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# Reading the in-between: Tools and concepts for analysing interaction

*by Gwendoline Torterat*

*“It is banal to say we never exist in the singular.  
We are surrounded by beings and things with which we maintain relationships.  
Through sight, touch, sympathy and cooperative work, we are with others (...).  
But I am not the other.  
I am all alone”.*  
Emmanuel Lévinas<sup>1</sup>

## Introduction

Analysis based on the concept of interaction is liable to be associated with the interactionist tradition, which only understands action when it is strategically oriented and experienced in a shared manner. Only the most prominent elements of an interaction are selected, to the detriment of others. This operation then becomes a precondition for the existence of a relation between the participants in an interaction. We must, however, realise that this tradition accords a certain power to the perspectives of each of the individuals mutually entering into action. Reciprocal intelligibility would appear to be the basis, or even the condition, of these perspectives. For some empiricists, such as W. James and G. H. Mead, this kind of intelligibility is on the contrary difficult to attain and, at best, transitory. As A. Bidet points out, James looks at how our interactions with the world lead to temporary encounters, within the flux of experience,<sup>2</sup> whereas Mead places more emphasis on the joint adjustment of individual experiences during a social act.<sup>3</sup> Consequently, we should observe in as much detail as possible the kinds of reciprocity that are thought to be the basis of our interactions, without selecting only a part of the the elements that constitute them. Without such an effort, we will be forced to continuously define them according to a relation that is dual (as seems natural with a face-to-face situation), simultaneous (one individual's experience is a function of the other's) and permanent (temporal variations are de-emphasised). Accepting that some degree of reciprocity exists then becomes the precondition for understanding the action of an individual, even when that action is not directly or fully oriented towards the action of an other. It is therefore essential to specify a particular type of interaction. We have chosen to focus on an encounter – that is, two individuals entering into contact for the first time in a clearly defined time and space. The relation that this contact generates is the pivot that we should seek to analyse in order to gain a more nuanced

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<sup>1</sup> LEVINAS, E., *Time and the Other*, Duquesne University Press, 1987.

<sup>2</sup> BIDET, A., M. BOUTET, F. CHAVE., “Au-delà de l'intelligibilité mutuelle: l'activité collective comme transaction. Un apport du pragmatisme illustré par trois cas”, *Activités*, vol. 1, no. 10, 2013, p. 176.

<sup>3</sup> MEAD, G.-H., *Mind, Self and Society: From the Standpoint of a Social Behaviorist* (1934), London, University of Chicago Press, 2009.

understanding of the different forces underlying it. In other words, the relation is the continuous space that both separates us and connects us, to some extent, to the individual we encounter.

Our specific aim is to observe a brief encounter between two individuals who do not know each other and who are discovering each other for the first time: an archaeologist and a schoolgirl.<sup>1</sup> A distinctive feature of this encounter is that it is organised rather than fortuitous. The encounter is made possible through a collective research project where archaeologists and secondary school pupils are brought into contact. At its launch, this project was designed with several objectives in mind: access for children from disadvantaged backgrounds to the scientific activity of researchers, the discovery of the ways of life of ancient or distant populations that are considered “other”, and encounters between researchers and pupils. Over the course of the school year, at meetings occurring once or twice a month, archaeologists and ethnologists took turns presenting their work to the pupils. Each meeting, which lasted an average of two hours, was led by one researcher in particular. An archaeologist specialising in Neolithic ceramics, another in hard animal material from the Upper Paleolithic, an ethnologist working with alpine glassmakers, and so on: each presented his or her research topic, then gave the pupils the chance to handle, touch, and even experiment with the natural raw materials or objects connected to the presentation – creating clay pottery, working with bones, or carefully manipulating crystals. Our research is based on observation of all of these meetings, which took place in the school refectory. As the project progressed, we focused as closely as possible on the key elements of each encounter – not the encounter between the CNRS and state education, but rather the one-off encounter between researcher and pupil. In particular, we have chosen to focus here on the meeting that took place between Pierre and Yasmina on 11 February 2014.

In response to the theoretical issues raised by our approach,<sup>2</sup> we develop a particular methodological toolkit that enables us to observe and record in an alternative manner. Often, the difficulty of description lies in problems related more to the work of the observer than to the discourse itself. “If the relation between observer and observed (rapport) can be managed, the relation between author and text (signature) will follow – it is thought – of itself”.<sup>3</sup> It is important here to consider these two stages in the research process. After examining the context, we will explore the findings from video observation, an ideal tool for the encounter scenario that we observed. We will then discuss techniques for monitoring an individual, the ethnographical method commonly known as “shadowing”, which we combined with the use of video.<sup>4</sup> In the context of an encounter, this combined method – incorporating both video observation and shadowing – allows us to observe an individual in terms of the simultaneous plurality of logics of action, a method that we have called “co-filming”. Using this method, we are able to provide a detailed and simultaneous description of two individuals as they experience a shared situation. Drawing on the work of cognitive psychology, we were then able to describe the individual’s different types of engagement and their tendency to become more intensely involved or, in contrast, to withdraw temporarily from the situation. This leads

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<sup>1</sup> The empirical context for our observations, the PréhistroScène project (Labex: *The past in the present, Nanterre*), was a major factor in our decision to select the encounter from among other types of interaction. The term “encounter” was in fact used in advance by the participants as a label for the idea of researchers presenting their work in a school environment.

<sup>2</sup> The author wishes to thank Alexandra Bidet and François Cooren for their comments on earlier versions of this submission.

<sup>3</sup> GEERTZ, C., *Works and lives: the anthropologist as author*, Stanford, Stanford University Press, 1988. p. 10.

<sup>4</sup> In this case, the expression “video shadowing” is used to describe the use of a video device during the shadowing process.

us to a series of situational graphs outlining this relation between two individuals. Indeterminable, fluctuating and extremely transient: these were the characteristics we observed and sought to describe in more detail, using a lexical toolkit adapted to the nature of the encounter.

## Development of methodology and new tools

*“To learn about,  
maybe even to feel what humans have experienced.”*  
Yasmina

This is the concise description provided by a participant in the PréhistoScène project, an annual programme taking place in a secondary school in the suburbs of Paris, of her encounter with the social and human sciences researchers who came in to present their work. Archaeologists and ethnologists took turns explaining one of their research topics to around thirty children aged between ten and twelve.

The circumstances of this observational context encourage us to analyse the distinguishing features of this brief and clearly delineated situation. We prefer to examine the situations as they develop on the equal basis on the point of view of two individuals, Pierre and Yasmina, rather than adopting a wider focus and taking into consideration all those involved – i.e. more than twenty people – at once. Pierre is a archaeologist specialising in the prehistoric and has been a researcher at the CNRS for more than twenty years. Yasmina is a girl who has just turned twelve and is in the sixth grade. While schools are designed for learning through teaching, they also represent a space where pupils learn from each other.<sup>1</sup> This justifies a heuristic approach, analysing the situation as it develops collectively, i.e. as a set of actions take place in sequence. We are not therefore seeking primarily to analyse a one-way, face-to-face learning situation where the voice of the individual possessing the knowledge is privileged over that of the individuals receiving it. Above all, we choose to focus on two individuals who are deeply involved in a situation that, significantly, initiates and enables their encounter. An initial encounter between two individuals has the particularity of enabling the emergence of modes of reciprocity and appreciation in a progressive manner. The relation forms, and it is in fact this process being constructed, this connection being made and unmade, that we must describe in as much detail as possible. To access these primary stages of any relation, an important first step is to define a spatio-temporal setting in which the encounter will occur and, further, where actions take place that can be divided up using different scales.<sup>2</sup> This enables us to analyse the collective experience of an archaeologist and a certain number of pupils, while still placing emphasis on two situated points of view. How, then, may we ethnographically examine this spatio-temporal setting that is so clearly delineated – two hours per session, punctuated by the sound of the bell and the clatter of plates in the kitchens?

Video observation seemed to us to be the most appropriate method for giving an account of this situation, and a single long take of one and a half hours was used for this submission. Since the video devices enable continuous image capture, a brief account can describe a series of actions exactly as they occur over time. In distinguishing different methods of video-based research, C. Lallier emphasises the benefits of an observational

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<sup>1</sup> DELALANDE, J., “Culture enfantine et règles de vie”, *Terrain. Revue d’ethnologie de l’Europe*, vol. 1, no. 40, 2003, p. 99-114.

<sup>2</sup> PIETTE, A., *Propositions anthropologiques: pour refonder la discipline*, Paris, Éd. Pétra, 2010, p. 105.

document that enables the examination of a social situation in terms of what is said and represented between those involved in the exchange. “What we should observe is not the action but rather what occurs between the person engaged in their action and the other individuals, objects and spaces with which they are interacting”.<sup>1</sup> In the context of our ethnography, video observation is considered not merely a technical means of recording, but rather as providing a genuine, fully-fledged observational document. It enables a true representation of the way in which individuals, whether children or adults, to some degree endeavour to act together within the context of an encounter situation. Video observation also enables the simultaneous monitoring of several individuals at once.

However, anthropology based on the filming of social interactions is often promoted to the detriment of in-depth observation of the different ways in which individuals engage with one another. By adopting a framework which may keep the observer at a certain distance from the situation, the action of the individual becomes woven into a dense narrative, the plot and context of which become central features. This does not enable a full account of what occurs *between* the individuals so much as an account of what occurs *around* them. We have therefore appropriated a video method developed in the field of organisational anthropology: shadowing. This approach involves the continuous, close-up filming of an individual as they go about their existence. The filming might take place over an hour; it might equally last for several days or even months.<sup>2</sup>

In our case, the adoption of this method means using video to monitor both Pierre and Yasmina at once. Our field of observation was defined on the basis of the situation being experienced from the point of view of the two interactants. Our approach is therefore situated between the video ethnography of social interactions and the simple shadowing of an individual over the course of their actions. The qualitative results of this method depend less on the duration of the observation than on its intensity.<sup>3</sup> For our research during this session we therefore situated ourselves as closely as possible to the situations experienced by Pierre and Yasmina. The mobile nature of the device makes it possible not only to carefully monitor actions in detail, but also, and most importantly, maintains the intensity of the observation of spatio-temporal interstices that are often ignored, including during changes in situation. In order to describe the encounter between two individuals using this monitoring technique, we rely on a co-filming process. Co-filming can be defined as the video monitoring of several individuals within a shared situation. It is based on a desire to examine the interpersonal issues involved in the encounter – a relation between individuals that varies according to the internal or external circumstances of the situation being experienced. When a large number of individuals are observed, a technical setup that can ensure detailed monitoring becomes necessary. Several cameras are then required for the observation, which can also imply a need to have several researchers present. The simultaneous monitoring of Pierre and Yasmina was facilitated by a lack of movement as well as by the use of relatively wide shots in order to monitor the situation as experienced from their point of view. Framing individuals more closely would make it necessary to constantly adjust the shot depending on the object of their attention.

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<sup>1</sup> LALLIER, C., COLLEYN, J.-P., *Pour une anthropologie filmée des interactions sociales*, Paris, Éd. des Archives contemporaines, 2009, p. 16.

<sup>2</sup> CZARNIAWSKA-JOERGES, B., *Shadowing: and other techniques for doing fieldwork in modern societies*, Malmö, Sweden: Herndon, Oslo: Liber, Copenhagen Business School Press, Universitetsforlaget, 2007, 134 p.

<sup>3</sup> VASQUEZ DONOSO, C., “Espacer l’organisation: trajectoires d’un projet de diffusion de la science et de la technologie au Chili”, 2009, <https://papyrus.bib.umontreal.ca/xmlui/handle/1866/3510>, accessed 4 March 2015.

This approach reveals the need to observe and understand the individual according to the simultaneous plurality of logics of action that are to some extent shared – their own as well as those around them. It should be pointed out that such an inclination must be combined with prior knowledge of both the “rules of play” for the situation that we observe, and the individuals that we approach. In our case, this second condition was fully met, since Pierre is our main contact in this area of research, and has been for several years, while Yasmina is a girl whom we have been monitoring for one year. Our depth of knowledge created a relationship of trust that was conducive both to close monitoring and to a proper analysis of our data. The nature of the encounter can only be understood by taking into account the factors that lead to it, and the genealogy of an event or situation is a necessary component in understanding that situation.<sup>1</sup>

This meticulous and detailed observation of two individuals enables a direct, focused methodological engagement. “While their gaze can generate multiple angles of observation and render a single angle more productive by allowing it to be seen according to different perspectives, the researcher risks becoming gradually influenced, if not by a hypothesis they wish to demonstrate, at least by general ideas that organise their experience and establish a certain order in their observation work”.<sup>2</sup> Forewarned of this tendency to direct one’s observation according to a preconceived set of notions, we took care not to select any one piece of information to the detriment of any other and instead simply recorded all the details that affected Pierre and Yasmina over the course of a situation. “If we perceive events as ‘wholes’, it becomes difficult to grasp and record the multitude of behavioural details and singular elements, such as postures and techniques of the body, that however form the basis of courses of action. The viewing of video recordings and the use of slow motion can help to alleviate this limitation of the ordinary gaze”.<sup>3</sup> At this stage in our project, it is necessary to “think of interaction as a continuous process, implying all aspects of behaviour and operating on several levels at the same time, so that the full methodological relevance of the audiovisual technique is revealed and so that this technique can enable the discovery of the most minute behavioural details”.<sup>4</sup>

Moreover, if researchers limit themselves to a rigorous and continuous observation of what happens in front of them, second by second, in this case, the resulting analysis will avoid the pitfalls of a symbolic interactionist method, which is often tempting in the context of this type of study. We can only note the close intertwining of the strict methodological guidelines at the basis of our ethnography and the theoretical elements that also guide it. Our observation was not influenced by those aspects of the interaction that created meaning for the interactants, i.e. a “sociology of significant behaviours”,<sup>5</sup> nor by those that enabled the creation of shared meaning. Interaction, in E. Goffman’s sense of the term, is defined among other things by “a collection of relevant signs, sufficiently meaningful and acceptable to the other individuals involved to constitute a starting point for their response”.<sup>6</sup> Goffman effectively suggests a level beyond which interaction becomes possible. A “surface of agreement”<sup>7</sup> or “working consensus”<sup>8</sup> are then the indicators made visible by the participants

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<sup>1</sup> GOFFMAN, E., *Interaction ritual: essays in face-to-face behavior* (1967), New York, Pantheon Books, 1982.

<sup>2</sup> PIETTE, A., *Ethnographie de l’action: l’observation des détails*, Paris, Éditions Métailié, 1996, p. 81.

<sup>3</sup> REMY, C., “Ni cliché, ni séquence: s’arrêter sur l’image”, *Ethnologie française*, vol. 1, no. 37, 2007, p. 90.

<sup>4</sup> PIETTE, A., *Ethnographie de l’action: l’observation des détails*, *op. cit.*, p. 111.

<sup>5</sup> JOSEPH, I., *Erving Goffman et la microsociologie*, Paris, Presses universitaires de France, 2002, p. 230.

<sup>6</sup> PIETTE, A., “Les enjeux d’une anthropologie existentielle: vigilance et dissection”, *Recherches Qualitatives*, vol. 1, no. 33, 2014, p.26.

<sup>7</sup> GOFFMAN, E., *The presentation of self in everyday life*, Edinburgh, University of Edinburgh, 1956, p. 4.

<sup>8</sup> *Ibidem*, p. 4.

themselves. The game of interaction is therefore strategically regulated and reciprocated. Paradoxically, we believe that an interactionist approach is not sufficient to describe an encounter between several individuals. Such an approach would limit us to describing two fully interdependent guiding lines of action. The individual would then be enclosed within a collective action, itself understood as the reciprocal adjustment of individual lines of action. Most of all, such an approach would encourage us to select the elements that make the encounter possible. Our approach is not to make a selection of pertinent signs in advance, but rather to enrich our description through a series of observable details. The Goffmanian interactionism that we wish to put to the test requires the selection of pertinent information in order for the relation to exist. However, when we take all of the elements constituting the interaction into account, we may observe that the relation does not develop in as meaningful a manner. Analysing all of the observable details directly as the situation unfolds therefore enables an entirely different interpretation of the situation as it is experienced. Of course, “the individual is not isolated within the reality of instants and situations: they are constantly impregnated, within the succession-continuity of their overlapping moments and the simultaneity of their conscious states, by the past, the future, other people, or their activity.”<sup>1</sup> We undertake an unbiased analysis of verbal exchanges, gestures, postures as well as movements outside of the situation, lapses of attention, brief moments of distraction, and so on. Essentially, we consider description to relate to a set of elements that together construct the situation, from a situated and personalised point of view, whether this means the elements contributed by the situation, those contributing to it, or those that remain unaffected by it.

## **Intensity and relaxation in engagement: the vectors of the relation**

While an interactionist approach means concentrating on the pertinent elements in a situation, the existential anthropology developed by A. Piette focuses on the elements of an individual’s existence that are seemingly of no importance: the unshared or even non-existent remnants of interaction, a way of being present both to the other and without the other. These states of being represent the very specific details of the minor mode: “They cannot be shared, nor intentionally accomplished or noticed, and nor do they generate a reaction”.<sup>2</sup> In both cases, an individual’s engagement is not fully described in its unique variations over the course of a situation. Either the process of methodological isolation applies to one interaction given priority due to the circumstances of its development, or it is applied entirely to unexpected and accidental features that were previously noted only accidentally by anthropologists and often eliminated during the first round of editing.<sup>3</sup>

The individual must continually deal with a multitude of concurrent demands and also, therefore, the need to articulate heterogeneous engagements within a situation.<sup>4</sup> Among the various meanings attached to the notion of engagement, let us focus on the idea of according greater value to the engagement of two people towards one another. In other words, let us understand “engagement” to mean the action of connecting oneself with the other to some degree as a situation develops. Relations are clearly a fundamental notion for analysing the details of this engagement, which both originates from the individual and is, to some degree, directed towards the other. Simply analysing the nature of the relation via an exclusively

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<sup>1</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, Lormont, le Bord de l’eau, 2014, p. 31.

<sup>2</sup> PIETTE, A., *Fondements à une anthropologie des hommes*, Paris, Hermann, 2011, p. 88.

<sup>3</sup> *Ibidem*, p. 87.

<sup>4</sup> CICOUREL, A.-V., “The Interpenetration of Communicative Contexts: Examples from Medical Encounters”, *Social Psychology Quarterly*, vol. 2, no. 50, 1987, 217-226.

interactionist interpretation, focusing solely on Pierre and Yasmina, is not enough. A consideration of the encounter between two individuals requires the proper analytical combination of a well-developed methodological individualism and a certain situationist holism, both with a relational perspective. Let us initially understand relations as “the individual’s capacities, characteristics, internal properties, that enable him or her to interact and accomplish, using such-and-such a method, these social actions”.<sup>1</sup> These relational abilities are to be found within each of the individuals, rather than directly between them. They may be considered basic social relations, social invariants<sup>2</sup> or, to use perhaps the most suitable terminology, “endorelations”.<sup>3</sup> Nevertheless, relations are also exteriorised, visible phenomena, or “exorelations. “The external act that we do observe is a part of the process which has started within”.<sup>4</sup> Often considered, wrongly, as the sole legitimate representatives of interactions, exorelations can also cause the observer to focus only on a corpus of observable and relevant evidence. It is therefore necessary to consider, on one hand, the capacities of each individual to connect and disconnect themselves, and on the other hand their constantly renewed and adjusted engagement. Endorelations and exorelations are the consequence of the development of a situation being experienced and to some degree shared. It is therefore necessary to analyse both together in order to establish the nature of the sharing or individual isolation that takes place within an encounter situation. This enables us to distinguish on one hand an “official (...) and legitimate focus of attention”, that is, “the objects normally selected in sociological operations,”<sup>5</sup> and on the other hand “competing sources of stimuli, becoming over-aware (...) of what is being said”.<sup>6</sup>

The individual can respond directly to the situation in which they are to some degree engaged or, on the contrary, turn away from it. “When the individual (...) engages in a conversational encounter with others he may become spontaneously involved in it. He can become unthinkingly and impulsively immersed in the talk and carried away by it, oblivious to other things, including himself (...) whether his involvement is intense and not easily disrupted, or meagre and easily distracted (...)”.<sup>7</sup> These different levels of involvement in the course of the situation are linked to “cognitive attractors”,<sup>8</sup> that is, “a set of material and immaterial elements that contribute to a given activity”.<sup>9</sup> The sociology of work is particularly relevant when describing “multi-tasking”<sup>10</sup> phenomena, focusing on “an alternation of consciousness among multiple action contexts per second such that they lead, as it were, to an overlapping of experiences as well as actions”.<sup>11</sup> In terms of how attention is directed, the individual takes varying account of a series of stimuli, some of which are relatively weak. Each individual either partially or completely excludes certain parts of their range of

<sup>1</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, op. cit., p. 9.

<sup>2</sup> KAUFMANN, L., CLEMENT F., “Les formes élémentaires de la vie sociale”, in FORNEL, M., LEMIEUX, C., (coord.), *Naturalisme versus constructivisme?*, Paris, Éd. de l’École des hautes études en sciences sociales, 2007, p. 334.

<sup>3</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, op. cit., p. 9.

<sup>4</sup> MEAD, G.-H., *Mind, Self and Society: From the Standpoint of a Social Behaviorist*, op. cit.

<sup>5</sup> PIETTE, A., *Fondements à une anthropologie des hommes*, op. cit., p. 87.

<sup>6</sup> GOFFMAN, E., *Interaction ritual: essays in face-to-face behavior*, op. cit., p. 123.

<sup>7</sup> *Ibidem*, p. 113.

<sup>8</sup> LAHLOU, S., “Attracteurs cognitifs et travail de bureau”, *Intellectica: Revue de L’association Pour la Recherche Cognitive*, vol. 1, no. 30, 2000, p. 103.

<sup>9</sup> *Ibidem*, p. 103.

<sup>10</sup> BIDET, A., “La multi-activité, ou le travail est-il encore une expérience?” *Communications*, vol. 1, no. 89, 2011, 9-26.

<sup>11</sup> ROSA, H., *Social acceleration: a new theory of modernity*, New York, Columbia university press, 2013, p. 125.



experience.<sup>1</sup> In our view, it is essential to situate individual experience as the action progresses and in relation to a certain degree of personal engagement. This degree is in part determined by the fact that each individual acts in a different manner depending on how their attention is directed. Being more or less present in a shared situation: this is what we will refer to as “intensity”.

The activity supervised by Pierre, a beginners’ flint-knapping workshop, provides the participants, around twenty pupils, with an official centre of attention, focusing on the discovery of the past. But other activities appear within the same scene, on the margins of what is officially taking place: Yasmina notices an unpleasant smell and looks at Jules, a classmate, Pierre exchanges a knowing look with the project leader, and so on. Treating these lateral lines of activity as distinct from the official activity<sup>2</sup> would prevent us from taking into account the information that we may gain from the individual’s action in its continuity – its stops, starts and moments of idleness. The fact that this information varies over the course of a situation enables us to define intensity as a temporal unit. At any given moment the field of activity, as a principle line of attention, is shared, and absorbs the attention of the individuals, to a different degree. Thus, Pierre and Yasmina find themselves involved to varying degrees in this shared situation, sometimes through their language actions, sometimes through their non-verbal actions. It is indeed this aspect of “varying degrees” that we are seeking to analyse. “Within a brief situation, for a single individual there will therefore be various ‘relations’ of differing intensity, a mixture of activity-passivity or work-rest coefficients which, when combined, in each case indicate a particular mode of presence.”<sup>3</sup>

Constituting an analytical framework specific to the video in question, a series of gradients numbered from -4 to 10 are used to postulate this differentiated intensity relation – a relation that is intricately linked to the main situation. The coefficients for an increase in activity range from 1 to 10 and those for an increase in passivity from -1 to -4 (see table 1). This system has been developed progressively over the course of the video observation, and adjusted after viewing the sequences selected for analysis. In fact, from the entire session – around two hours of recorded film – we have made a series of artificial cuts, partly to facilitate analysis, partly to encourage a focus on brief moments, and finally because it would have been technically difficult to include a full description of the session in this submission. The long take was therefore cut into eleven separate sequences. We have decided here to focus on sequences nine and ten, and the analysis chart includes only the gradients from these two sequences.<sup>4</sup> This is relevant in that it means our analysis is only partial, and conducted at the expense of other descriptions. In any case, the chart is only relevant when combined with the experienced moments that are recorded individually and then compared. From one moment to the next the individual reveals, via the object of their attention, attitudes that vary according to the degree of tension and the internal flux of their consciousness.<sup>5</sup> For example, the intensity of an action will be considered lower if Yasmina merely nods to indicate agreement. On the other hand, the intensity will be higher when she participates actively during a debate, speaking in a forceful and assured way and displaying frank disagreement. These two acts, the first non-verbal and the second language-based, will have different

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<sup>1</sup> MEAD, G.-H., *Mind, Self and Society: From the Standpoint of a Social Behaviorist*, *op. cit.*

<sup>2</sup> GOFFMAN, E., *Interaction ritual: essays in face-to-face behavior*, *op. cit.*

<sup>3</sup> PIETTE, A., “Au cœur de l’activité, au plus près de la présence”, *Réseaux*, vol. 6, no. 182, 2013, p. 76.

<sup>4</sup> Clearly, an analysis of the entire long take would have enriched and added complexity to the table that we present in Appendix 1. The addition of new situational setups might also alter some of the gradients. It is therefore essential that the present analysis is considered as only a rough outline of an incomplete situation.

<sup>5</sup> SCHÜTZ, A., *The Phenomenology of the social world* (1932), Evanston, Northwestern University Press, 1972, p. 73.

impacts on the situation. They may just as easily amplify the orientation of a situation as lessen it, or they may indeed have no impact. In order to ascribe them equal importance to the actions they result from, the immediate impacts are observed then immediately described using a coefficient, again depending on the situation. Measuring these impacts enables us to move away from an interactionist perspective and to define the involvement of Pierre and Yasmina over the course of the situation.

Analysis charts are a tool commonly used in cognitive psychology. There, the pragmatic analysis of speech consists in identifying and classifying the different types of language acts and determining the possible cause of incompatibility when there is a need to identify pathological language problems.<sup>1</sup> Our analysis chart, on the other hand, uses a non-evaluative, gradual distinction that is, moreover, situational. While left to our subjective appreciation, the observation is initially guided by our degree of familiarity with the two individuals being observed. Every experience creates in the individual “particular habits of behaviour, action or reaction; these become tendencies, in the sense that the individual is, through their past experience, predisposed to see, feel or act in one particular way rather than another”.<sup>2</sup> Through our contact with Pierre and Yasmina, we have become familiar with these forms of experience, these ways in which emotions express themselves through their body and language. This is how we were able to draw up an initial version of the analytical chart along with different gradients for the intensity of involvement, through a meticulous viewing of the video images. The creation of the gradients was therefore enabled by an interpretation of the experience “that is present-at-hand”.<sup>3</sup> We prefer instead to talk of an experience that is “present-to-the-eye”. A negative coefficient thus corresponds to what our eyes perceive to be a certain degree of escape or release from the situation being experienced. This might be a moment of distraction, drifting attention, or a brief involvement in a peripheral situation. A positive coefficient, on the other hand, indicates some degree of involvement in the main situation.

Establishing a set of gradients in parallel with the development of the situation requires involving the participants directly in this task. We believe this can be achieved in two ways. The first consists of viewing the video images with the participants being analysed while asking them directly to establish or correct the reference system. Thus, with the anthropologist having already established coefficients, they themselves evaluate their different degrees of engagement over the course of the situation. Secondly, the anthropologist, on the basis of the reference system previously established, conducts a clarifying interview with the individual being analysed. This review of the experience is conducted retrospectively, within a period short enough for the participant to remember in detail the situation experienced. This facilitates the description and, most importantly, clarifies the internal state of the individual in the situation. The clarifying interview indeed has the purpose of enabling their action to be put into words, including by making the implicit part of any action accessible. In this sense, this technique has the effect of deliberately eliciting awareness.<sup>4</sup> In our case, we did not conduct a full clarifying interview, but instead held a joint discussion with Yasmina and Pierre in which we reviewed the situation in a general manner. The first option seemed difficult to implement, partly because of the age gap between Pierre and Yasmina. Creating one’s own analysis chart is a long and painstaking task. When it then comes to reviewing the

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<sup>1</sup> ROUSSEAU, T., “La Communication dans la maladie d’Alzheimer. Approche pragmatique et écologique”, *Bulletin de psychologie*, vol. 5, no. 503, 2009, p. 433.

<sup>2</sup> LAHIRE, B., *Monde pluriel: penser l’unité des sciences sociales*, Paris, Éd. du Seuil, 2012, p. 28-29.

<sup>3</sup> SCHÜTZ, A., *The Phenomenology of the Social World, op. cit.*, p. 78.

<sup>4</sup> VERMERSCH, P., *L’Entretien d’explicitation* (1994), Issy-les-Moulineaux, ESF, 2014, 205 p.

chart in order to conduct an analysis, it is necessary to ensure that the feasibility of the exercise is roughly equal for those involved. Asking a girl of ten and a man of fifty-five to conduct the exercise would have meant this balance was not guaranteed.

## Simultaneous narrations

The principle of our descriptive method is, firstly, to adopt two entirely simultaneous points of view for two participants within a single situation, Pierre and Yasmina. As mentioned earlier, this enables us provide a simultaneous description of how each individual engages and disengages from the successive actions in which they are involved. In addition, this reveals a kind of intuitive simultaneity that is immediately perceived and experienced, or in Bergson’s definition, the “possibility of two or more events entering within a single, instantaneous perception”.<sup>1</sup> We must also consider the different elements of the surrounding environment, which has a parallel impact on each individual’s modes of being.

The two sequences selected – sequence 9 (00:48:41-00:53:33) and sequence 10 (00:53:34-00:57:03) – focus on the moments when Yasmina and another pupil attempt to produce a flake from the piece of flint given to them. These two sequences were selected on the basis of the contrasts they present in terms of individual engagement. As shown in the following description, the children take on the role of flint knapper and attempt to imitate the initial gesture. They approach the knapping area, having not previously done so, and lean in to observe the material in detail and touch the flakes that have fallen to the floor. Their attention increases significantly. Yasmina’s attention focuses on the centre of the activity, which Pierre is explaining verbally while demonstrating the required gestures.

### From the point of view of Pierre

Pierre starts forming groups of four children, who will participate, in turn, in a short introduction to flint knapping. **[Explains an instruction: 4]**<sup>2</sup>

*The tension in the room increases. The pupils’ bodies begin to alter from their initial posture before the groups have even been formed.*<sup>3</sup>

Pierre is still sitting on the chair. He emphasises the fact that everyone will get a turn. **[Explains an instruction: 4]**

He uses his arm to indicate the first four children in front of

### From the point of view of Yasmina

Yasmina has not moved. **[Focuses her attention on Pierre: 2]**

Jules suggests they form a group. She approves of this by nodding slightly and then turns to one of her female friends. She points to indicate that they could make a group. Behind her, a girl asks her, smiling, whether she can join the group that is being formed. **[Attention focused on other children: -1]**

This plan for a group is undermined and Yasmina’s

<sup>1</sup> BERGSON, H., *Duration and Simultaneity: Bergson and the Einsteinian Universe* (1922), Clinamen Press, 1999, p. 31.

<sup>2</sup> The bold text in brackets indicates the gradients that we use to describe the degree of intensity of individual engagement. These are samples from an analysis chart drawn up for the entirety of the observed situation, and are the basis of the graphic charts shown below. These gradients therefore apply to this situation only. Each additional field investigation will require a new set of references.

<sup>3</sup> Text in italics indicates contextual details for the purposes of situating the developing action.

him as the first group that will be doing some knapping. **[Explains an instruction: 4]**

He explains to the other children the activities being run by Marion and Jade **[Explains an instruction: 4]**. *The children all get up and move to the tables set out behind them, except for Yasmina, Jules, Audrey and Léa.* Pierre places the hammerstone and flint on the floor. He picks up a white plastic box in which various laminar flakes of flint are displayed, then stares into space for a few seconds. **[Lost in thought: -1]**

While rising, he makes a small gesture with his hand, inviting Marion to come closer. **[Attention focused outside the situation: -3]**. *Clearly, she does not see this.*

*The children are now all standing up and moving around.*

Pierre therefore gives one of them the job of giving the box to Marion. He thanks the child and returns to where he was standing. **[Attention focused outside the situation: -3]**.

expression is one of slight disappointment. **[Attention focused on Pierre: 2]** *This contrasts with the happiness of the boy next to her, Jules.*

Yasmina starts to uncross her legs and tells Jules, with a grimace, that she has “sore thighs” from sitting down in that position for a long time. She supports herself on her two fists and eventually stands up completely. **[Attention focused on other children: -1]**

*Jules is the first child invited to take on the role of flint knapper.*

Audrey picks up some scraps from the knapping on the floor and asks Pierre about how sharp they are. Pierre takes the flake that the girl had been holding. He explains about the sharp edge of these pieces of stone. **[Explains an instruction: 4]**

He holds out one of the freshly-knapped flakes to the three girls in the group, and suggests that they test the sharpness by gently running a finger along the edge. **[Talks about prehistory: 5]**

Pierre holds the piece of flint in both hands, leaving only one of the sharp edges showing. He again emphasises the precautions that it is necessary to take when handling these tools. **[Explains an instruction: 4]**

He bends down to pick up the piece of flint and remains squatting at the boy’s level. **[Attentiveness: 4]**

He asks the rest of the small group to sit down. **[Explains an instruction: 4]**

Hesitating momentarily, he turns the flint in different directions **[Lost in thought: -1]** and suggests that Jules try to produce a flake from a specific point that he indicates with his finger. **[Explains the technique: 5]**

*Jules timidly agrees.*

“Where’s your flake going to come off?” Pierre asks Jules. **[Asks a child a question: 4]**

Yasmina stands facing Pierre and listening attentively. **[Attention focused on Pierre: 2]**

Yasmina tries it out and places her index finger carefully on the sharp edge. This first contact with the flint makes her smile. She raises her eyebrows and agrees that the flake is as sharp as a knife. **[Touches an object: 3]**

She then squats, watching Jules. **[Reacts to an instruction: 4]**

*The boy indicates a point on the flint. He holds the flint on his thigh.*

Pierre gives Jules the hammerstone. Audrey moves closer and remarks that it might break. The archaeologist confirms this, and takes it back from Jules. **[Explains the technique: 5]**

He shows the small group the marks left from previous uses, pointing to them with his index finger. **[Explains the technique: 5]**

*Jules takes back the hammerstone and, without hesitating, strikes the flint a few times without success. He only manages to produce a few slivers.*

Pierre asks Jules why this attempt was unsuccessful **[Asks a child a question: 4]**. Jules manages to work out why, and tries to strike the flint closer to the edge.

Pierre watches Jules for a few seconds. "That's it, there's nothing tricky about it!" he says. **[Explains the technique: 5]**

Pierre abrades the edge using the stone by vigorously rubbing it on its surface. **[Technical manipulation: 6]**

Pierre gives Jules some more advice and indicates the specific point on the piece of flint that he should strike. **[Explains the technique: 5]**

*After two attempts, the boy does not manage to produce a single flake. He finds it difficult.*

Pierre takes the flint and turns it over. He rapidly removes a series of pieces from the flint while turning it. **[Technical manipulation: 6]**

*Jules moves closer to look at the new flat surface.*

Pierre points to where Jules should strike: "You'll strike here and the flake will come off here," he explains. **[Instruction: 4]**

Pierre draws this intended flake on the flint using another piece of stone taken from the scraps. He leaves a thin white line on the cortex of the flint **[Explains the technique: 5]**. Eventually he decides to abrade the edges of the flint again so that it's more "sturdy".<sup>1</sup> Satisfied, he hands it back to Jules. **[Technical manipulation: 6]**

*Jules has another go and manages to produce a flake.*

Yasmina stands up to get a better view of what he's doing. She watches, smiling **[Focused attention + : 3]**. *From below she couldn't see the top of the block well.*

She pulls the bottom of her trousers down to her ankles, inside her boots. She puts her hair back and pulls her vest down by tugging it below her waist. **[Focused attention: 2]**

She then looks around at the activities that the other children are currently participating in **[Attention diverted outside the situation: -1]**

With her feet together, she again concentrates on the advice Pierre is giving Jules. **[Focused attention: 2]**

She bends down to look closer at the piece of flint. **[Focused attention + : 3]**

Yasmina moves even closer. **[Focused attention ++ : 4]**

<sup>1</sup> Quotation marks indicate words spoken by the participants.

Pierre congratulates him [**Experience of impact: 7**] and immediately takes the flint and uses both hands to hold the flake in place. “Good job”. He focuses briefly on the flake, which he gently removes from the flint. He looks at Jules, smiling [**Enthusiasm: 7**]. *The flake is well-sized and has gone even further than the line he had previously drawn.*

“When you know how to knap flint, you know roughly where the flake is going to come off. Isn’t that crazy? It means prehistoric humans were able to control their gestures too.”  
[**Talks about prehistory: 5**]

*Jules agrees.*

*From the point of view of Pierre*

Pierre has stayed squatting and picks up a stone as well as the flint. He asks the girl who has joined him what her name is.  
[**Talks to one of the children in the group: 2**]

He compliments Yasmina on having a very nice name. **3**

Pierre abrades the edge of the flint at the place where the girl is going to strike. [**Technical manipulation: 6**]

He also removes some flakes to make her task easier.  
[**Technical manipulation: 6**]

He points at the part of the flint that will get in Yasmina’s way. “You see this bit – that’s going to get in the way.” He makes a few more sharp blows in order to remove these small parts of the flint. [**Explains the technique: 5**]

He then gives the flint to Yasmina.

Pierre looks attentively at Jade who is leaning over the crate of stones. She gets Pierre’s permission to take one of them.  
[**Strongly diverted attention: -3**]

He shifts his focus back to Yasmina’s piece of flint and shows her the exact place she should strike. He also draws an outline of the intended flake. [**Explains the technique: 5**]

Pierre looks at the flint. [**Concentration before striking: 6**]

Yasmina smiles [**Experience of impact: 7**] and congratulates Jules. “Well done!” [**Focused attention + : 3**]

*From the point of view of Yasmina*

Yasmina joins Pierre. She sits on the chair with her back straight against the backrest. [**Focused attention: 2**]

Flattered, Yasmina smiles and thanks him. [**Focused attention ++ : 4**]

She places the hide on her right thigh to protect herself.  
[**Focused attention: 2**]

She watches Pierre attentively. [**Focused attention: 2**]

Yasmina moves back slightly, frowning. She flinches at these energetic blows being made right in front of her.  
[**Scared before the cutting: 6**]

She places the piece of flint on her thigh and holds it firmly with her right hand. [**Focused attention: 2**]

Holding the hammerstone in her other hand, she looks at the piece of flint. A slight nod appears to indicate that she has indeed understood this advice. [**Concentration before cutting: 6**]

She makes a sharp first blow. [**Experience of impact: 7**]  
*She did not strike far enough into the piece of flint. Only two small pieces of cortex came off. In other words, she only removed the superficial, chalky part of the flint, its crust, or cortex.*

Pierre indicates the exact point her hammerstone just struck. **[Explains the technique: 5]**

*The striking point should have been slightly further back.*

He explains to her why her action caused her cortex flake to break. **[Explains the technique: 5]**

*Jules says that she might have held it wrong, which is a possibility. In particular, the position of her fingers may have caused it to break in this way by preventing the shockwaves from spreading as they should.*

To help her in her second attempt, Pierre again abrades the edge of the flint. **[Technical manipulation: 6]**

The archaeologist tells Yasmina to strike a little wider and harder **[Explains the technique: 5]** then looks at her piece of flint. **[Concentration before striking: 6]**

Immediately, Pierre reaches to take the flint while congratulating her. **[Experience of impact: 7]**

He places the flake on its own in the palm of his hand. Pierre opens his mouth, amazed. "A perfect blow". **[Enthusiasm: 7]**

He looks at Yasmina, smiling:  
"This is the flake from hell, this is!" he tells Yasmina. **[Enthusiasm + : 8]**

*She struck exactly the right place and her blow was as hard as required.*

Pierre looks at the flint and turns it over. He removes the flake while looking at it and holds it up. **[Enthusiasm: 7]**  
*The cutting edge of that flake alone will let her "cut up as many wild boar skins" as she wants. It's a perfect blow.* Pierre smiles again while looking at Yasmina, the flake in his hand. **[Enthusiasm: 7]**

Pierre tells Yasmina that she won't be able to leave with her

She looks at the exact point her hammerstone just struck. **[Focused attention ++ : 4]**

She moves the top half of her body back slightly. **[Scared before striking: 6]**

She takes the piece of flint again and hesitates. She raises the hammerstone above the flint once, and then a second time. At the same time, she listens to the latest advice being given to her. She looks at Pierre again, agrees and focuses on her flint. **[Concentration before striking: 6]**

She strikes. **[Experience of impact: 7]**

*No flake is produced.*

She is clearly disappointed. **[Focused attention + : 3]**

She catches her breath and takes only a couple of seconds to regain her concentration **[Concentration before cutting: 6]** and strike. **[Experience of impact: 7]**

This time, a sharp blow rings out. She seems to recognise the particular sound that the stone makes when a flake is produced. She understands immediately and is visibly satisfied. **[Experience of impact: 7]**

Her eyes widen and this time her smile is even broader. She laughs. **[Experience of impact: 7]**

flake, even though she produced it herself **[Explains the technique: 5]**.

Pierre talks to the small group about this issue. **[Questions the group: 4]**.

Pierre agrees:

“It’s very, very dangerous. It can cut all sorts of things.”

While giving the children this warning, he looks at the flake that he’s holding and runs his thumb along the sharp edge. **[Explains an instruction: 4]**

Audrey holds out the one she has just picked up off the floor. He says he doesn’t want to be giving this very sharp tool out to children, who might use it to do something bad. **[Explains an instruction: 4]**

Pierre congratulates Yasmina again. **[Addresses one of the children in the group while smiling: 3]**

Yasmina mentions how dangerous the sharp edges of these pieces of flint can be. **[Direct contribution: 4]**

Yasmina gets up from the knapping area and allows the last member of the group, Lea, to take her place. She adjusts her vest and pulls it well below her waist. With a grin, she looks at the new participant who places the protective hide on her thigh, somewhat alarmed by the marks that the chalk has left on her trousers. **[Focused attention + : 3]**

These two children, first Jules and then Yasmina, try out flint knapping. Their training is of short duration, since each child stays an average of only five minutes on the knapping chair. Initially, and according to an analysis of the other descriptive sequences not presented here, it seems as though the knapping sequence follows a standard pattern each time. First, Pierre picks up the piece of flint, gets rid of a few unwanted flakes and abrades the flint to get rid of any tiny splinters. Next, he points to the exact place where the child should strike and then draws an outline of the desired flake. This detail reveals a certain expertise in knapping. A good knapper is able to predict the shape and position of their flake based on factors that Pierre doesn’t go into here. He takes the piece of flint and abrades it again, especially if the child is unable to strike off a flake. The child then strikes their flint again and, if the impact was at the right place, Pierre takes it from them while holding the flake in place. The sound produced is a useful indicator for everyone, including the children. When the flint makes a ringing noise, they are visibly delighted. Lastly, Pierre shows the children the result of a successful percussion and holds the flake up so they can see it. These detailed descriptions reveal distinct modes of engagement where each individual is involved in the main situation to a different degree. However, this form of description is not entirely sufficient. Its narrative structure does not sufficiently capture the way in which Pierre and Yasmina are connected to one another to a varying degree, being sometimes present and sometimes absent vis-à-vis the other. Their respective engagements and disengagements constitute a constant to-and-fro that they each conduct more or less consciously – an perpetual movement that represents the real essence of their encounter. The use of graphic representations will enable us to move in this direction.

## **Individual engagements and shared distances**



As mentioned above, we created an analysis chart containing every individual action in the situation, marked with a series of numbered gradients corresponding to the intensity of the respective engagements. The preceding narrative description played a part in producing this chart, although it was not the initial basis for this work. A systematic description needed to be conducted based on a meticulous viewing of the video footage. This description enabled us to obtain the two graphs presented below. They correspond to the two preceding descriptive sequences. The x-axis represents the passage of time. Its division – 1, 2, 3, 4, etc. – is based on the successive and simultaneous modes of presence of the two participants, Pierre (the green line) and Yasmina (the orange line). The y-axis represents the degrees of engagement of each of the two participants as the situation progresses. Each mode of presence may be boosted or reduced depending on the value of its immediate impact. For example, if Yasmina begins to engage vehemently or angrily in the discussion, the intensity of the moment will be immediately increased if the group is affected by her reaction. The y-coordinate therefore relies on a double measurement enabling a representation of an individual's involvement in a shared situation, while avoiding an interactionist approach, which would only take into account the forms of action occurring between the participants. This may be associated with the quantitative, graphical processing of language and nonverbal communication in the field of ethology. It is thus a medium enabling us to visualise the temporal interrelation of gestural activity.<sup>1</sup>

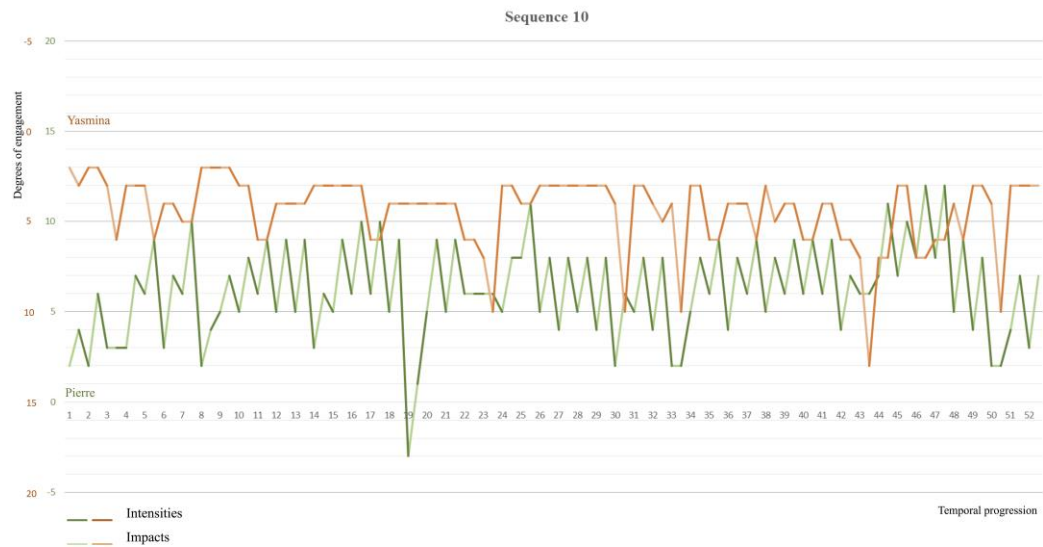
The values of the upper curve of the graph are reversed. This enables the different modes of engagement of the two individuals over time to be read as mirror images. These curves enable us to investigate the moments when an intensity is shared between the individuals, to a greater or lesser degree, and not solely through gestural activity. It is this reading of the “in-between” over the course of the situation that we shall seek to analyse.

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<sup>1</sup> COSNIER, J., BROSSARD, A., *La Communication non verbale*, Neuchâtel, Paris, Delachaux et Niestlé, 1984, 244 p.



**Chart 1**



## Chart 2

In sequence 9, Pierre is directly involved in teaching Jules how to knap flint while Yasmina is sitting, concentrating on the scene. On several occasions, they both disengage from the situation. Yasmina is distracted by the other children located behind the scene (x (2-3, 57)), looks elsewhere (x (51)) or talks to Jules privately before he goes to join Pierre (x (5-9)). Pierre, too, becomes disengaged from the situation when he addresses his colleagues (x (7-9)) or when he focuses on mentally “reading” a piece of flint – i.e. reflecting silently on how best to produce flakes from it. In both cases, these moments of withdrawal from the situation are not shared between Pierre and Yasmina. In contrast, there are three striking moments where a simultaneous, highly perceptive intensity may be observed. The first occurs when Jules strikes the flint for the first time (x (48)). The second corresponds to the moment when Pierre vigorously abrades the flint (x (64)), and the third to the final impact that enables Jules to produce his first flake (x (71-73)). What we are analysing as the shared aspect of these brief moments is “shared” primarily because of the material interaction that focuses the attention of the two individuals. The piece of flint is the object enabling this convergence – one that is likely to be collective at this moment of action. This convergence does not, however, imply that the two individuals are necessarily interacting with one another.

In sequence 10, Yasmina sits in the knapping chair and this time Pierre talks directly to her, both verbally and using body language. This relation is closer, with the graph revealing this convergence. The difference between the two curves becomes smaller, and while this is relative to the predetermined value separating them (y (15)), the phenomenon is clear. The intensity of their respective experience enters into an instant relational communion that is again linked to the material interface represented by the piece of flint. It is via this piece of flint that the encounter is then able to partially occur. Pierre abrades the block vigorously, which removes tiny chips from the stone (x (35-40)). The attention of both participants is focused on this preparatory step that is necessary for the production of the desired flake. The tension rises gradually and collectively, from the silent concentration that occurs before the strike (x (43)) until the impact of the stone on the flint, which causes a flake to be produced (x (45-49)).

The individual therefore accomplishes a set of actions that have limited effects and are rarely neutral. The 0-line, which would indicate a withdrawn moment of introspection, is scarcely represented in the sequences we have analysed. Pierre and Yasmina are thus rarely in an internal state that would precede each of their actions. They are continually engaged in and/or away from the main situation – a constant participation in the act that either focuses or relaxes their attention. A. Piette describes this relational movement as a to-and-fro generated by a set of “exoactions”.<sup>1</sup> As the etymology of this neologism implies, the action emerges from the individual and their internal state. However, the individual’s constant engagement/disengagement in/from the situation means that it is appropriate for us to describe this movement as a series of “ab-actions” and “ad-actions”. In effect, the variations in intensity describe actions that either distance us from ourselves (*ab*) or bring us closer (*ad*). Often, these actions traverse us without even affecting us. This also explains why it can be difficult to remember each of the individual actions after the fact.

For a few years now, the sociology of work has offered new categories for analysing interaction, in particular those for examining the ecology of activity linked to technological

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<sup>1</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, op. cit., p. 19.

interfaces for teleaction and telework. This digression seems necessary because of the attempts made to describe the conditions of face-to-face encounters and ordinary conversation,<sup>1</sup> particularly for a relationship occurring at a distance via technology. By distinguishing technical interactivity from human interaction,<sup>2</sup> an “original interactive space” is allowed to open between man and machine in their reciprocal actions<sup>3</sup> – or, should we perhaps say, “between” their reciprocal actions? The interactive situation is “neither a direct encounter with a subjective being, nor a univocal predetermined operation. (...) It is rather this quality of the ‘in-between’ that should be admitted.”<sup>4</sup>

If a distance between the participants is admitted for “interactive” situations, might it not also exist in the case of “interactional” situations? Can we explain our empirical observations and their graphical analysis in terms of a gap between individuals, a varying degree of relaxation in interaction? This would enable us to conduct our analysis according to an individual’s varying patterns of engagement. In the Goffmanian tradition, A. Kendon ascribes full recognition to an interaction when it occurs on the basis of a shared pattern. But, as we have seen, our analysis suggests a plurality of patterned individual moments of involvement, which usually occur at a distance from one another. According to Kendon, a form of interactional synchrony is thus the only way for the participants to ensure a sharing of their perspectives of the interaction.<sup>5</sup> In this case, while we recognise with certain reservations the existence of an absolute form of interaction, we should clarify its other forms, those that we may observe within a situation.

The aim is to provide a detailed ontological description of our interactions by concentrating specifically on an encounter between two individuals. We must therefore apply a lexical apparatus capable of describing the different ways of being more or less present in relation to the other depending on one’s own engagement over the course of a situation. We achieve this by correlating the degree of intensity of a situated engagement (x) with the distance separating one individual from another (y), which we call the interactional relaxation. Additionally, we must use a special vocabulary to define how two individuals involved in and by a given situation engage with one another to a greater or lesser degree. In short, we must specify and describe in detail the individual elements of an encounter between two individual in terms of shared instants.

We define six modes of interaction within a situation: intense shared monody, relaxed shared monody, intense teledy, relaxed teledy, shared heterody, and external heterody. This terminology is based on musical vocabulary and, in particular, the word “monody”,<sup>6</sup> on the basis of which the other terms were formed. Monody is defined as “music for a single voice or part, for example plainchant and unaccompanied solo song”.<sup>7</sup> It originally describes a

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<sup>1</sup> JOSEPH, I., *Erving Goffman et la microsociologie*, Paris, Presses universitaires de France, 2002, 128 p.

<sup>2</sup> LINARD, M., *Des machines et des hommes: apprendre avec les nouvelles technologies*, Paris, L’Harmattan, 1996, 288 p.

<sup>3</sup> JULIA, L., VOUTSAS, D., CHEYER, A., “Accessing network-based electronic information through scripted online interfaces using spoken input”, 2003, <https://www.google.com/patents/WO2001069449A2?cl=en&hl=fr>, accessed 4 March 2015.

<sup>4</sup> WEISSBERG, J.-L., *Présences à distance: déplacement virtuel et réseaux numériques*, Paris, L’Harmattan, 1999, 301 p.

<sup>5</sup> KENDON, A., *Conducting interaction: patterns of behavior in focused encounters*, Cambridge, Cambridge University Press, 1990, p. 256.

<sup>6</sup> < lat. *monodia* (“solo, song performed by a single person”), from the Greek μονωδία, *monodia* (same meaning) formed from μόνος (“alone”) and ᾠδή (“song”, “ode”).

<sup>7</sup> This definition is taken from the following online dictionary: Monophony. *Grove Music Online. Oxford Music Online*. Oxford University Press, accessed May 11, 2014,

musical structure in which each of the parts may, in some cases, be separated by a unison interval, i.e. where the same musical note or melody is played simultaneously by several instruments or voices. Applying this notion to an individual essentially means defining a form of harmonious presence that is offered towards the other in a reciprocal and instantaneous manner. Continuing our linguistic derivation, “teledy”, which uses the ancient Greek prefix τῆλε, *têle* (“far”), suggests an element of distance in the inter-individual relationship, whereas “heterody”, which uses the ancient Greek prefix ἕτερος, *heteros* (“other, one of two”), isolates the individual in their relationship to the other. These categories describe the porous forms of encounters. In this sense, they do not definitively place an individual within one particular mode of being, but on the contrary describe his or her various forms of engagement towards the other depending on their involvement over the course of a situation.

Let us clarify the differences between these modes with some definitions illustrated by short scenes taken from the workshop.

If individuals (A) and (B) are engaged intensely ( $x \geq 5$ ) and in an entirely concomitant manner in a given situation, then the situation is one of **intense shared monody**. For example, Yasmina (A) has just produced her first flake and, smiling, looks at it while Pierre (B) holds it. Pierre shows it to her enthusiastically. This brief moment of intense joy is shared between the two individuals.

If individuals (A) and (B) are engaged less intensely ( $x \geq 5$ ) and in an entirely concomitant manner in a given situation, then the situation is one of **weak shared monody**. For example, at the start of the workshop, Pierre (A) focuses his attention on the group he is addressing while Yasmina (B) watches Pierre attentively. Their engagement does not suggest a significant intensity and is simultaneously the same for both individuals.

If individual (A) engages intensely ( $x \geq 5$ ) in a given situation while, simultaneously, individual (B) distances himself or herself from it ( $y \geq 5$ ), then individual (A) is engaged in **intense teledy**. For example, Pierre (A) knows, from the sound of the stone striking the flint, that Jules has successfully produced a flake. He is already congratulating the boy whereas Yasmina (B) has not yet realised her friend's success. She is simply watching him.

If an individual (A) engages less intensely ( $x < 5$ ) in a given situation while, simultaneously, the involvement of an individual (B) is more significant, then individual (A) is in a state of **weak teledy**. For example, while Yasmina (A) remains simply attentive to the speech of Pierre (B), Pierre enthusiastically points to the response given by one of the children. The weak engagement of individual (A) distances them from that of individual (B), which by contrast is more intense.<sup>1</sup>

If individual (A) temporarily disengages from a given situation ( $x \leq 0$ ), while individual (B) is only weakly involved, then the situation is one of **shared heterody**. For example, at the beginning of sequence 1, Pierre (A) concentrates on preparing his material before the workshop begins. He moves away from the others, close to the box containing the stones. Meanwhile, Yasmina (B) slowly approaches the area where the session will take place. Neither of them are in the situation, since the workshop has not properly started.<sup>2</sup>

If individual (A) disengages from a given situation ( $x \leq 0$ ) whereas individual (B) is involved more intensely, then individual (A) is said to enter into **external heterody**. For example, when Jules is preparing to strike his piece of flint, Yasmina (A) is looking

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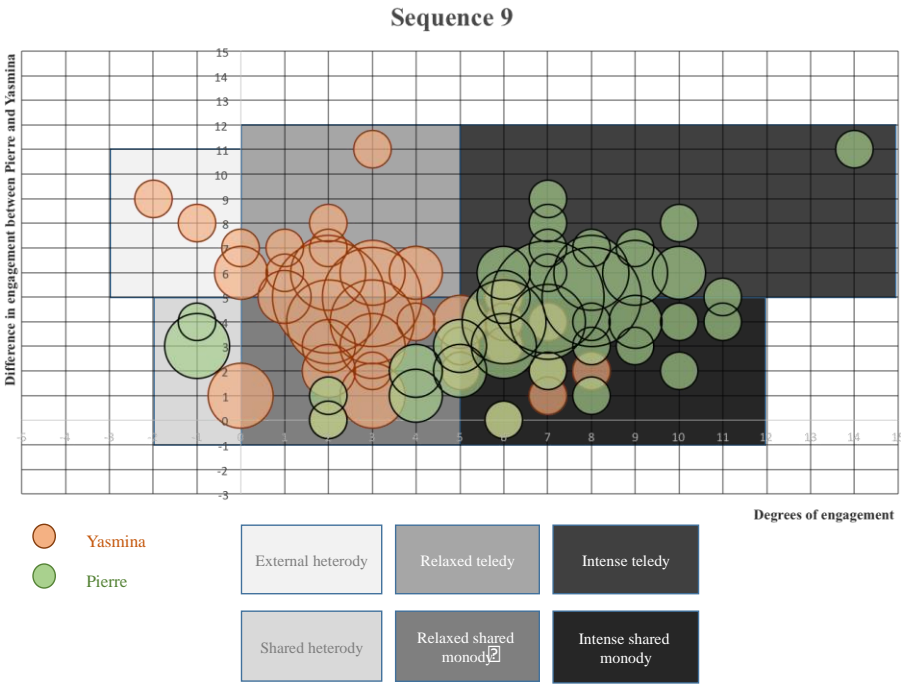
<http://www.oxfordmusiconline.com/subscriber/article/grove/music/18980>.

<sup>1</sup> This is a reference to one of the earlier sequences of the workshop, not described here.

<sup>2</sup> This is a reference to one of the earlier sequences of the workshop, not described here.

elsewhere. Her attention is drawn by events exterior to the situation, while in the meantime Pierre (B) is involved more intensely as he concentrates and indicates the exact area where the boy should strike.

The two bubble charts below apply this terminology to the sequences we began analysing earlier. The x-coordinates represent the gradients ( $-4 \leq x \leq 15$ ) that determine the intensity of an individual's engagement. We should again emphasise that this intensity also includes the impact on the situation. This explains the x-axis figures: the intensities added to the impacts. As for the y-axes, these represent the gap calculated between Pierre and Yasmina respectively as they each engage in the situation ( $-3 \leq y \leq 15$ ). The data points correlating these two types of prior measurement are represented by bubbles, green for Pierre and orange for Yasmina. The colour effects are due to the bubbles overlapping. An additional dimension of the data is represented by the different sizes of the bubbles, necessary in order to show their precise values visually. In other words, these bubbles add an additional level of value to what we are seeking to demonstrate. Each represents the moments, of varying number, when Pierre or Yasmina both engage in a situation. Their position on the graph determines their mode of presence and specifies their engagement with one another. Allow us to demonstrate how this type of graph is to be interpreted by means of a specific example found below, during sequence 9. On the x-axis, we can note that Pierre engages in a particular intense manner at a precise moment (x(14)). The y-coordinate for this point is very high (y(11)). This means that, at the same time, Yasmina was by contrast very unengaged by the situation. (x(14)) subtracted from (y (11)) indicates a degree of engagement for Yasmina equivalent to (x(3)). We may also note the strong concentration of values in this zone for the girl.



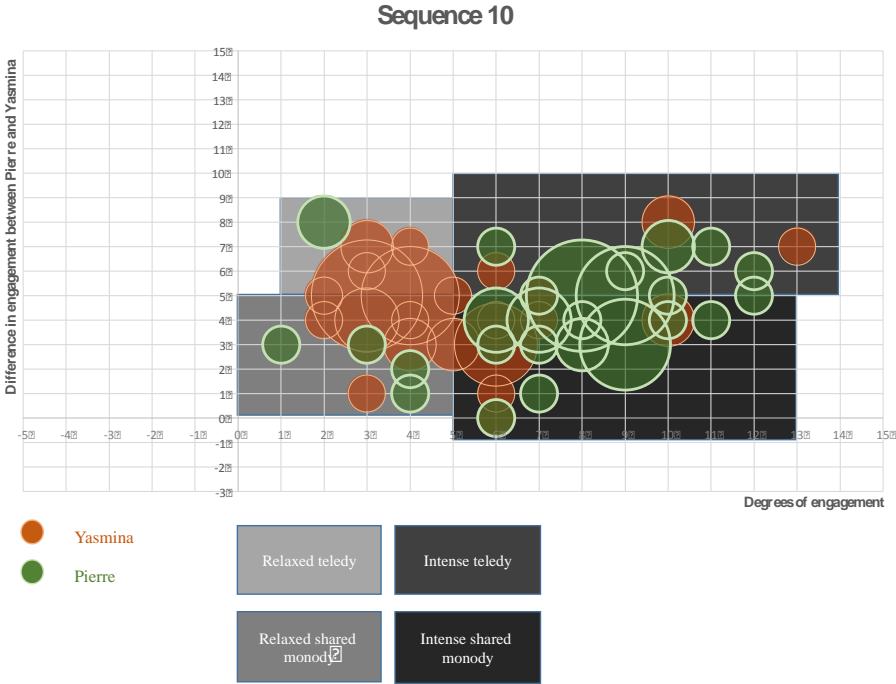
**Chart 3**

Here, Jules is being shown how to knap flint by Pierre while Yasmina watches them. There is a clear spread of bubbles around the concentrated area of bubbles, which is almost identical to the preceding sequence. Yasmina becomes more distracted whereas Pierre becomes more involved, at various points and in an increasingly intense manner. Here however, the situation seems to be very different from the preceding sequence, since the first twenty minutes of the workshop have elapsed and discussion has given way to practice.

By comparing our analysis with those of our two participants, we were able to obtain an explanation of the situations as they were experienced. This explanation is based on the subjective points of view of Pierre and Yasmina when, a few weeks later, we asked them to review this situation.<sup>1</sup>

“There is this lack of a relationship, for some of them maybe, I’m not saying all of them, with the material. So they have to get over that – I mean they move on to proper manual work. Basically, they’re in contact with something they’ve never seen before. And they don’t understand (...). I think they get more into the challenge, because there’s something at stake. Showing their friends that they’re able to do it like the man told them to. And hey, they manage it”. (Pierre)

According to Pierre, the children’s attention is therefore focused less on the material and more on the other members of the group. This explains Yasmina’s weak engagement with the knapping situation she is observing and in which she is not yet involved directly.



**Chart 4**

<sup>1</sup> These extracts are taken from interviews conducted with both Pierre and Yasmina (2014). The interviews focused directly on a description of the workshop.

Here, Yasmina is sitting on the knapping seat and Pierre talks to her directly during this brief learning sequence. We might have expected a more sustained intense shared monody, since the bubbles that are both orange and green are concentrated in that zone. This is not the case. Observed graphically, the phenomenon concerns two zones, one with a concentration of orange bubbles and the other with green bubbles. While the previous curves tended to show that for this sequence the interaction between Pierre and Yasmina was shared, this alternative graphical depiction reveals that the concentration is not the same for both. This is the main contribution of these bubble graphs, which provide a more nuanced and detailed representation of the different modes of engagement. On one hand, Pierre and Yasmina do not share the same type of interactive space, since Pierre on average engages more intensely in the situation, unlike Yasmina for whom the figures show a weaker engagement. This is expressed by the gap between them on the x-axis. In addition, the intense shared monody which, in our description, ought to represent the ideal of Goffmanian interaction is only really effective if it is shared by the two individuals. However, only Pierre's engagement is shown to match this description. The intensity of engagement of one individual is therefore not simultaneously that of the other.

“There is a reaction from me that means that... You see.... I mean, I know that the flake has been produced. But she doesn't know that. Of course not, because she doesn't make the connection. If you haven't explained it at the start, she won't connect the noise, the cracking sound, with producing a flake. So I think she gauges it more based on my reaction. I say 'There we go' (...). At that moment you gratify them because you have to gratify them. And for the kids, yeah, it's great (...). It's wonderful (...). There's this thing that comes out the other side without you seeing what it is. And then you're told that it's actually the thing you were trying to produce.’ (Pierre)

Meanwhile, Yasmina summarises her impressions in a few sentences:

“When I saw the others doing it already I was thinking, what do they feel? I was wondering, what's going through their head? Do they just say OK, good. Or do they have a particular kind of emotion. So when I did it, at the start, I don't know, I was a bit embarrassed. I don't know why.” (Yasmina)

The simultaneous nature of the two individuals' engagements §do not seem to be governed by the same rules. Pierre and Yasmina are clearly not concerned with the same issues.

“With kids, you have to bring them out of their environment, totally (...). There, they've just eaten, the bell's ringing for playtime, there are other kids making noise outside, so yeah. They're in an environment they know (...). I think that what it boils down to is that they see us arriving a bit like we're aliens (...). When you arrive in those sorts of conditions, each of us is a bit of an outsider. And giving context to what we're there to do, that's not always easy (...). So it's more about the affect, the relation with others, their friends. They don't care about me because I'm just a conduit for information. That's all. They have nothing to prove to me. On the other hand, they do have something to prove to themselves and to their friends.” (Pierre)

Since the graphs provide another type of interpretation to that of a narrative description, we must consider the type of interaction that is at work between Yasmina and Pierre and the basic characteristics of their interaction in the context of an encounter. These graphical



representations provide evidence of an interactional space<sup>1</sup> that is both present and varies over the course of a situation. In other words, the relation that supposedly links these two individuals is a fluctuating and particularly fragile one. We may therefore question whether the notion of relation can be of any relevance. The description of a collective scene often means concentrating on how those present mutually understand one another, act towards one another or behave together. It is therefore worth posing the reverse question in order to gain a more nuanced and detailed understanding of what occurs between individuals. “In particular, we should allow ourselves to be affected by our distance from the other, to make ourselves susceptible to what the other expresses to us within the space that separates us from them and which is the basis of our face-to-face relationship”<sup>2</sup>. Winnicott went even further by proposing the idea of a common area or space existing within every relation. This area is then a part of the experience of any relation between two individuals.<sup>3</sup>

Consequently, what value should we ascribe to an encounter between two individuals in a situation considered collective – an encounter relying on a relation that, as we have seen, is fragile? How may we define it otherwise? We must add detail to, but most importantly move beyond, the interactionist model. We cannot content ourselves with mere shared planes of existence accorded to a speaker sharing their response with an other.<sup>4</sup> As we have noted, these planes exist rarely, briefly and, most of all, are particularly dependent on the intensity of an individual’s engagement in the situation. They represent only a tiny fraction of the sequences at the workshop that we have described and analysed – a few seconds here and there. Consequently, might not the space that separates us from the other be the pivot around which every relation is constructed? If we accept this, we must challenge the notions both of relation – synonymous with continuity and interactional fluidity – and of interaction. The latter would be relevant only if it were possible to consider it to as a shared space within a learning situation. We have seen that this is not the case. Since the “inter” suggests discontinuity, we propose a more precise description of the notion of interaction as well as that of relation. “Intraction” would be synonymous with interiorised, mainly mental activities. It would include the kind of withdrawal into the self that is often difficult for the observer to interpret. As we have already mentioned, “exoaction”, on the other hand, would be that which moves beyond the individual, an exteriorised movement towards the other. These two terms enable us to describe an interaction as it really is, a discontinuous movement between the individuals. The “inter” effectively implies a wide range of interactional variations, as outlined by our range of six types of interaction. Are we primarily absent for the other? The flow of our conscious actions corresponds to “the constantly varying modalities and intensities of presence and absence within action (...), affecting another individual with a certain degree of intensity.”<sup>5</sup> Let us now assert that this absence vis-à-vis the other, the absence of relation, is a condition of what is often labelled interaction. The idea of interacting fully within a situation is an illusion.

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<sup>1</sup> LALLIER, C., COLLEYN, J.-P., *Pour une anthropologie filmée des interactions sociales*, *op. cit.*, p.68.

<sup>2</sup> *Ibidem*, p. 106.

<sup>3</sup> WINNICOTT, D.-W., *Playing and reality* (1975), London, Routledge, 2005.

<sup>4</sup> GOFFMAN, E., *Interaction ritual: essays in face-to-face behavior*, *op. cit.*

<sup>5</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, *op. cit.*, p. 19.

## Conclusion

*“To agree to let things occur without taking, without rejecting, to see and to listen, watching and hearing even without understanding, is to accept solitude in relation to others.”*

Francoise Dolto<sup>1</sup>

From its in-situ existence to its analysis in writing, we have sought to provide as detailed as possible an examination of the encounter as an observable spatio-temporal unity. Seeking to remedy a degree of scepticism among ethnographers, our approach has consisted in concentrating on the minute details of the situations we experience and the relations that affect us on a daily basis. As we have outlined, these relations of an individual to the other are above all determined by the degree of individual engagement in the situation. The toolkit we propose, still in an experimental phase, is therefore designed to add nuance, depth and detail to what anthropologists commonly call the relation with the other. In our case, we have chosen to focus on the encounter with the other in its most fundamental and yet fleeting aspects. Let us recall that the situation we have analysed occurs within the context of an educational session. Our proposal here is not to deny the factors at work, but rather to propose a lexical toolkit that is capable of properly describing any type of situation, on the basis of the one used here as an example. Questions linked to the types of learning that we observed shall therefore be the subject of a future work, a second stage in our analysis.<sup>2</sup>

By providing a graphical analysis of the position of these two individuals in the simultaneity of their respective experiences, their forms of engagement/disengagement in/from the situation, we are inclined to concentrate, by contrast, on the moments when Pierre and Yasmina appear to be connected, animated and brought towards one another within the situation. We are now able to properly describe this encounter between an archaeologist and a schoolgirl. If we look at all the cases of monody, shared by the two participants in our analysis with varying degrees of intensity, we may conclude that a situated relationship is not definitively set up between them. It develops unsystematically over the course of the situation, but is never entirely broken off, nor entirely consolidated. A possible continuation of our analysis would be a comparative investigation of this type of encounter, between other researchers from the PréhistroScène project and other school pupils. We also believe that an extension of the analysis to other situations would be of value.

The actions that traverse the individual, however minute they might be, do not appear to connect them entirely to the other. In contrast to the interactionist approach, we have sought to show that these actions are based on varying supporting elements that are unique to the individual. What causes one person to act in certain ways is not necessarily or simultaneously the same as what motivates the other. Solitude within interaction: this appears an apt description of most of the actions that motivate or inhibit our relations. Solitude, then, is a necessary medium for these actions – even, perhaps, a condition for maintaining the majority of our interactions.

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<sup>1</sup> DOLTO, F., *La Solitude*, Paris, Éd. Mercure de France, 1985, p. 59.

<sup>2</sup> PIETTE, A., *Contre le relationnisme: lettre aux anthropologues*, op. cit.

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## Appendix

Table 1: Analysis chart for the situational gradients

	Intensity of Pierre's actions	Intensity of Yasmina's actions	Pierre's impacts	Yasmina's impacts
7	<ul style="list-style-type: none"> <li>-demonstrates response and shows his enthusiasm</li> <li>-talks enthusiastically to the group</li> </ul>	-	-	-someone responds to her in a way that promotes her response
6	<ul style="list-style-type: none"> <li>-addresses an important response</li> <li>-accentuates what he's saying about prehistory by miming gestures</li> </ul>	-	-someone makes an unexpected response	-someone builds on what she says
5	<ul style="list-style-type: none"> <li>-talks to the group about prehistory</li> </ul>	<ul style="list-style-type: none"> <li>-strong contribution to the discussion</li> </ul>	<ul style="list-style-type: none"> <li>-someone laughs at what he says</li> <li>-child is moved</li> <li>-several responses to him</li> <li>-someone wants to respond +</li> </ul>	-
4	<ul style="list-style-type: none"> <li>-explains an instruction to the group</li> <li>-poses a question to the group</li> </ul>	<ul style="list-style-type: none"> <li>-direct contribution to the discussion</li> </ul>	<ul style="list-style-type: none"> <li>-someone replies to him</li> <li>-children watch him +</li> <li>-someone wants to respond</li> <li>-someone smiles (flattered)</li> </ul>	-someone responds to her
3	<ul style="list-style-type: none"> <li>-watches while smiling</li> </ul>	<ul style="list-style-type: none"> <li>-raises her hand</li> <li>-has strong desire to contribute</li> <li>-agrees</li> </ul>	<ul style="list-style-type: none"> <li>-someone listens to him more attentively</li> <li>-children watch him</li> <li>-someone raises their hand</li> <li>-someone wants to respond</li> </ul>	-someone adds something extra
2	<ul style="list-style-type: none"> <li>-addresses one of the children in the group</li> <li>-focused attention on the group</li> </ul>	<ul style="list-style-type: none"> <li>-attention focused on the discussion</li> </ul>	<ul style="list-style-type: none"> <li>-the children move about</li> <li>-children observe him</li> <li>-someone listens to him attentively</li> <li>-someone obeys his instruction</li> </ul>	<ul style="list-style-type: none"> <li>-changes the focus of her attention</li> <li>-someone listens attentively to her</li> <li>-someone allows her to speak</li> </ul>
1	<ul style="list-style-type: none"> <li>-waiting, relaxed listening and observation</li> </ul>	<ul style="list-style-type: none"> <li>-looks at the hides</li> <li>-looks at her boots while listening</li> </ul>	<ul style="list-style-type: none"> <li>-someone replies politely</li> <li>-someone watches him without much intensity</li> </ul>	<ul style="list-style-type: none"> <li>-someone replies politely</li> <li>-someone watches her without much intensity</li> <li>-someone agrees with her</li> </ul>
0	<ul style="list-style-type: none"> <li>-doing nothing with no apparent external sign</li> </ul>			-none
-1	<ul style="list-style-type: none"> <li>-lost in thought</li> </ul>	<ul style="list-style-type: none"> <li>-both with junior</li> </ul>	-	-
-2	<ul style="list-style-type: none"> <li>-knowing look with diverted attention</li> </ul>	<ul style="list-style-type: none"> <li>-diverted attention and physical movement</li> </ul>	-	-
-3	-	<ul style="list-style-type: none"> <li>-looking and focusing strongly outside the situation</li> </ul>	-	-
-4	<ul style="list-style-type: none"> <li>-diverted attention and laughing during an exchange</li> </ul>	<ul style="list-style-type: none"> <li>-explaining a peripheral event</li> </ul>	-	-