

## **AN EMBODIED APPROACH TO INCLUSION AND EDUCATION: EXAMPLES FROM SCHOOL, HEALTHCARE, AND SPORT**

### **UN APPROCCIO EMBODIED ALLO STUDIO DI INCLUSIONE E EDUCAZIONE: ESEMPI DAL CONTESTO SCOLASTICO, SOCIOSANITARIO E SPORTIVO**

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#### **Abstract**

In this article, the analytical instruments of ethnography and Conversation Analysis are used to investigate social inclusion and education in three different domains: school, healthcare, and sport. The article proposes an embodied and situated approach that sees inclusion and education as co-accomplished, deeply interrelated processes taking place in interaction. Drawing on careful analysis of selected audio-video material, the article illustrates how, in the three settings under investigation, verbal, embodied, and material resources are assembled and coordinated to enable participants with limited

linguistic skills in the language of the interaction (i.e., Italian) or impairment (i.e., visual impairment) to act meaningfully and competently in concert with others. By reconstructing the endogenous practices through which participants achieve inclusion and educate each other in three crucial domains of social life such as schooling, healthcare, and sports, the article suggests that the micro-ethnographic conversation-analytical approach enables a better understanding of the dynamics of inclusion and education in our society.

## Abstract

In questo articolo, gli strumenti analitici dell'etnografia e dell'Analisi della Conversazione vengono utilizzati per studiare i processi di inclusione e educazione in tre diversi contesti: il contesto scolastico, sanitario, e sportivo. L'articolo propone un approccio embodied e situato che considera inclusione e educazione come processi collaborativi e profondamente interrelati che si realizzano in interazione. A partire dall'analisi dettagliata di interazioni videoregistrate, l'articolo illustra come, nei tre contesti oggetto di indagine, i partecipanti in interazione utilizzano e coordinano risorse verbali, corporee, e materiali al fine di favorire la partecipazione dei soggetti che hanno una competenza linguistica limitata nella lingua dell'interazione (i.e., italiano) o sono portatori di forme di disabilità (i.e., disabilità visiva). Ricostruendo le pratiche endogene attraverso le quali i partecipanti realizzano inclusione e processi educativi in tre contesti cruciali della vita sociale quali la scuola, il contesto sanitario, e lo sport, l'articolo suggerisce che l'approccio micro-etnografico e dell'Analisi della Conversazione può favorire una comprensione approfondita delle dinamiche di inclusione e educazione nella nostra società.

**Keywords (ENG):** Embodiment, ethnography, Conversation Analysis, social inclusion, education

**Keywords (ITA):** Approccio embodied, etnografia, Analisi della Conversazione, educazione, inclusione sociale

## 1. Introduction

This article focuses on social interactions in educational contexts where participants carry out situated practices that promote members' inclusion and illustrates the heuristic potential of the ethnographic, embodied approach of Conversation Analysis (Sidnell & Stivers, 2013) to capture and describe the processes of inclusion and education occurring in such contexts. Within educational sciences, the embodied approach is rooted in a rich tradition of reflections and studies that have long emphasized the relevance of interactions with the socio-material environment in shaping educational processes. This tradition can be traced back to Rousseau (2006/1762), who was the first author to stress the educational function of nature and things. Yet, it is particularly with Montessori and her notion of *ambiente appositamente preparato* ("purposely set environment", Montessori, 1950) that the material, intersubjective context started being conceived as a fundamental resource for learning. Similarly, the sociocultural approach initiated by Vygotskij (1962[1934]) and the "clinical materialism" developed by Riccardo Massa (1986, 1987) have differently yet consistently stressed how children's learning and development are rooted in interaction with materiality and human bodies (Pontecorvo, 1993, 1999; Pontecorvo et alii, 1991, 1995,

2001; Barone, 1997; Barbanti, 2019; Mantegazza, 2001). In a similar fashion, the phenomenological perspective in education (Caronia, 2011; Iori, 1996) has proposed that the spatial-temporal organization as well as the material affordances of settings and artifacts suggest courses of action and convey cultural preferences, thus *educating* people (Caronia & Colla, 2021).

In recent years, the embodied approach in pedagogical and educational sciences has received a new impetus thanks to the establishment of theories of embodied cognition. Research in experimental psychology and neuroscience shows that processes such as learning, reasoning, and knowledge acquisition that were previously thought to involve only the brain are in fact shaped by the whole body (its perceptual, motor, and affective experiences), which requires rethinking teaching techniques and education from an embodied point of view (e.g., Agostini & Francesconi, 2020; Castaldo, 2021; Glenberg, 2008a,b; Gomez-Paloma, Ianes & Tafuri, 2017; Pallonetto, Perrone & Palumbo, 2021; Shapiro & Stoltz, 2019). However, over the last decades, most embodied approaches to cognition have focused on the relation between the individual body and its cognitive processes, overlooking the social, organizational, and material contexts of action and cognition. By contrast, studies in education and educational psychology embracing a situated perspective (e.g., Resnick, Levine & Teasley, 1991; Resnick, Pontecorvo & Säljö, 1997; Rogoff & Lave, 1984; Salomon, 1993) have long shown that education and learning are shaped in and by interactions with others. These studies also show the effectiveness of ethnographic research methods in rendering the complexity and richness of educational phenomena.

Along this line, the present article proposes an embodied and situated approach to the social dynamics of inclusion and education. Considering inclusion as a situated and co-constructed achievement (Weiste, Stevanovic & Lindholm, 2020; Finlay et al., 2008; Ochs et al., 2001), this study focuses on the embodied practices through which participants make sense of and constitute intersubjectively shared social worlds in the unfolding of interactions. This means that participants (may) deploy semiotic resources that allow each other to meaningfully participate in the communicative project at hand (Goodwin & Cekaite, 2018). The complex interplay of inclusion and exclusion is thus a joint accomplishment that involves multiple semiotic resources, which are deployed by participants in temporally unfolding sequences of social interaction.

Drawing on the methodological framework of Conversation Analysis, the study analyses videorecorded interactions from three institutional settings in Italy: school (peer interaction in a primary school multilingual class), healthcare (triadic medical visits with unaccompanied foreign minors and educators), and sports (paraclimbing training with a sight guide and vision-impaired athlete). The analysis illustrates that interactants in these diverse settings rely on embodied resources such as language, gestures, postures, and touch to adjust to emerging communicative needs and co-construct mutually intelligible courses of action. By relying on these embodied resources, interactants include others as ratified participants (Goffman, 1981) in the activity, thereby educating them to the salience of specific elements of the environment as well as to the appropriate and expected

ways of acting in that community of practices. The results of the analysis argue for a conception of inclusivity and education that is practical, embodied, and intersubjectively accomplished. In this regard, the article highlights the heuristic value of video-ethnography and Conversation Analysis as tools for reconstructing the dynamics of social inclusion and educational processes as they occur in everyday interactions.

## **2. Embodiment and inclusion in school, healthcare, and sports: Data and methods**

This study draws on three different corpora of video-recorded social interactions in three different settings: an Italian L2 class in a primary school, a medical visit with an unaccompanied foreign minor, and a paraclimbing session with a blind climber. The corpora were collected by the authors within three different research projects (see Caronia et al., 2020a, b, 2022; Simone, 2021; Simone & Galatolo 2020, 2021; Nasi 2022a, b). Beyond their specificities, all these research projects share the focus on social interaction and embodiment. Participants in the recorded interactions were recruited by the authors through their personal and work connections. The recordings were made upon obtaining the participants' written consent in compliance with the Italian and European data protection laws.

To highlight the verbal, embodied, and material resources through which participants accomplish inclusion and education, we deploy the analytical framework of Conversation Analysis (hereafter, CA) and rely on ethnographic information to refine and deepen our understanding of the courses of action in which participants are engaged. This combined approach allows to highlight the local practices through which participants co-construct social inclusion in their daily lives and activities and has been widely used in the study of social interaction in educational contexts (see, among others, Burdelski, 2010; Cekaite, 2013; Evaldsson, 2007).

In a nutshell, CA is a multidisciplinary, micro-analytic, empirical approach to the study of talk and social interaction originated in American sociology in the mid-1960s from the work of Harvey Sacks and his colleagues Emanuel Schegloff and Gail Jefferson (Jefferson, 2004; Sacks, 1992; Sacks, Schegloff & Jefferson, 1974). CA investigates talk-in-interaction as the most basic and ubiquitous form of social organization and the primordial ecology of language (Schegloff, 1992). It adopts a strictly empirical, data-driven approach based on the transcription and analysis of recordings of 'naturally occurring' (i.e., not set up for research purposes) social interactions. Such materials allow a very close and careful examination, enabling the analyst to observe even the tiniest details of the participants' conduct that contributed to the accomplishment of the recorded interactional event (Mondada, 2013).

A core principle of CA approach is adhering to the participants' internal, or *emic*, perspective (Maynard, 2006) at every stage of analysis, starting from the selection of the phenomena to be analysed. More specifically, in CA, providing evidence of a certain phenomenon requires not only that such phenomenon "can be viewed in

the way suggested, but that it actually is so conceived by the participants producing it” (Levinson, 1983:319; see also Hoey & Kendrick, 2017).

Another fundamental principle of CA is that the phenomena of interest are analysed with respect to their situated context, which means, by carefully considering their positioning within the course of the interaction. CA is indeed particularly attentive to the *temporality* of interaction, which refers to the locally negotiated, sequential unfolding of actions, as well as to the multiplicity of verbal, embodied and material resources that are locally employed to build such actions (Goodwin, 2000; Mondada, 2007; Nevile, 2015).

Following the *emic* principle illustrated above, this article proposes stretches of interactional episodes in which participants demonstrably orient to achieve inclusion as a relevant, practical issue in their courses of action. Moreover, in line with the situated and embodied approach to social interaction, the data of this article are presented and discussed in the form of multimodal transcripts, i.e., enriched transcripts that include precise notations of details (such as gaze, gestures, posture and bodily movements) that appear central to understanding participants’ inclusive practices. Each line of the transcripts is presented both in the original Italian version and in idiomatic translation in English (in italics). The list of transcription symbols that are used in the transcripts is provided in the Appendix. For the sake of anonymity, all the participants’ names have been fictionalized and information concerning people and places has been removed.

In what follows, we illustrate the relevance of embodied practices for inclusion in the three settings considered. The analytical focus will be on the micro, situated practices through which participants achieve inclusion and educate each other in social interaction.

### **3. Inclusion and education in interaction**

This section articulates the results of our analysis. The presentation of results is organized into three blocks corresponding to the three settings examined. One excerpt for each setting has been selected that significantly illustrates the inclusive practices implemented by the participants. Each excerpt is preceded by a description of the interaction context.

#### ***3.1. School setting***

The first setting under scrutiny is a primary school in a medium-sized city in northern Italy. Data were collected during video-ethnographic research and consist of approximately 30 hours of classroom interactions. The school is placed in a suburban area and takes care of a high percentage of non-native children. Since some of these children have limited competences in Italian, the school organizes several Italian L2 classes. Ex. 1 was recorded in one of these classes, which is attended by a small group of non-native children aged 8 to 9.

The analysis focuses on children's practices of *subteaching*, i.e., on children's enactment of the role of the teacher with their peers (Tholander & Aronsson, 2003). This local enactment is accomplished by reproducing teachers' prototypical practices, which are in turn performed through various verbal and non-verbal resources. Clearly, a child's enactment of the role of the teacher needs to be acknowledged and ratified by the other children: subteaching can be seen as a collaborative accomplishment of several children, who locally position themselves as 'teachers' or 'pupils'. Notably, these shifting social organizations are built and maintained (also) through embodied conduct, as the analysis will illustrate.

In Ex. 1, children are expected to work autonomously on a photocopy (i.e., on a list of words which need to be divided according to certain syllables, e.g., 'che', 'chi'). The teacher is momentarily out of the classroom. Shortly before the extract presented, Moad has displayed difficulties in solving the task at hand. In response to that, Ramil and Ying alternatively enact the role of the teacher, thereby helping Moad to solve the exercise.

#### *Excerpt 1*

1                   *((Ramil is standing next to Moad, looking at Moad's photocopy))*  
 2     Ramil       questo, (0.2) ^qui.  
                   **this, (0.2) ^here.**  
 3     Ramil                                   ^((points on Moad's photocopy)) [Fig. 1]  
                   *((13 lines))*  
            Ying    va bè tu vai ^a sedere.  
                   **alright you go ^and sit down.**  
 17    Ying                                   ^((pushes Ramill toward his desk))  
 18    Ying       aiuto ↑io a fare,  
                   ↑i **help to do,**  
 19                   *((Ramil goes back to his desk, Ying stands beside Moad))*  
 20    Ying       moa:d,  
 21                   (1)  
 22    Ying       *((points on Moad's photocopy))*  
 23    Ying       che. (.) dove va?  
                   **che. (.) where does it go?**  
 24                   (0.3)  
 25    Moad       che:, (0.3) ^qui.  
                   **che:, (0.3) ^here.**  
 26    Moad                                   ^((points on the photocopy))  
 27    Moad       *((looks at Ying))*  
 28    Ying       ^eh.  
 29    Ying       ^((nods))  
 30                   (0.2)  
 31    Ying       ^scrivi  
                   ^write  
 32    Ying       ^((gesture toward the photocopy)) [Fig. 2]





Fig. 1. Ramil enacts the teacher.



Fig. 2. Ying enacts the teacher

Moad has displayed difficulties in solving the exercise autonomously, and Ramil now stands beside him and looks at his photocopy (line 1). With this bodily position, Ramil marks his ‘official’ assumption of the role of the teacher and points to a salient element in the local semiotic environment (i.e., the exercise of Moad’s photocopy; see also the children’s gaze in Fig. 1). Having established a shared focus of attention, Ramil proceeds along his trajectory by suggesting Moad the right solution (“this here”, line 2). Notably, Ramil’s instruction is also constructed with embodied resources, as the deictics are accompanied by a pointing gesture on the relevant spots on the photocopy (see Fig. 1). By deploying these various semiotic resources, Ramil helps a classmate with limited verbal resources to solve the academic task the teacher expects him to do: the local configuration of verbal, embodied and material resources makes possible Moad’s understanding and active involvement in the current activity.

Children’s orientation to Moad’s limited competences in Italian also emerges from Ying’s subsequent actions. After having appointed herself as the new teacher (“I help to do”, line 18), Ying uses again embodied resources to perform her instructions to Moad: she stands next to her classmates, nods, and points to the photocopy, thereby arranging a “semiotic field” that permits Moad’s understanding and participation (lines 19 to 32; see Goodwin, 2000).<sup>i</sup>

This brief analysis of Ramil’s and Ying’s subteaching practices points to the relevance of the complex interplay of verbal, embodied, and material resources for children’s social inclusion and education. Children aptly

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<sup>i</sup> Notably, Ying’s enactment of the role of the teacher leads to the tripartite structure typical of classroom interaction: a first question by the teacher (line 23), the pupil’s tentative answer (line 25), and the teacher’s final evaluation (lines 28-29) (see Mehan 1979).



use various resources to co-construct a semiotic environment that permits the joint accomplishment of the task at hand. Specifically, Moad's participation is (also) made possible by children's deployment of non-verbal resources, which integrate the use of verbal deictics and possibly allow to overcome Moad's limited competences in Italian. Non-native children's ability to efficiently communicate is relevant to newcomers' inclusion in the Italian schooling system, as it possibly favors newcomers' complicated apprenticeship period in the new community.

### ***3.2. Healthcare setting***

The second setting under investigation is a primary care clinic in a northern Italian city providing medical assistance to unaccompanied foreign minors (UFMs). The data are drawn from the corpus of an exploratory, single-case study constituted of three video-recorded primary care visits collected in 2018. The participants in the medical visits are a general practitioner, three UFMs with low competence in the language of the visit (i.e., Italian), and two educators institutionally responsible for them. Importantly, the physician and the educators are not competent in the patients' L1, and no interpreter is available. For this reason, including UFMs in the medical conversation and, relatedly, acknowledging them as competent and agentic patients constitutes a challenge for the care professionals involved (see Caronia et al., 2020a, 2020b, 2022).

The analysis focuses on the history-taking phase of the visit, which is characterized by a series of question-answer sequences typically initiated by the physician (Boyd & Heritage, 2006). The main goal of the history taking is to gather comprehensive information about the patient's medical history and initiate differential diagnosis. However, in the case of UFM patients, gathering relevant and reliable information can be particularly complex due to the language divide. The analysis shows how the physician (Phys)'s use of verbal and embodied resources constitutes a valuable means to maximize mutual understanding, gain access to relevant information, and therefore include the UFM patient (Pat) in the ongoing medical interaction.

#### *Excerpt 2*

- 1 Phys fanno prurito?  
**do they itch?** *((rubbing his clenched hands together))* [Fig. 3]
- 2 Pat *((nods))*
- 3 Phys mh?
- 4 Pat sì.  
**yes.**
- 5 (1.2)
- 6 Phys quando ti succede, quando ^sei fuori,  
**when does it happen, when ^you're outside,**
- 7 Phys *^((moves his right hand with pointed finger outward))* [Fig. 4]
- 8 Phys ^o anche quando sei dentro?=  
**^or also when you're inside?=  
9 Phys ^((moves his right hand with pointed finger inward))** [Fig. 5]
- 10 Pat =anche quando sono dentro.  
**=also when I'm inside.**



Fig. 3 – The physician rubs his clenched hands together



Fig. 4 – The physician moves his hand with pointed finger outward



Fig. 5 – The physician moves his hand with pointed finger inward

After the patient reports that his eyes have been burning in the past few days (not transcribed), the physician asks him a series of closed-ended questions. The first one is whether his eyes itch (“do they itch?”, line 1). While asking the question, the physician makes a hand gesture: he rubs his clenched hands together as to convey a friction between them (line 1, Fig. 3). Through this “iconic gesture” (McNeill, 1985; Kendon, 2009; Caronia et al., forthcoming), the physician uses his hands as a semiotic resource that visually represents the concepts being uttered (i.e., the “itching”) and therefore displays his orientation to addressing the patient as a ratified participant and maximizing his active participation in the interaction despite his low competence in Italian. Note that the gestural translation actually works: in the next turn, the patient provides a non-verbal answer (he nods, line 2) and then a verbal confirmation (“yes”, line 4), thus demonstrating his understanding of the question.

Then, the physician inquires whether the itching happens only when the patient is outdoors or also when he is indoors (lines 6-9). While issuing the question, the physician makes two hand gestures that provide a visible representation of the uttered words “inside” and “outside” (lines 7 and 9). First, he moves his left hand with pointed finger outward in correspondence of the word “outside” (Fig. 4); then, when uttering the word “inside”, he moves the same hand in the opposite direction (Fig. 5). Note that through the use of iconic gestures (lines 7 and 9) the physician does not only translate the uttered words in a non-verbal language that could be understood by the patient, but he also marks the syntactic structure of the turn by multimodally distinguishing the two components of his question (“when you’re outside” and “or also when you’re inside”). In so doing, the physician guides the UFM patient in understanding his turn as an *alternative* (i.e., “either-or”) question and further displays his orientation toward including the patient in the interaction. The patient’s reply is appropriate and type-conforming: by recycling part of the physician’s turn (“also when I’m inside”, line 10), the patient chooses one of the two alternatives proposed by the physician and manages to meaningfully participate in the medical exchange.

To sum up, the physician’s subtle combination of verbal and embodied resources creates a multimodal semiotic field that facilitates the progression of the interaction and, most importantly, maximizes the UFM patient’s understanding and therefore inclusion in the medical encounter despite his low competence in the language of the visit. It is worth pointing out that the patient’s inclusion in interaction crucially contributes to his apprenticeship into the routines, norms, structure, and expectations of the medical encounter. Being included in the medical interaction, the UFM patient has the chance to witness, experiment, and appropriate the overall organization of the medical visit, thus being gradually socialized into the physician’s expectations about his

participation as a ‘patient’ as well as the norms regulating question-answer sequences in the anamnestic phase of the visit.

### ***3.3. Sport setting***

The third and last setting under scrutiny is paraclimbing, the adapted form of sport climbing for athletes with physical and sensory impairments. The data come from a corpus of 53 videorecorded paraclimbing sessions collected in 2016 in two climbing gyms in Italy. The sessions were performed by three elite-level climbers with visual impairments (1 blind athlete and 2 athletes with severe vision loss) who were assisted by a coach as a sight-guide. Each session is organized into three main activities, namely (1) previewing the route, (2) climbing, and (3) when relevant, assessing any critical issue that arose during the ascent. Extract 3 provides an example of this third activity.

Before the beginning of the extract, the climber’s unsuccessful attempt to complete a move on a route he was climbing for the first time resulted in his detachment from the wall and in the suspension of the climb. When we join the interaction, guide and climber have been discussing the difficulty of the failed move for some time while standing at the base of the wall. Then, in line 1, the climber (CLI) explicitly asks the guide (GUI) for instructions regarding how to grab the handhold he was unable to attain during the prior attempt.

#### ***Excerpt 3***

01 CLI: **che fai dopo >come lo devi prendere quell-< cioè**  
*what do you do then >how do you grab that-< I mean*  
 02 **(.) ( ) (quella:)**  
*(.) ( ) (the one:)*  
 03 GUI: **QUELLA LÀ C'ERI**  
*YOU WHERE THERE*  
 04 **(0.4)**  
 05 GUI: **quella là- incro:ci,**  
*that one- you cross,*  
 06 **e trovi proprio**  
*and you find just*  
 07 **una mensolina netta buona [Fig. 6]**  
*a good neat small ledge*  
 08 **e- é::: strana è una presa strana,**  
*i- it's strange it's a strange hold,*  
 09 **(.) ma qui proprio c'è una mensolina che viene in fuo:ri,**  
*(.) but right here there's a small ledge which comes out,*  
 10 **(.) che come l'agga:nci,**  
*(.) and as you hook it,*  
 11 **(0.7)**  
 12 **poi ac[cop]pi.**  
*then you pair [your hands on it].*  
 13 CLI: **[ah]**  
*oh*  
 14 **(1.0)**  
 15 GUI: **okay?**  
*okay?*  
 16 **(0.2)**  
 17 CLI: **(così) [sì]**  
*(so) yeah*  
 18 GUI: **[riproviamo.**  
*let's try again.*



Fig. 6

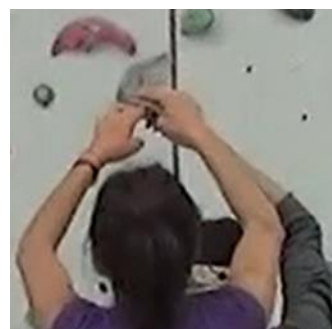


Fig. 6a (detail)

The guide uses her own left index finger to depict a handhold shaped like “a good neat small ledge” (l. 07) and enable the climber to simulate the grip that is afforded by such handhold.

Between lines 5-12, the extract offers a vivid illustration of the embodied resources the guide employs to enable the climber to perceive specific material aspects, such as the location and shape of the target-handhold,

that would otherwise be precluded to him. Her description of the handhold shaped as a “good neat small edge” (l. 07) is intertwined with an embodied arrangement that allows her to simultaneously produce a gesture that is seen as depicting the described shape and make such gestural depiction available to the climber’s tactile perception and action. A look to Fig. 6 allows to grasp the complexity of such accomplishment which requires the guide to employ her hands to concurrently perform two complementary tasks. More specifically, the guide uses her left hand to depict the small ledge she is simultaneously describing verbally; she uses her right hand to shape in turn the climber’s right hand in a grasping posture and enable him to simulate the grip that is afforded by the described handhold. In so doing, the guide makes her own body a sensory resource for the climber and for the overall instructive practice.

To sum, the extract illustrates how inclusion of a participant with visual impairment is locally achieved by tailoring the description of an object to his *blind style of perception* (Saerberg, 2010). Ultimately, the example from paraclimbing suggests that inclusion is only made possible by processes of mutual education (namely, education of the senses) through which individuals learn to inhabit the perspective of others.

#### **4. Capturing and describing the educational import of inclusive interactional practices. Concluding remarks**

Based on video-ethnographic research conducted in three different institutional settings and on the framework of Conversation Analysis, this article has illustrated the practical, embodied, and intersubjective achievement of inclusion within situated interactions.

The analysis of interaction between classmates in an Italian L2 class has illustrated how non-native children arrange the semiotic field of action in a way that allows the participation of a child with limited resources in the L2. Specifically, children manage to use embodied and material resources to overcome the limited verbal repertoire of a classmate, thereby helping him to solve an academic task.

The analysis of medical interaction between a general practitioner and an unaccompanied foreign minor in primary care has shown how the physician’s subtle interplay of verbal and embodied resources contributes to fostering the UFM’s active participation in the history taking despite the linguistic divide. Particularly, the physician’s use of close-ended questions and iconic gestures constitutes a powerful means to promote the UFM’s interactive inclusion as well as to acknowledge his locally relevant identity as an epistemically competent patient.

Analysis of interaction in paraclimbing involving a sight guide and a visually impaired climber has illustrated how inclusion is accomplished by providing the climber with sensory information and enabling him to perceive relevant features of the climbing route (i.e., the affordance of a handhold) that would otherwise be inaccessible to him. This is done by the sight guide by engaging in embodied interaction with the climber and by combining diverse resources (talk, gestures, bodily movements) and sensory modalities (vision and touch).



Altogether, the analysis highlights the *educational import* of inclusive interactional practices through which participants are provided with resources to enhance their skills and act as competent members within their community. As regards the school setting, children can facilitate their classmates' apprenticeship by deploying embodied resources that foster their participation despite limited verbal competence in Italian. In turn, participation to everyday activities enables novices to develop and refine various resources in their interactional repertoire, thereby gradually approximating the expected ways of acting of the classroom community. As for the healthcare setting, the analysis illuminates how the physician's deployment of verbal and embodied resources contributes to socializing the UFM patient to the overall organization of a medical visit and enables the patient to learn how to appropriately reply to anamnestic questions according to socially shared expected standards. As paraclimbing is concerned, the analysis has shown that multisensory resources provided by the sight-guide enable the visually impaired climber to grasp the affordances for climbing that are required to engage successfully in the athletic performance.

A further commonality across the analyses concerns the crucial role that participants' bodies play in structuring inclusive practices. In particular, participants have been shown to employ their bodies in flexible and specific ways to organize the salience of activity-relevant phenomena and provide for their mutual recognition. Throughout the analyses, a *crescendo* of mutual engagement between the participants' bodies is delineated, beginning with the achievement of a common bodily orientation and shared attentive focus (Ex. 1), developing into reflexivity and reciprocity between the interacting bodies (Ex. 2), and culminating in the joint action of two bodies connected by tactile contact (Ex. 3).

Overall, the analysis demonstrates that building actions in concert with others enables individuals to act meaningfully even when their individual resources are limited to some extent (either because of the lack of linguistic skills or because of impairment), precisely because social interaction provides them with a semiotically rich environment where they can exploit the resources made available by others. In this regard, this article highlights the heuristic value of video-ethnography and Conversation Analysis as tools for reconstructing inclusive dynamics and educational processes in detail. If we assume that inclusion and education are primarily accomplished by individuals through social interaction, the analytical instruments of video-ethnography and Conversation Analysis are powerful tools to describe the dynamics of these – deeply interrelated – processes. The article demonstrates how this combined methodology enables the analyst to cast light on the verbal, embodied, and material resources that participants deploy to allow others to participate in various educational events, thereby affording their socialization and fostering their gradual inclusion in the community.

## **Appendix : Conversation Analysis transcription symbols**

Symbol	Description
(.)	Micropause
(0.7)	Timed pause in tenth of a second
[word]	Overlapping talk
[okay]	
word=	Latching between subsequent turns
=word	
> word <	Speech delivered at increased speed
< word >	Speech delivered at decreased speed
wor-	Cut off
wo:::rd	Syllable stretching. The more the colons, the lengthier the stretch
°word°	Syllables or words that are quieter than the surrounding talk
WORD	Syllables or words that are louder than the surrounding talk
↑ word	Abrupt up (↑) or down (↓) shift in pitch
↓ word	
word,	Continuing intonation
word?	Rising intonation
word.	Falling intonation
(word)	Uncertain transcription
( )	Speech that is impossible to transcribe
((nods))	Transcribers' annotations and comments concerning embodied behaviour of the participants
^	Indicates the exact moment in which the annotated embodied behaviour occurs
[Fig. 1]	Indicates the exact moment in which a snapshot is taken

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