Teachers and Learners Constructing Meaning for Vocabulary Items in a Foreign Language Classroom

Eva Ingerpuu-Rümmel
University of Tartu
Institute of Social Studies
Estonia
eva.ingerpuu-rummel@ut.ee

Abstract

This paper presents a study of how teachers and learners use two semiotic resources – verbal expression and gestures – to construct meaning for words and expressions in French and Estonian language classrooms. For the purposes of the research, university seminars where Estonian and French were taught as foreign languages were videotaped. A micro-level multimodal discourse analysis of the videos was then conducted. The results show that each semiotic resource has its specific functions in the process of constructing meaning.

Keywords: meaning construction, gestures, foreign language learning, multimodal discourse analysis

1 Introduction

The paper presents a study of how teachers and learners use gestures to construct meaning for words and expressions in a foreign language classroom. Learners acquire elements of language and culture that are first partially or completely incomprehensible to them. A new word or expression (‘word’ hereafter) may be explained by the teacher alone or in collaboration with learners. The teacher and/or the learner(s) may introduce new words and expressions in a multimodal manner: verbal expression (words and grammar), vocal expression (e.g., stress, volume, pausing), gestures (body movement and position) as well as aids (e.g., texts, figures, drawings, videos) are used. Speech (verbal expression and vocal expression) and gestures collaborate in the co-construction of discourse (Kendon, 2004).

The explanation of words as a multimodal phenomenon and the role of gestures in this have not been extensively researched in the context of foreign language learning. Anne Lazaraton (2004) illustrates how a teacher explains words in English as a second language classroom. She underlines the role that gestures can have in how a teacher explains words. The present paper shows how the cooperation of semiotic resources (verbal expression and gestures) is important both in teachers’ and learners’ explanations. For the purposes of the research, university seminars where Estonian and French were taught as foreign languages were videotaped, and a micro-level multimodal discourse analysis of the videos was conducted. Communication in the seminars was entirely held in the target languages.

The analysis indicates that the explanation created for a word is not a definition that is clearly formulated as a sentence. The work involved in constructing meaning may be distributed between different semiotic resources. Teachers and learners may use two semiotic resources – verbal expression and gestures – together. The results show how each semiotic resource has its specific functions and how pieces of information are organized into an explanation through engaging several semiotic resources. For example, gestures provide information which is not included in the verbal expression and vice versa. The paper introduces examples of how teachers and learners use gestures and verbal expressions in collaboration when explaining words.
2 Background

The study involves multimodal discourse analysis and the approach of the study is based on authors whose areas of research are very different. This section presents some authors who are interested in gestures (Gullberg, 1998; Kendon, 2004), whose focus is mainly on body movements in communication; authors who are interested in classroom interaction (Hall, 2009; Mondada and Doehler, 2004; Shepherd, 2010); researchers who are interested in language use by people who have limited ability to express themselves verbally (Goodwin, 1995; Rummo and Tenjes, 2011; Jokinen et al., 2013); and researchers who classify themselves as engaging in multimodal discourse analysis (Drissi, 2011; Kress et al., 2001a; Kress and Leeuwen, 2001b; Lim Fei, 2011; O’Halloran, 2011).

Classroom interaction usually has a specific topic and specific goals. Teacher and learners meet in predetermined room for predefined time period. In order to better understand classroom interaction, it is useful to know which patterns and norms can be found in communication. The manner in which the participants’ specific patterns of behaviour affect language learning has been explored through the analysis of classroom interaction in terms of turn taking and sequences of verbal expression (e.g., Lerner, 1995; Hall, 2009). Mondada and Doehler (2004) have analysed French lessons and show how language learning occurs in group communication and how tasks are (re)organized in cooperation during the class.

Even though the first purpose of foreign language learning is to learn to use accurately verbal and vocal semiotic resources in a target language, gestures are intrinsically part of classroom interaction. In order to understand body movement and positions, one needs a working knowledge of Adam Kendon’s (2004) discussion of the classification of gestures by various authors. This will help understand body movements and positions from their physical performance to the construction of meaning. Kendon (2004: 104–106) discusses multiple continua of gestures proposed by different authors (e.g. Kendon, 1988; Gullberg, 1998; McNeill, 2000). In conclusion, he assumes that many authors agree that gestures can be pointing, depictive or enactive and “displaying aspects of a logical structure of a speaker’s discourse” (Kendon, 2004: 107).

Kendon (2004: 80–82) also presents different possibilities concerning functions of gestures on the basis of previous researches on gestures. He considers that on one side, gestures may facilitate verbal expression and the thought processes, and that on the other side, gestures may have communicative purpose – they provide another person with information, for example, about their ideas and intentions. Researchers have taken different approaches to investigating the use of body movements and positions as well as the use of space and objects. For example, Shepherd (2010) has explored classroom discourse, focusing on the use of a specific movement – the raising of one’s hand with the intention to be given the word. The use of body movement in language learning has been semi-experimentally researched by Gullberg (1998). Gullberg (1998) describes research in which people who were learning Swedish and French as foreign languages had to retell the story of a cartoon both in their native and in the foreign language. Gullberg (1998) provides an overview of the use of different types of gestures used in telling the story in different languages and notes that gestures may help overcome difficulties with verbal expression.

The closest research to the present one is Lazaraton (2004) in which teachers’ gestures in explaining words are analysed. Lazaraton (2004) focuses on situations in which explaining words is not planned. She presents a table that shows that in 14 situations out of 18, the teacher used non-verbal means (hand gestures in 12 instances and the whole body in two) (Lazaraton, 2004: 94). She concludes that the use of hand gestures in explaining words is a very important tool for teachers. At the same time, she admits that her research does not indicate why the teacher uses gesture – is it because they cannot find the right words to express the meaning or because they wish to make the meaning clearer to learners, or both (Lazaraton, 2004: 108–109).

In the context of language learning, Gullberg (1998) and Lazaraton (2004) discuss the compensatory use gestures can have in the case of difficulties with verbal expression. Thus, researchers of language learning are also interested in people whose ability to speak is limited. Goodwin’s article (1995) shows us how meaning is created in cooperation between participants, which is also part of constructing the meanings for new words in language classes. Goodwin (1995: 23) also explains how a person with aphasia who is only able to say three words uses “the full expressive
powers of his body (intonation, gesture, affective displays of his face and body)” when communicating.

Jokinen et al. (2013) present in their article a study on the communication possibilities of a person with Patau syndrome. They declare that meaning is created in interaction and that there are different aspects which need to be considered in meaning creation – roles, relationship between participants, shared knowledge, and contextual information (Jokinen et al., 2013: 75). Jokinen et al. (2013) reveal with the examples of communicative situations how the meaning is negotiated and how the intended meaning of a person with Patau syndrome becomes more precise in collaboration of the participants in interaction.

This paper studies the meaning construction for vocabulary items. The term meaning construction represents the idea that the meaning is created by use of semiotic resources and in collaboration of the participants in the interaction. This paper relies also on semiotic principles presented by Kress and Leeuwen (2001b) – the provenance of signs and the experiential meaning potential. By the provenance Kress and Leeuwen mean that human beings “‘import’ signs from other contexts” (Kress and Leeuwen, 2001b: 10). The experiential meaning potential refers to the idea that human being is able to “extend [his/her] practical experience metaphorically, and to grasp similar extensions made by others”.

Researchers of multimodal discourse think that in the process of participants’ constructing meaning, all possible simultaneously used semiotic resources need to be considered (in the classroom, this can, for instance, include using boards and additional material, people’s movement and position in the room). Kress et al. (2001a) analyse multimodal communication in the science classroom, including the combination of body movement and verbal expression, the use of objects (e.g., chalk, distilled water, the anatomical model of the human body, figures on the board), the location and movement of bodies in the room in connection to verbal expression. Lim Fei (2011) studies how two teachers use language, gesture, positioning and movements in the lessons in English and outlines five categories to map in communication: time, lesson genre and lesson microgenre, gesture, space, language. Drissi (2011) analyses how French language learning takes place by video conference and distinguishes three modalities – audio, typing on the keyboard and video. Multimodal discourse analysis gives us the opportunity to take into account the effect of various semiotic resources on the study process. In the present paper the analyses is based on the semiotic resources which are involved in the construction of meaning for a vocabulary item – on verbal expression and gestures.

3 Data

The research is based on the sub-corpus of interactive communicative situations from the database of multimodal communication. More specifically, the analysis focuses on language classes videotaped at an Estonian university in 2009–2010. The aim was to collect data from university-level foreign language classes. The videos include two Estonian and two French classes. Two cameras were used. While I was taping the classes, I did not interfere with the activities of the seminar and the participants did not address me verbally during the classes.

Each seminar lasted for 90 minutes. The activities of the seminars were based on the teachers’ plans; I had no input in the structure or content of the classes. The Estonian seminars had different teachers (marked EEA and EEB in Table 1, next page), both native speakers of Estonian. The French seminars had the same teacher (marked PRC in Table 1). All teachers were female. The students participating in the seminars had different native languages; the language taught was a foreign language for all of them. There were 27 episodes of communication in Estonian classes and 24 episodes in French classes in which the meaning of a word was constructed through verbal expression and gesture.

4 Method

From each seminar, only those episodes of communication were chosen in which words were explained. Such situations occurred in all four seminars. The process of explaining a word was initiated by the teacher (if the teacher had asked the students whether they knew the word and noticed that some or all did not) or by the students (who pointed out that they did not know the word). Words were explained by the teachers alone, by the teachers and students, or by the students alone.
In transcribing the audiovisual material, I observed not only participants’ (teachers’ or students’) verbal expressions but also their gestures (body movements and positions), movement in the classroom, use of objects, vocal expression (e.g., stress, volume, pausing). The analysis below is based on 51 instances of the meaning of words being explained (see Table 1) in a multimodal manner, that is, through the use of both words and gestures.

The video material was transcribed using Jefferson’s (2004) transcription system which has been adapted and partially modified in order to achieve a clear presentation of the episodes. Additionally, the transcriptions employ letters to mark the participants and use \( l \) and \( r \) to mark left and right (see Appendix 1). Some iconic gestures are labelled with a descriptive name instead of a lengthy phrase. Such gestures are accompanied by photographs and descriptions and are referred to in the transcriptions.

Combining the observation of the audiovisual material and the reading of transcriptions, I analysed the communicative acts of the teachers and learners as one complex multimodal phenomena in which the participants work towards constructing a meaning for a word and the semiotic resources serve as tools or aids.

### 5 Results

The data encompasses 51 episodes of communication in which the meaning of a word is constructed through verbal expression and gesture (see also Table 1). Multimodal construction of meaning of words is used in all classes (27 episodes in Estonian seminars and 24 episodes in French seminars). The analysis allows us to conclude that the explanation created for an unknown word is not a definition that is clearly formulated as a sentence. The work towards constructing the meaning is distributed between two semiotic resources – verbal expression and gestures. The results show that verbal expression and gestures have their specific functions and that pieces of information are organized into an explanation through the engagement of both semiotic resources. For example, gestures provide information which is not included in the verbal expression and vice versa (Ex. 1).

**Example 1. PRC1’s class.** The teacher is explaining the word “remuer” (to move).

1. T: *remuer* (…)  
   *j’sais pas je vous parle quand vous avez une tasse de café*  
   *to move* (…)  
   *i don’t know i tell you if you have a cup of coffee*  
   ((the r hand stirs, see Figure 1))((swings, flails the r hand))

2. T: *vous mettez du sucre* et vous (…) on dit *touiller avec une petite cuiller remuer aussi*  
   *you put sugar* and you (…) we can say *to stir with a little spoon to move also*  
   ((the r hand puts in)) ((the r hand stirs, then turns the gaze towards A, B, C, D))
In a French class, the teacher is explaining the word “remuer”. The fact that a cup of coffee and the adding of sugar are involved is made clear verbally (lines 1–2). She then adds a synonym to the word (“touiller”), saying: “on dit touiller avec une petite cuiller remuer aussi” (we can say to stir with a spoon) (line 2). When the teacher begins explaining the word by saying the word “remuer”, a momentary silence follows during which she motions the act of stirring with her hand (line 1) (see also Figure 1). She repeats the same motion while saying the synonym for the word “remuer” (“touiller”) (line 2). Prior to repeating the stirring motion, the teacher demonstrates the lifting and placing of something by touching the tips of her fingers and, at the same time, saying “vous mettez du sucre” (you put sugar) (line 2). The motion of stirring (lines 1–2) iconically signals the meaning of “remuer” before the verbal expression is given. This motion can help understand the meaning if “touiller” is not known to the students. The verbal expression “vous avez une tasse de café vous mettez du sucre” (you have a cup of coffee you put sugar) specifies the usage of “remuer” (lines 1–2).

Example 2 is taken from an Estonian class in which the words “soo” (mire) and “raba” (bog) are explained. The participants explaining the words are student A and teacher T.

Example 2. EEB’s class. The teacher and the student A are explaining the word “soo” (mire) and “raba” (bog).

1. A: raba on kõrgsoo ütleme nii
   a bog is a raised bog
   ((nods))((inclines head twice to the r))
   T:
   ((looks at A))
2. A: bioloogias nimoodi õpetatakse
   they teach it in biology
   right so (...)
3. T: jah nii et (...)
4. A: ta on kõrgsoo
   it is a raised bog
   ((inclines head to the l))
5. T: just
   exactly
6. A: tal on need (... ) igasugused need
   it has these (... ) all these
   ((shows a hill, separating hands in the middle, see Figure 2))
7. T:
   ((indicates with l palm towards A and remains waiting with an opened palm))
8. A: tal on nimoodi et all on nagu see vesi
   it has like that so that like the water is below
   ((draws a hollow shape twice, see Figure 3))
9. A: ja peal pool on siis on siis
   so on the upper side there is there
   ((draws a hill with hands together and apart))
10. T: noh
    well
    ((a nod))
11. A: kuidas öelda need
    how to say these
(smiles and glances at T and then at E))

12. T: just (. ) aga soo on sīs see mārg maa

exactly (. ) but a mire is then this wet land

((draws a flat surface with l palm, fingers repeatedly touch the thumb, see Figure 4))

13. A: soo on lihtsalt mārg

jah

mire is simply wet

yes

((draws a flat surface with r hand, see Figure 5))

T: see ei kasva ülesse kõrgemaks eks ole

it does not grow taller right

((draws a hill with l hand, see Figure 6))

In explaining the word “raba” (bog), student A takes the lead and says that it is taught in biology and that a bog is a raised bog (lines 1–4). Thus, “kõrgsoo” (raised bog) is offered as a synonym of “raba”. The student continues by explaining that a bog is elevated compared to surrounding areas and has water below, all the while drawing a hill (see Figure 2) and a hollow shape in the air with hands (lines 6–9) (see also Figure 3).

Figure 2. Example 2. Line 6. Student A draws a hill.

Figure 3. Example 2. Line 8. Student A draws a hollow shape demonstrating the water below the surface.

The student is looking for a suitable word to denote the top surface (line 6) but cannot find it and, instead, gestures with hands to complete the explanation. The teacher adds to this explanation by pointing to the difference between “raba” and “soo”, commenting that “soo” (mire) is wetland as she draws a flat surface with the palm of her hand (line 12) (see also Figure 4).

Figure 4. Example 2. Line 12. The teacher draws a flat surface (the palm of the hand moves horisontally).

Here also, one can see how the word and body movement cooperate and complement each other. The gestures outline the layers characteristic to bogs and mires. The words tell us that, with each type of surface, one is dealing with wet areas. However, in the case of a bog, the water is below the surface, whereas the surface of mire is itself wet. At the end of the episode, the teacher and student seem inspired by each other’s use of gestures, as they repeat their respective motions (lines 12–13) (see also Figure 5).
Student A repeats the teacher’s motion of drawing a flat surface and the teacher uses one hand to draw a hill (lines 12–13) (see also Figure 6), just as the student had done previously with two hands (line 9).

The gestures are accompanied by affirmative words: the teacher uses “just” (exactly), “eks ole” (right) and the student says “jah” (yes) (lines 12–13). This is how they convey being in agreement to the other students and this is also how student A receives feedback that the teacher agrees with the explanation offered.

The meaning emerges through the use of two semiotic resources – verbal expression and gestures. Both examples illustrate how a gesture that reveals the meaning of a word can occur right before a longer explanation where verbal expression and gesture combine (French teacher (Example 1, line 1) and student A (Example 2, line 6)). In both examples, gestures present one visual aspect of the object explained with a word – the gestures are iconic. The verbal expressions in both instances include synonyms of the main word: in Example 1, the teacher offers the synonym “touiller” for the word “remuer”, and in Example 2, the student offers “kõrgsoo” as a synonym for “raba”. In the first instance, the verbal expression specifies the context of the motion and adds the substances involved (coffee and sugar). In the second, the verbal expression describes the context in which the word would be used (biology) as well as the location of water (in the surface or below it) that need not be visible. Whereas gestures present one possible visual aspect of the object described; verbal expressions create the context and add aspects that need not be visible to the eye.

6 Conclusion

The paper has shown how the construction of meaning occurs in the combination of verbal expression and gesture. Two examples were selected from the database encompassing 51 episodes of communication in order to demonstrate that the meaning emerges through the use of two semiotic resources and becomes audible and visible – as a puzzle, piece by piece – for other participants in interaction. Both semiotic resources – verbal expression and gesture – fulfil specific roles and work towards creating a meaningful whole. Both students and teachers use verbal expression as well as gesture in explaining a word. In the examples, the analysis illustrated how the gesture constructing meaning for a word can precede the verbal expression.

The study of other similar situations could give us information about other semiotic resources which might be involved in the meaning construction of a word, and might allow us to draw more general conclusions on how the meaning is constructed in French and Estonian learning classroom.

The analysis did not address the other students’ co-occurring non-verbal feedback to the participants who were explaining the word. The study of feedback could uncover how the other students are engaged in the construction of the meaning for a vocabulary item and how they express understanding or confusion. Hopefully, future research into language learning will be able to shed
light on the aspect of feedback and also extend the research into other areas of foreign language learning.

Acknowledgements

I would like to thank the participants in the seminars who agreed to be videotaped. This research is supported by the Estonian Science Foundation grant ETF8008 and the European Union through the European Regional Development Fund (Centre of Excellence in Cultural Theory).

References


Appendix A. Transcript symbols.

(...)
pausing

(( ))
hand gestures and other body movements (mimic, gaze, movements with different body parts)

T  teacher
A, B, C, D, E students
l  left
r  right