’ intuitions of the recipients’ responsiveness to the story emerged as they watched the interplay between the tellers and the recipients, and in this interplay, the recipients’ displays of empathy occurred in the context of the opportunities provided by the storyteller. Intraclass correlation for ratings was 0.70.

The data extracts above illustrate also stories with different ratings of empathy. The story in the Extract 1 had a mean empathy rating of 3.67. Only 11 (4%) of stories had equal or lower rating. Individual ratings were unanimous (3, 4 and 4). This story had a mean empathy rating of 7.33. 102 (37%) of stories were rated equal or higher. There was some variation in the individual ratings (6, 7 and 9). The story in Extract 2 had a mean empathy rating of 7.33. 102 (37%) of stories were rated equal or higher. There was some variation in the individual ratings (6,7 and 9).

## **Statistical analysis**

Our data of 20 video-recorded discussions yielded a total of 317 stories, with the average length of 59.17 seconds. Out of these, 95 were coded as happy, 89 as sad, and 89 as ambivalent. In addition, the valence of 44 stories was coded as “other.” The latter were usually about nonpersonal topics and did not make relevant affiliation in ways similar to happy, sad, or ambivalent stories. Therefore, they are not included in the present analysis. Continuers were found in 74% of the story build-ups and also 74 % of the climaxes. Nods, on the other hand, were found in 68 % of the build-ups and 69 % of the climaxes. (For the prevalences of other response actions, see Peräkylä et al 2015). The mean rating of empathy was 6.55 (range=2.33-9.00, SD=1.36)

Data were analyzed with SPSS 20 using mixed models. The dependent variable—story empathy—was specified as the mean of the three ratings. Square root transformed values of the dependent variable were used in analysis to ensure normality. Separate models were tested for nods and continuers. Both models included the presences of nod/continuer in build-up and climax phases as predictors along with their interaction. Also, as nods, continuers and other story recipient’s responses correlate, a combined model including all the response types by the recipient was tested to control the effect of other responses. Categories of response cries and affective gestures were omitted from the analysis due to their scarcity (less than 10 occurrences in both phases).

Individuals may differ consistently in how their responses are perceived as empathic by the raters. To accommodate this individual variance in the dependent variable per person, random intercept was estimated for individual participants (Dyad × Member) using identity covariance structure (ID). As there are multiple observations per participant and participants belong to their respective dyads, a repeated measures covariance model was estimated.

Stories were specified as repeated variable, nested within dyad participants (Dyad × Member), using AR1 covariance structure for residuals.

## Results

We will first report the results where nods and continuers are analyzed in separate models and thereafter the model that includes all tokens. It should be noted that the effect of nods is statistically significant only in the separate model, it does not remain statistically significant in the latter model where all responses were included. This indicates that nods did not have an effect independent of other responses co-occurring with nods. Despite of this, we show also the results from this separate model, as we consider them as a signal of a possible difference in how nods and continuers are perceived in different story phases—even if that effect it is lost in the model where stronger effects are included.

### Separate analyses of nods and continuers

The separate analysis of nods and rated empathy showed that nods (vs. no nods) delivered in the build-up phase increased the rated empathy ( $F(1,249.90)=5.18, p<0.05$ ) but did *not* do that in the story climax. Instead, we found a trending effect for nods *decreasing* the rated empathy in the story climax ( $F(1,247.36)=2.66, p=0.10$ ). This is in line with Stivers' (2008) claim that the interactive organization of storytelling has an effect to whether or not a nod is a sufficient display of affiliation. There was no statistically significant interaction between the presence of nods in build-up and climax ( $F(1,238.42)=0.62$ ), which points to the independence of these two variables.

Figure 1 shows the estimated means and 95% confidence intervals for nods in two story phases: build-up and climax, with rated empathy as the dependent variable. The occurrence of nods has an effect on the rated empathy and the effect is different in build-up and climax. Story recipient's nods during the build-up phase ( $M=2.01$ ,  $SE=0.05$ ) increased the rated empathy compared to the situations with no nods ( $M=1.90$ ,  $SE=0.05$ ). In contrast, if the response to the story climax included a nod, there is a trend that the empathy was rated as lower ( $M=1.92$ ,  $SE=0.04$ ) than in the cases of no nod ( $M=1.99$ ,  $SE=0.05$ ).

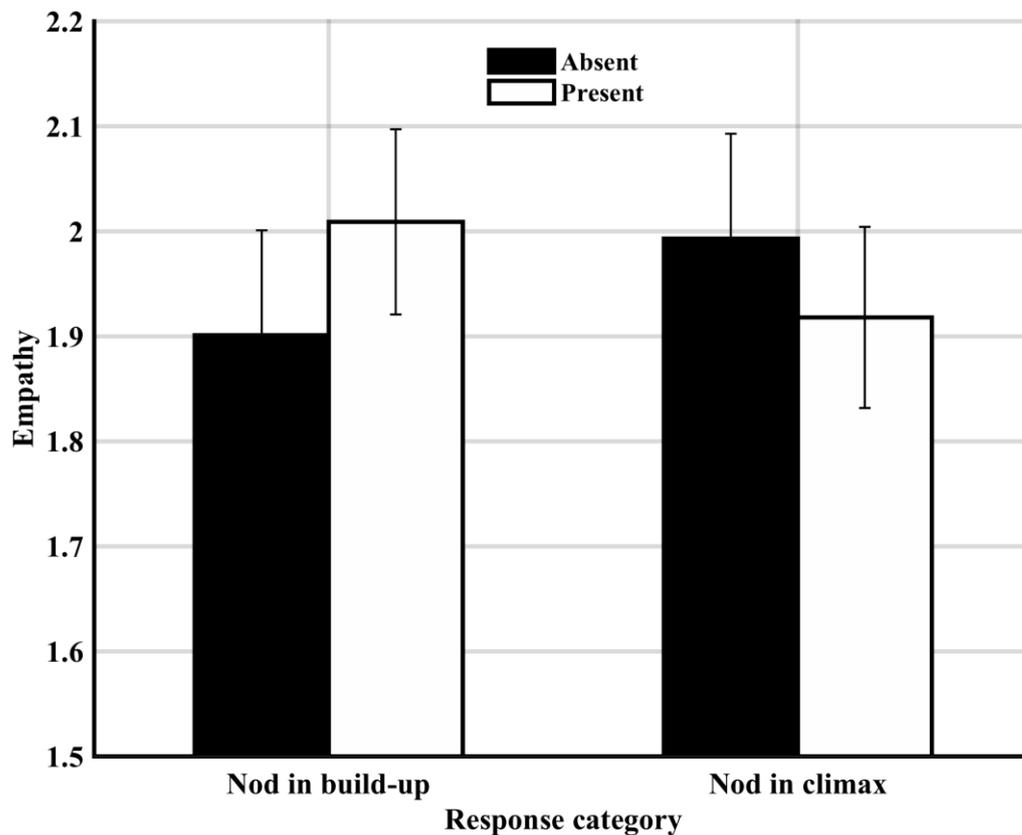


Figure 1. Rated empathy on build-up and climax during presence and absence of nods. Empathy rate is shown in square root transformed values. Error bars represent 95% confidence intervals.

Also vocal continuers increased the rated empathy in the build-up phase ( $F(1,259.74)=12.81$ ,  $p<0.001$ ). Similarly to nods, this effect does not show after the climax of the story ( $F(1,249.43)=1.04$ ) and there is no interaction effect ( $F(1,248.88)=1.07$ ). In the case of continuers, however, we did not get the similar trending effect as we got for nods – that is, verbal continuers did not *decrease* the rated empathy in the story climax (as nods did). Contrary to our expectations, the effect of continuers to rated empathy was not weaker but in fact stronger than the effect of nods.

The figure 2 below shows the estimated means and 95% confidence intervals for the continuers in story phases, rated empathy as the dependent variable. The occurrence of continuers has an effect on the rated empathy and the effect is different in build-up and climax. It is shown that the presence of recipient's continuers in the story build-up increased the rated empathy ( $M=2.04$ ,  $SE=0.05$ ) compared to their absence ( $M=1.85$ ,  $SE=0.06$ ). In contrast, continuers delivered in the story climax ( $M=1.92$ ,  $SE=0.05$ ) do not demonstrate such effect, compared to when they are not ( $M=1.97$ ,  $SE=0.05$ ).

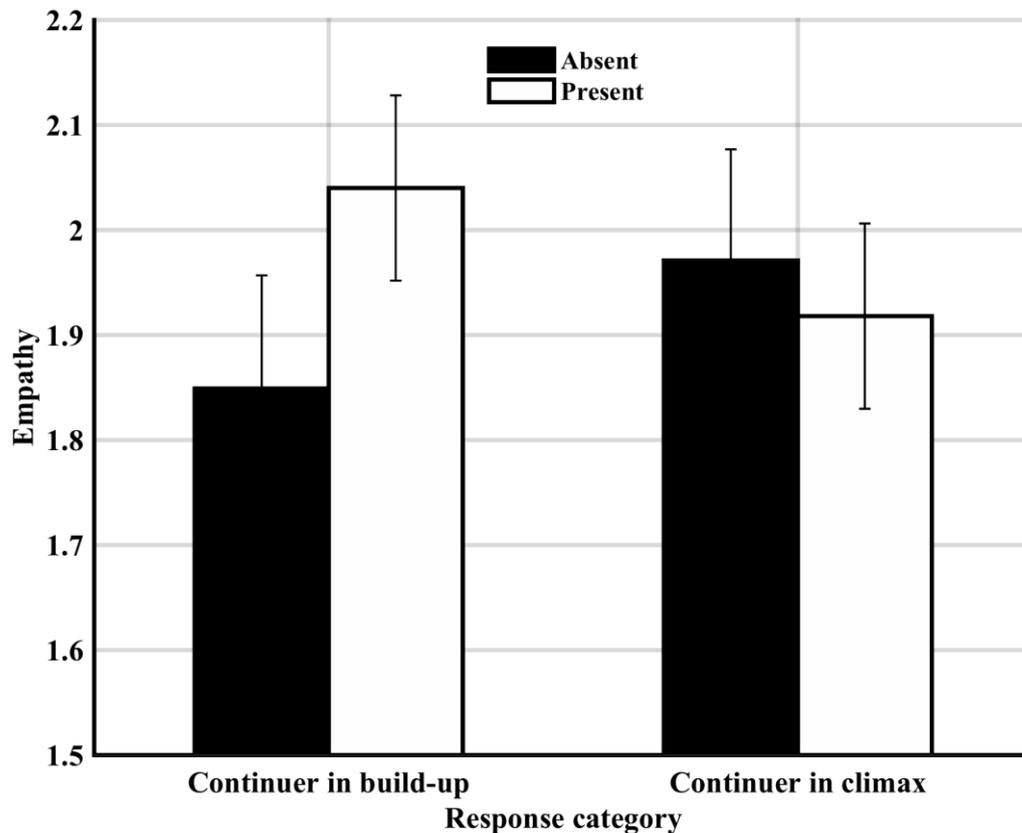


Figure 2. Rated empathy on build-up and climax during presence and absence of continuers. Empathy rate is shown in square root transformed values. Errorbars represent 95% confidence intervals.

In sum, these models showed that nods and continuers were used in relatively similar ways, but that there was a difference between the build-up and the climax in how empathetic the two types of responses appeared, especially in the case of nods, in line with Stivers' (2008) study. It is reasonable, however, to pay closer attention to the matter that nods and continuers are not independent of each other and of the other responses by the story recipient.

### **Analysis of all response categories**

To control the effect of other responses to the rated empathy, we conducted a second analysis where both nods and continuers were analyzed in the same model with all coded response

types. In this analysis, the effect of continuers in the build-up remained as statistically significant. The Table 1 below shows the results of this analysis.

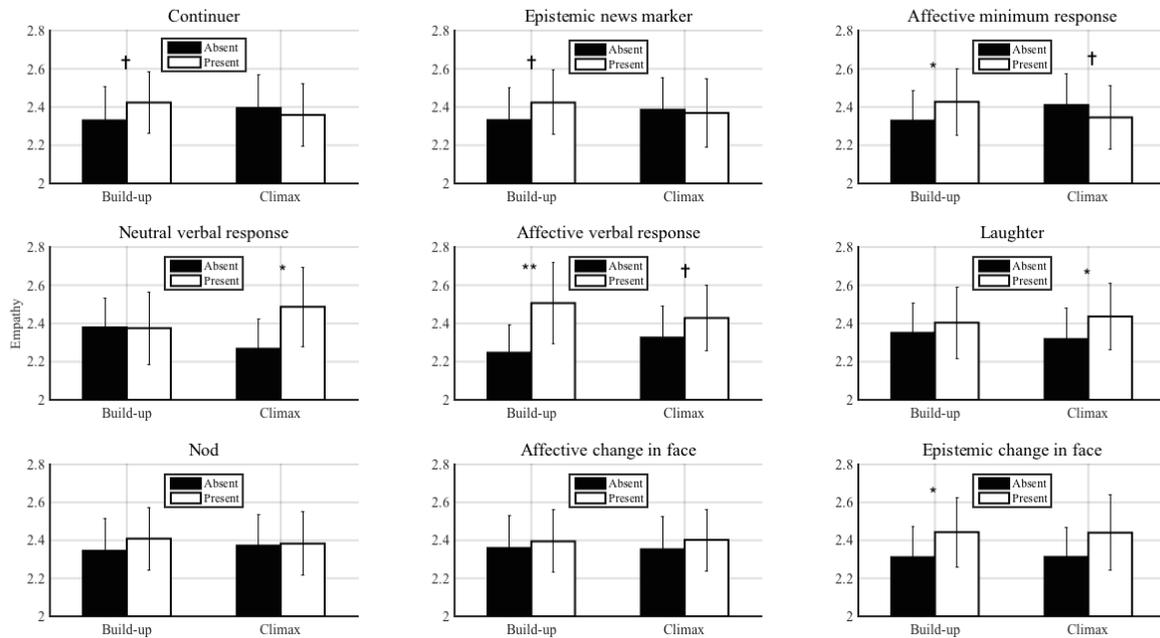
Table 1. Fixed effect estimates and statistical significances of the model containing all response categories. \*\*) p<0.01, \*) p<0.05, †) Trend (p<0.10).

<u>Response type</u>	<u>Buildup</u>						<u>Climax</u>					
	<u>Cases</u>	<u>Estimate</u>	<u>SE</u>	<u>df</u>	<u>F</u>	<u>p</u>	<u>Cases</u>	<u>Estimate</u>	<u>SE</u>	<u>df</u>	<u>F</u>	<u>p</u>
Continuer	195	0.09	0.05	1,244.16	3.77	.053†	196	-0.04	0.05	1,238.89	0.58	ns.
Epistemic news marker	49	0.09	0.06	1,231.45	2.73	.100†	26	-0.02	0.07	1,231.93	0.06	ns.
Affective minimum response	60	0.10	0.05	1,237.10	4.48	.035*	114	-0.07	0.04	1,236.83	2.76	.098†
Neutral verbal response	24	0.00	0.07	1,223.91	0.00	ns.	14	0.22	0.09	1,235.84	6.02	.015*
Affective verbal response	13	0.26	0.09	1,238.89	8.55	.004**	42	0.10	0.05	1,232.04	3.73	.055†
Laughter	33	0.05	0.06	1,230.15	0.69	ns.	72	0.12	0.05	1,233.18	5.70	.018*
Nod	179	0.06	0.05	1,241.96	1.91	ns.	182	0.01	0.04	1,237.82	0.06	ns.
Affective change in face	103	0.03	0.05	1,226.64	0.57	ns.	152	0.05	0.04	1,233.78	1.18	ns.
Epistemic change in face	26	0.13	0.07	1,225.97	3.88	.050*	17	0.13	0.08	1,234.51	2.65	ns.

In this model, regarding our hypotheses, the effect of continuers increasing the rated empathy in build-up phase remains as statistically significant (exhibiting a very strong trend at p=0.053). In other words, continuers have an effect on empathy that is independent from the effect of other responses, whereas we did not find an independent effect of nods. In this respect, it seems that, contrary to what we expected on the basis of Stivers' distinction, it is a continuer, rather than a nod, that is a particularly crucial vehicle for a story recipient to display affiliation.

The analysis revealed that also epistemic news markers (trend), affective minimal responses, affective verbal responses and epistemic changes in face (facial expression that showed surprise) during build-up had an independent effect on rated empathy. In climax, both affective (trend) and neutral verbal responses and laughter had statistically significant effect on the empathy rating. Affective minimal response in story climax had an independent, *negative* trending effect on the rated empathy. In other words, occurrence of affective minimal response in story climax decreased the raters' impression of the empathy of the story recipient.

Figure 3. Rated empathy on build-up and climax during presence and absence of all response categories. Empathy rate is shown in square root transformed values. Errorbars represent 95% confidence intervals. \*\*)  $p < 0.01$ , \*)  $p < 0.05$ , †) Trend ( $p < 0.10$ ).



## Discussion

A basic argument in conversation analysis is that social interaction is structurally organized (Schegloff, 2007). In earlier empirical research this has been shown to apply also to the activity of storytelling and to the reciprocal displays of affective stance within that activity (Sacks, 1974; Jefferson, 1978; Stivers, 2008). In this paper, we investigated Finnish conversation to find out how these structures of storytelling configure with the impressions of empathy that the participants, through their conduct, give off to others. More specifically, we examined nods and verbal continuers as to their function in conveying empathy, and how this empathetic function relates to two different story phases: build-up and climax. We tested two hypotheses inspired by Stivers' (2008) argument: that nods would increase the rated empathy

in the build-up but not in the climax, and that continuers would have a generally weaker effect on the rated empathy. These hypotheses were not supported by our data. However, the separate analysis of nods offered some indication that nods in mid-telling and nods in climax may have a different effect on the perception of empathy. Our question did not differentiate the sequential position of nods or continuers more specifically than by the story phase. In further research, a more elaborated coding scheme could be developed to specify the question. Interestingly, however, our data suggests that continuers have a clear positive effect on the rated empathy, even independently of other response types. The strong effect of continuers found in this study invites further research and reflection on the function of vocal response tokens in affiliation, as well as on the limitations of the distinction between affiliation and alignment.

We may interpret the affiliative function of continuers in several different ways. One is to consider the possibility that, in Finnish language and culture, even non-affective response tokens are perceived to convey empathy, which may not hold for other languages and cultures. Previous research has shown that, in Finnish, the same minimal tokens that communicate that the recipient is following the story are also used to display epistemic and affective relations between utterances and participants (Sorjonen, 2001). Thus, the distinction between the resources for alignment and affiliation might be less clear than what we assumed on the basis of Stivers' work on English data. Another way to understand our results focuses on the possible overlap between affiliation and alignment as relational phenomena. *Attention* may be a key phenomenon here. Both alignment and affiliation presuppose attention, and it may be that our Finnish raters perceived attention in the storyteller's vocal continuers, and associated that with increased empathy. Thus, our results also suggest further work on the interactional ramifications of attention.

Our analyses on nods and continuers (in the separate models) suggested a difference between nods and continuers in how they are perceived in story climax. The recipient's nods in the story climax were apparently more "misplaced" than continuers in the same storytelling phase. It may be possible that continuers are heard to *postpone* a full affective reception of the story, while nods may be seen to replace that (like affective minimal responses in story climaxes that decreased empathy rate). However, we do not yet know much about the extent to which nods and verbal continuers may operate as indications of incipient speakership (Schegloff, 1996: 92-93) in different interactional environments – even if some research in this direction has already been done (Gonzalez, Temer, and Ogden, 2015).

While our research question focused on nods and continuers, our analysis revealed also independent effects of other response tokens on rated empathy. Interestingly, affective minimal response in story climax decreased the rated empathy. This can be seen to offer further support to the notion of the division of labor between different response types in different story phases (see Stivers, 2012; Kupez, 2014). Presumably the negative effect relates to the immediate context of the affective minimal responses in story climax: if they occur 'stand alone' ('replacing' other responses), their effect might be more salient than when they occur together with other recipient actions, such as affective verbal responses. This question could be investigated in future research with more sophisticated coding schemes that include e.g. the timing of the teller's actions and the recipient's responses. Earlier qualitative CA on storytelling and responsive actions (e.g. Sorjonen 2001; Couper-Kuhlen, 2012; Kupez 2014; Heritage 2011) can offer hypotheses for further quantitative research on the functions of different response tokens in different phases of stories. For example, there may be significant differences in how the timing of response influences the perceived empathy in minimalvs. extended responses.

Finally, we need to consider the meaning of the observer's perspective in our study. We used naïve raters' evaluations as an analytical resource (for another way to use observer perspective in CA informed study, see Hirvenkari, Ruusuvuori, Saarinen, Kivioja, Peräkylä, and Hari, 2013). This involved a departure from central methodological principle in CA, which has been geared to investigate how participants of interaction *themselves* show orientation to the structures and norms of social action in their visible, intersubjective behavior (Heritage and Atkinson, 1984:1). In this study, however, we considered the participants' behaviors as seen from a third person perspective. Our results imply that conversational structures—such as the phasic structure of stories—are attended to by the observers, as a matrix informing the perception of the participants' affective interpersonal experiences. The observer's and the participant's perspectives necessarily overlap. Indeed, in our everyday lives, we constantly evaluate our potential co-participants, assessing their intentions, dispositions and emotional states on the basis of how they operate within the matrix of conversational structures. What a person is like is given off in his/her behavioral choices in the matrix of conversational organization (cf. Goffman, 1983). The capacity to make judgments also about empathy in others is part of our competence as a member of our community, and conversational organization is a necessary facet of this competence.

As for the limitations of the study at hand, coding and quantitative analysis necessarily fail to reach many discreet organizations of the phenomena at hand (see also Peräkylä et al., 2015). Thus, we could not consider the very specific sequential environments of responsive behaviors described by Stivers (2008, p. 41-42), who suggested that nods (unlike continuers) occur as responses to particular utterances where the teller provides access to his or her stance. In our coding, the relevant environment was more gross, i.e., the story phase: we focused on how nods and continuers, occurring at different phases of the story, effect to the impression of empathy. It seems possible that the affiliative work nods do in the specific

contexts of mid-telling is an outcome of a more discreet interactional organization that the robust coding that was used in the current study cannot fully describe.

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*Appendix A: Glossing abbreviations*

PL plural  
1 first person  
2 second person  
SG1, PL2... personal pronoun

DEM demonstrative pronoun

GEN genitive

PAR partitive

ESS essive

TRA translative

INE inessive

ILL illative

ADE adessive

ABL ablative

ALL allative

INF infinitive

CLI particle clitic

Q question clitic

PASS        passive  
PST        past tense  
PPC        past participle

Singular, third person, nominative, active, and present tense are forms that have been considered unmarked. These have not been glossed (except for the first person singular personal pronoun = SG1).