

Showing interest during first acquaintance

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Abstract

The goal of this paper is to investigate the expression of *interest* as an affective-epistemic attitude in first acquaintance conversations. The study presents an analysis of how interest, as one of several different affective-epistemic attitudes, is shown through multimodal expressions between strangers meeting the first time. The results show that interest can be shown both as a single attitude and in combination with other attitudes. Interest as a single attitude occurs more often. The findings indicate that multimodal expressions connected with showing interest mainly include five body movements/gestures; gaze, head movements, holistic face, hand movements and body postures. Gaze occurs 70 times in the case of interest as a single attitude, and in combination with other attitudes 7 times. The corresponding numbers for head movements are 50 times for a single attitude and 7 times for a combined attitude. While smiles (classified as a general face movement) occur 24 times with a single attitude of interest, it occurs 9 times, in a combination with other attitudes. The difference between a single and a combined attitude was less pronounced regarding hand movements – 16 times for a single attitude and 8 times for a combined attitude. The numbers for body postures expressing attitudes were 11 for a single attitude versus only 1 for a combined attitude. The study suggests that there are signs of differences between how women and men show interest, even when taking into account that the number of women in the study exceeds the number of men. The difference between sexes regarding showing interest is bigger concerning the combined attitude type than the single attitude type.

Keywords: showing interest, attitude annotation, first acquaintance

Introduction

Communication is one of the tools humans use when socializing and interacting with others in any social community. Communication in general, but particularly face-to-face communication is multimodal, usually involving both speech and visible bodily gestures (Allwood, 2002:12). Further, bodily communication that is perceived visually has a central place in human communication. Navarretta et al. (2011) include attributes such as *facial expressions*, *gaze* and *hand gestures*, *head movements* and *body postures* as particularly significant for the expression of the emotional states of an individual (See also Meeren et al. 2005:16518).

In order to analyze how interest is expressed and perceived by interlocutors, we have to take into account the relationship between expressions of emotions using vocal verbal utterances, facial expressions and other bodily movements i.e. body posture and hand movements. It can also be important to take into account “touching and scratching” involving “self-manipulation”, together with changes in body position, head and hand movements (Mehrabian, 1968:54). All of these types of bodily expressions can express the underlying positive or negative attitudes of a person (Ibid:54).

One of the motives for writing this paper is that in our data of audio/ and video recorded first encounters between two university students, *interest* turns out to be the most commonly expressed affective-epistemic attitude, followed by being *certain*, *casual* (*relaxed and/or informal*), *amused* and *reassuring*. Table 1 shows the five most

common affective epistemic attitudes that occur in our study. The table shows that an attitude can be simultaneously expressed by several bodily features, e.g. 171 particular features were involved in the 86 occurrences of the expression of the attitude of interest.

Affective Epistemic states - Single attitude	Total Frequency of particular bodily features involved in the multimodal expression of an attitude ¹	Total Frequency of the attitude expressed by participants
<i>Interested</i>	171	86
Certain	96	44
Reassuring	74	44
Casual	72	33
Amused	77	29

Table 1: Most common affective epistemic attitudes in the analyzed first acquaintances

Showing interest

In this paper we focus on how *interest* is expressed multimodally, combining a study of the utterances and gestures made by the participants. As already mentioned, this can be done either by expressing interest alone or by expressing it in combination with other attitudes, for example showing *interest* and being *reassuring* at the same time. In both cases *interest* can be expressed using vocal verbal means, facial expressions or body movements.

Whether to include interest as an emotion or not has been a topic of discussion. Ortony et al. (1990) reports that some emotion theorists (Plutchik, Ekman and Arnold) claimed that whether interest can be considered an emotion is unclear since interest is something more of “a cognitive state and not an affective one” while other theorists like Frijda, Tomkins and Izard have called interest a “basic emotion” since interest “exhibits a distinctive facial expression” (Ortony et al. 1990:318).

There are several theories of emotion and also several lists of basic emotions, e.g. Plutchik lists 8 basic emotions, i.e. *joy, trust, fear, surprise, sadness, disgust, anger* and *anticipation* (Ortony et al. 1990:316). Ekman only identifies 6 emotions, i.e. happiness, anger, fear, sadness, surprise and disgust/(contempt) (Ibid:316). The lists vary

¹ The number stands for the total frequency of the occurring multimodal features i.e. gaze, face, head, hand, body.

between different theories. As already mentioned, some emotion theorists such as Frijda, Izard and Tomkins have included interest as an emotion, see Table 2 for an overview.

Basic emotions defined by theorists (based on Ortony & Turner (1990 & http://www.deepermind.com/02clarty.htm))	
Theorist	Basic Emotions
Plutchik, R. (1927–2006)	Acceptance, anger, anticipation, disgust, joy, fear, sadness, surprise
Ekman, P (1934-)	Anger, disgust, fear, joy, sadness, surprise
Arnold, M. B (1903–2002)	Anger, aversion, courage, dejection, desire, despair, fear, hate, hope, love, sadness
Frijda, N. H. (1927-)	Desire, interest, happiness, surprise, sorrow, wonder
Tomkins, S. S. (1911–1991)	Anger, contempt, disgust, distress, fear, interest, joy, shame, surprise
Izard, C (1924-)	Anger, contempt, disgust, distress, fear, guilt, interest, joy, shame, surprise

Table 2. A sample over emotion theorist’s emotion position.

Showing interest as expressing a stance

Kiesling (2009) defines a stance as “a person’s expression of their relationship to their talk /.../ or a person’s expression of their relationship to their interlocutors (Kiesling, 2009:272/1).

A stance usually occurs when two (or several) contributors interact and communicate with each other face-to-face. In doing so, the contributors react to each other’s facial and bodily attributes, which is a basic feature of a co-constructed stance (Allwood et al. 2012). Biber et al. (1999) in Clift (2006) have suggested 3 types of stance: *epistemic, affect* and *manner* (Clift 2006:579). Epistemic stances include certainty, doubt and particular viewpoints, while affective stances include more emotional attitudes and manner stances concern style of communication (Ibid:579).

Allwood et al. (2011:2) define communicative stance as an “attitude which is expressed and sustained interactively in communication, in a unimodal or multimodal manner”. The difference between attitudes and stances, following this definition would thus be that a stance, but not an attitude, needs to be overtly expressed. The term *unimodal* is used when the stance is only vocal verbal or only gestural. *Attitudes* can be both of an

epistemic and an affective kind. Epistemic stances can be exemplified by *believing* and *being bored* while expressing happiness is an example of an affective stance. However, there are many attitudes that are both “epistemic and affective” like *feeling of certainty* or attitudes that are related to expectation like *surprise* (Allwood et al. 2012).

Purpose

As already stated, the overall aim of this paper is to investigate interest as an affective-epistemic attitude. We do this by identifying different affective-epistemic attitudes shown between strangers when they meet the first time and by describing the multimodal features of these attitudes. The research questions for this paper are four: First, does the expression of interest express a single attitude or is it combined with other attitudes? Second, what kind of multimodal expressions are used in showing interest? Third, are there any differences between the sexes in how and how much interest is shown? And fourth, does showing interest qualify as a stance?

Data analysis and method

Transcription of audio

The data analysis in this paper is based on 14 video-recordings of first acquaintances between strangers, recorded at the University of Gothenburg during the period 2009 -2010.

The participants were Swedish university students from different disciplines at the University of Gothenburg who met the first time. In total, 14 of the participants were female (two of them occur twice in the recordings) and 10 were male (two of them also occur twice in the recordings). The 24 students were randomly selected in order to get as unbiased data as possible. The approximate length of each video recording ranges from 6 to 8 minutes. The video recording transcriptions were made using the Gothenburg Transcription Standard (GTS) with The Modified Standard Orthography version 6 (MSO6), (Nivre, et al. 1999:3). The transcriptions and recordings were imported into the Anvil-program (Kipp

2001). and annotated using the MUMIN annotation scheme (Allwood et al. 2007). A randomized selection, involving numbering all utterances and then using a numerically randomizing program to pick out sequences of 3 utterances in the transcription, exemplifying different affective-epistemic states, was used to select what was annotated.

In total, 97 out of 333 utterances were coded as expressing *interest*. For each expression of interest we determined exactly where the utterances started and ended on the video recordings. Each sequence of 3 utterances was for this purpose imported into Anvil for detailed analysis. The selected sequences were later on classified more carefully regarding what affective-epistemic states and speech acts they expressed. Besides classifying the utterances expressing a particular affective-epistemic attitude, we also classified the utterances immediately preceding these utterances in order to have an idea of the conversational context.

The annotation of video

The annotations are based on the MUMIN annotation scheme which is a tool for studying gestures in interactive communication (Allwood, et al. 2007:274) and in this study it has been used to annotate the communicative gestures Navarretta, et al. 2011:155) (i.e. gestural movements expressed through five manners) together with the vocal verbal expressions connected with these gestures, in the recorded video sequences.

In order to synchronize the annotated video files with the transcriptions, the computer program Anvil was used for annotating the video recordings (Kipp 2001). All in all, the empirical data for the study comprises 62 video sequences. The lengths of the video sequences vary from 4 to 19 seconds.

In this paper, we have included the following movements for the head: down nod, up nod, head backward, head forward, tilt, side turn, waggle, shake, and head other single movement or repetitive movement.

For facial expressions: smile, laughter, and other. Eyebrows are coded as: frown and raised. Eyes are coded as: x-open, close both and close one.

Gaze direction is coded as: gaze forward, gaze backward, gaze up, gaze down, gaze

side, gaze direction and other. Gaze to interlocutor or away from interlocutor.

Hand gestures are coded as: handedness (single, both), hands other. Body posture or body direction: body forward, body backward, body up, body down, body side, body direction other, body directed to the interlocutor or body away from the interlocutor, Shrug and shoulders other have also been coded.

An illustration of an utterance that expresses interest as an affective-epistemic attitude can be found below.

B: < ja så du läser / kursen vi{d} sidan om >
 < yeah so you study /take the course on the side >
 < eliciting > ; < gaze at interlocutor > ;
 < attitude: interested >

(Transcription conventions:

< > = commented sequence of transcription and comments;

/ = short pause,

{ } = non-pronounced letter)

Result and discussion

In section 4.1, below we will present and discuss the results of identifying expressions of interest and the multimodal expressions through which this is done in conversations between university students meeting the first time.

General observations

Single attitude or combined attitudes

Our findings show that interest can occur alone and combined with other attitudes. By a single attitude we, thus refer to the case when no other attitude than interest is expressed. By a combined attitude we refer to the case where interest is expressed in combination with a second attitude. Interest as a single attitude occurs more often than as a combined state, i.e. 86 times, whereas interest combined with other attitudes occurs 11 times, as shown in tables 1 and 3.

Combined Affective-epistemic states	Total 11
Interested + surprised	4
Interested + casual	2
Interested + uncertain	2
Interested +ironic	1
Interested +unconfident	1
Interested +astonished	1

Table 3: Frequency of utterances expressing interest

Interest occurs mostly together with the *speech act* of *feedback* (both alone and multi-functionally) in combination with other speech acts The second and third most common speech act is *question* were interest occurs 14 times and *elicitation* were interest occurs 5 times.

The feedback utterances often involve overlaps, e.g. utterances such as [< m >] (occurs 6 times), [< m:>] (4), [< {j}a >] (4), [< okej >] (3), [< mhm >] (2), [< ja >] (2), [< {j}a >] (2), [< {j}a / {j}a >] (2).

Interest is also expressed in longer comments like: < okej men då då e de{t} fler än du som e jobbar me{d} precis samma sak / elle{r} e du unik på de+ [fronten så att säga >], <<m > // < va:{d} men då e1 > har du nån släkt kvar i < danmark > de{t} ha{r} du > << va:{d} e1 / m > men du va{r} lite{n} när du flyttade till < värmland > sa [du] > <okay but then then are there more people like you um working with just the same thing / or are you unique on the + [front so to speak>] << m > // < what but then um> do you have any family left in <denmark> have you > << what um / m > but you were small when you moved to <värmland> did [you] say>.

We also have utterances expressing interest through direct comments such as < du då > (*you then*), <du > (*you*), < du har gått på andra] > (<*you have gone to the other*>), < då har du gått på < område tre > skolan också > < eller{r} >> (<*then you gone to <area three> school too> <or >>*), < har du jobbat hä{r} länge > (<*have you worked here for long time >*), << ha{r} [du > några] syskon > (<< do [you have > some] siblings >), < ha{r} du plane{r} på att flytta < tillbaks till < värmland >>> (<< do you have plans to move <back to <värmland >>>), << å du plugga{r} inte här > / < eller >> (<< and you don't study here> / <or >>). In general, the expressions of single

attitudes of interest are slightly longer than are those of combined attitudes.

Multimodal expressions connected with showing interest

The results indicate that the multimodal expressions connected with showing interest besides the vocal verbal part include five types of body movements/gestures; gaze, head movements, general face movements, hand movements and body posture, as shown in Table 4.

Gesture	Single affective-epistemic state of Interested 86			Combined affective-epistemic state of Interested 11		
	Fem	Male	Tot	Fem	Male	Tot
Face	66%	34 %	70	5	2	7
Gaze	66%	34%	24	8	1	9
Head	66%	34%	50	6	6	12
Hand	37%	67%	16	6	2	8
Body	27 %	73%	11	-	1	1
Total	104	67	171	25	12	37
	61%	39%		67%	33%	
	171			37		

Table 4: Frequency of Multimodal Communicative attitude.

The corresponding numbers for *head movements* are 50 times for a single state and only 7 times for a combined attitude. *Smiles i.e. holistic face* occur as much as 70 times expressing interest as a single attitude and 7 times as a combined attitude. The difference between a single and a combined attitude was less pronounced regarding *hand movements* 16 times for a single attitude and 8 times for a combined one. The frequency for *body posture* regarding a single attitude that was 11 times, versus only 1 time for a combined attitude.

Face (smile) is the most common multimodal feature, followed by *head and gaze and hand and body*.

Differences between genders

Our study suggests that there are differences between how women and men show interest, also when compensating for the fact that the number of women in the study exceeds the number of men. The results in the table have to be compared to the expected difference between men and women (57% vs. 43%) due to the fact that there were more female participants.

The results indicate that women show interest slightly more often than men, and that the difference between the genders is larger concerning the combined attitude type than for single attitudes. They also indicate a slight difference in how interest is expressed. Women use face(smile), gaze and head slightly more and men hands and body.

As shown in Table 4, a single attitude of interest was shown 104 times and 25 times in combinations of multimodal attributes, by females and 67 times as a single attitude of interest and 7 times in combinations of multimodal attributes, by males.

Is showing interest a stance?

The participants who participated more than once enable us to explore the question of whether the expression of interest is a personality feature and thus a dispositional stance or if its occurrence is more dependent on the interlocutor and thus coconstructed.

As mentioned above, the participants in this study were 14 females, two of whom participated twice in the recordings and 10 males, where two participated twice in the recordings. This means that 57% of the recorded participants were female and 43% male. The reoccurring participants are two females, F1 and F2 and two males M1 and M2. If a particular attitude is shown frequently, in a similar way, we take it as an indication that what is expressed is a stance and perhaps a personality feature. If an attitude is shown less frequently, we take it as a sign that the expression of the attitude is perhaps not a personality feature and thus perhaps not a dispositional stance.

Using this criterion, our study indicates that showing interest can be considered a dispositional stance.

Showing interest - Difference between two males and two females								
Use of Behavioral feature	M1 -M2		F1-M2		F2-M1		F1-F2	
	Single feature	4	9	7	11	9	4	13
Combined features								2
Total	4	9	7	11	9	4	13	2

Table 6: Frequency of showing interest - Difference between only four participants, i.e. M1, M2, F1 and F2.

The reason is that when we compare the four encounters, M1 meeting M2, F1 meeting M2, F2 meeting M1, F1 meeting F2, as shown in Table 6, there is a similarity in how interest is shown by M1, M2 and F1 concerning both expression of interest both as a single and/combined attitude.

Conclusions

In this paper we have explored four questions i.e. does interest usually occur as a single attitude or is it combined with other attitudes? What kind of multimodal expressions are connected with showing interest? Are there any differences between the sexes in how much and how interest is shown? And lastly, is showing interest a stance?

Through our analysis we have illustrated that expression of *interest* is expressed both vocal verbally, by facial expressions and by bodily movements and gestures.

The expression of *interest* can occur both as a single attitude and in combination with other attitudes. A single attitude of interest occurs more often than a combined attitude. As shown in Table 4, the multimodal expressions connected with showing interest, besides the vocal verbal aspect, include five types of bodily expression features. Among these, *face*(smiles) is the most common, followed by, *head*, *gaze hand* and lastly *body*.

Turning to gender differences, females expressed interest slightly more often than males both as a single attitude and even more in combination with other attitudes. This is so also when we compensate for the fact that the number of women in the study

is greater than the number of men i.e. 14 females and 10 males (where four of them participate twice in the video recordings). The study also suggests that there are differences in the way that women and men show interest. Since expression of interest often has long duration and is expressed repeatedly by the same person, our results suggest that showing interest can be a dispositional stance based on an emotional attitude, often expressed as a pattern in face, the body and hand, which according to (Scherer, 2007:158) also typically characterizes emotional features.

Limitation of research

There are some limitations in our study. First, the number of participants is small and only four of them occur twice. Thus our claims can only be of a tentative nature.

Secondly, we have not sufficiently analyzed how the background of the participants influences their communication. They are Swedish university students. Their cultural background, age and length of study at university may all play a role for their behavior.

And lastly, power and dominance are other features that could be further analyzed, i.e. Is there a "leader" and a "follower" in the conversation? Such relations may well influence the way the participants talk, respond and express *interest*.

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