The postural dynamics of a psychoanalytical process[1]
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Abstract

Postural dynamics is a model and a coding system that allows researchers to scan the postural dimensions of any interaction. In this paper I will show how this model can be used to scan complex dimensions in a psychotherapeutic interaction, and to clarify some of the issues involved. I shall use Beatrice Beebe's published psychoanalytical case study of Dolores as a concrete example to show that postural dynamics is particularly useful when it analyzes how a setting and individual particularities regulate.

1. An homage to Gregory Bateson

At the last EABP congress, in Holland, I had the honor of presenting to you a fascinating anthropologist, Mary Catherine Bateson. I hope that this meeting helped some of you to remember how important anthropology has always been for body psychotherapists. That meeting was particularly intense because of three ingredients:

A) Mary Catherine's immense knowledge, which has so much relevance for our field (e.g., M. C. Bateson, 1994).
B) The meeting occurred just after the 9/11/2001 bombing of the New York towers. We were all shocked, and thankful to Mary Catherine Bateson for her knowledge of Muslim cultures to help us digest what was happening.
C) The main reason for her presence was because 2001 was the centennial of Mary Catherine's mother, Margaret Mead, who has done so much for the understanding of women and the education of children.

This year is the centennial of Mary Catherine Bateson's father, the anthropologist Gregory Bateson. With his colleague, Ray L. Birdwhistell, he convinced many psychotherapists that gestures play a central role in psychotherapy. Studying gestures was part of a general strategy, developed with Bateson's colleagues in Palo Alto, which permitted psychotherapists to focus more efficiently than in the past on how individuals communicate. His rationale for highlighting body dynamics was that it is the only visible dimension of the complex cybernetic and systemic web that organizes the behavior of individuals who interact with each other. This is only one of the many contributions that Gregory Bateson made to psychotherapy theory, and more generally to psychological and social sciences. However, it has had such a massive impact

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[1] This conference was hosted by me, as main speaker, at the October 2004 congress of the European Association of Body Psychotherapy (EABP), near Marathon, in Greece, October 11, 2004. Last revision: December 1, 2004. Although the final result is under my responsibility, I am grateful to Judy Ramsay-Jensen for the many corrections she has introduced to improve my English and clarify my thoughts. Copyright: Michael Coster Heller. Last revision: December 2004.

on our work that I find it important, as a main speaker of this conference, to honor this centennial, and to dedicate this presentation to the work Gregory Bateson began with Margaret Mead when they published *Balinese Character* in 1942.

Gregory Bateson's work has influenced most of us, both directly and indirectly. The discussion between a psychoanalyst and an expert on body communication I will summarize in this paper was published six months ago. It did not mention Gregory Bateson. However, I am convinced that neither Beatrice Beebe nor I would be talking as we are today, if Bateson's wisdom had not been an important chapter in our training. This presentation is thus an example of Gregory Bateson's indirect influence.

2. Introduction

During the 1970′s and 1980's, I created, with the help of Siegfried Frey, a *postural dynamic* **model** that led to a *postural dynamic* **code** (Heller, 1997a). This code was designed to describe postural behavior in such a way that it could be used for research purposes, and could be managed by computer programs. The basic rationale of postural dynamics is how the organism deals with gravity. The postural code was then used to analyze how certain dimensions of social status – institutional hierarchy – influence postural dynamics, which I will define in a short moment. The data provided by this study illustrated four hypotheses that still inspire my work today:

A) A body produces many more signals than what is currently described in the literature.
B) Such a vast quantity of body phenomena cannot be perceived consciously. They are therefore mostly managed by nonconscious dynamics.
C) Nonconscious processes are different from Freud′s unconscious processes because 1) they have never been conscious, 2) they can never become conscious, and 3) they do not need to become conscious.
D) Certain dimensions of body behavior may be reacting to a set of stimuli (e.g., the weather), while other dimensions may be independently and simultaneously reacting to another set of stimuli (e.g., emotions).

Three years ago, I began training with George Downing in Zurich on how to use video analysis in psychotherapy sessions. This allowed both of us to discuss how we scan behavior on video films. George Downing's scanning system focuses on body dimensions that are ignored by postural dynamics, which are highly relevant for a psychotherapeutic intervention. Learning this system has thus been an important period in my post-training. He also convinced me that my knowledge of postural dynamics could be usefully applied without going through the full process of coding, as it soon became apparent that I could detect relevant events that he did not detect with his scanning procedure.

Like me, Beatrice Beebe is a researcher in nonverbal communication, and a psychotherapist. However, we have been formed by different traditions, as Beatrice Beebe is closer to a form of psychoanalytic research on mother-infant interaction that is particularly active on the East coast of the USA. Other well-known names of this method of exploring mother-infant interaction are Daniel Stern and Edward Tronick. Recently, Beatrice Beebe and her colleagues have been exploring ways of applying what she has learned from this research to

psychoanalytic therapy of adults (Beebe & Lachmann, 2002). To illustrate what this move implies, she decided to publish a case study that involved procedures that are known in studies on nonverbal behavior, but which are not typically used in a psychoanalytic setting. As she was discussing her ideas with George Downing, he suggested that she might be interested in my method of analyzing facial behavior (I have used Ekman and Friesen's Facial Action Coding System for many years) and postural dynamics. We discussed her preliminary versions of the published articles, focusing on her fascinating observations of facial representations, and on the postural dynamics involved in her interaction with her patient Dolores. She convinced *Psychoanalytic Dialogues* to ask me if I was willing to publish my views on this case. I was of course honored, and agreed to write what I shall now summarize (Heller, 2004).

3. Postural Dynamics

3.1. Postural dimensions

The postural dynamic model distinguishes four dimensions in posture: *displacement, basic posture, connecting posture, and surface posture*.

3.1.1. Displacement behavior

Before I can define displacement, I must define support surface and anchoring point(s):

- The **support surface** is *the surface that supports the body's weight*. It can be composed of one surface (e.g., a floor, water, a bed, etc.) or several (e.g., floor, chair and table). The support system is simpler to analyze when it is hard than when it is fluid.
- **Anchoring point** is composed of the parts of the body that are a) in contact with the support surface and b) that *transmit a greater ration of the body's weight to the support surface* than any other part of the body. Thus feet are the anchoring points of an organism when a person stands, and the buttock is the anchoring point when a person sits.
- **Displacement** can now be easily defined as the displacement of an anchoring point in space. The displacement can be active (a person walks) or passive (a person sits in an airplane). There is a displacement when anchoring point is not situated in the same location at two different moments. The coding of displacement focuses on: a) the anchoring point of the body, b) the geography of a support surface, and c) time. What the other parts of the body do is nearly irrelevant when one codes this dimension.

There is *movement* when a part of the body moves, but the anchoring point is not displaced. There is a *shift* when there is a weight increase on a part of the body without changing the position of the anchoring point. There is a *displacement of the anchoring point* when there is a change of anchoring point on the same support surface, and there is a *displacement of the body* when the anchoring point changes support surface.

There are semantic points I have not solved concerning the *scale* of displacements. For example, in my study on social status (Heller, 1991) I used the term "displacement" to analyze the location of the buttock on different

parts of a large seat (front of the seat, centre of the seat, back of the seat, etc.); today I would specify it is a displacement of the anchoring point but not of the body, because the weight of the body has shifted on the same support surface. However, displacement still designates phenomena of different scale, like a displacement within a room, an apartment, a town, space, etc. This information is secondary when one analyzes the behavior of an organism while it sits on a chair, but becomes useful to characterize the material organization of a person's *life process* and family history. A more refined terminology may be required when scientific displacement analysis will be carried out. I have heard that in the hospital I worked in during the 1990s (the University Hospital in Geneva, Switzerland), the administration followed employees to make an inventory of what they did. A nurse would spend so much time in a room with patients, so much time drinking coffee, so much time in a car visiting patients, so much time in a patient's apartment, so much time discussing with colleagues, etc. These empirical studies could provide a first set of data on which finer distinctions of the displacement concept could be constructed.

Displacement is a variable that is nearly always overlooked, even in psychotherapy, except when it is explicitly presented as an issue by a patient. When a psychotherapist focuses on this dimension, he necessarily pays closer attention to the efforts he and his patients make to attend therapy sessions, or the efforts made by a husband and wife to see each other as often as they do. These are already huge topics, which require a frame of an analysis that does not yet exist. Consider abusive families, for example. Little has been said about how some families manage to prevent displacement strategies from the abused, or why an apparently unloving parent fights for often-highly static[2] family dynamics.

Some people have seldom moved away from their village, others travel from one continent to another every month. From the perspective of displacement, these are opposite life styles that can only be explained using a multi-causal grid. One thing I am not implying is that mobile persons necessarily have common psychological characteristics (e.g., a character structure) that are distinct from those of static persons. In each case a close analysis must be made. One may, for example, discover that the traveler sits most of the time (in cars, planes, offices, restaurants, etc.), while the non-traveler hunts every day in a wide mountainous area. Displacement is not necessarily traumatic but often important. When one works with migrants, for example, one must necessarily deal with the implications of their displacement. These implications are always deep, even if they are not necessarily traumatic.

I tend to assume that this variable can be associated to a person's fundamental choices. When a patient enters a therapist's practice he has selected this displacement over other potential ones. He may enter the therapist's office in an ambivalent mood, in a resistant mood, but the basic choice is to be there. This is the aspect of a situation that is stressed when one considers a person from the angle of his or her displacements.

3.1.2. Basic posture

Displacement is required in all actions that require moving away from one place. Basic posture may be used to analyze how a person displaces herself, but it comes to the foreground when a person arrives somewhere, and impro-

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[2] In terms of displacement

vises how she occupies a certain space. Base posture is mainly focused on the organization of weight in the gravity field, through basic surface and axis regulation:

> -*Base surface* is defined by the parts of the body that touch a support surface, such as the floor or a chair, at a given moment.
> - *Axis* is related to the position of the spine and the orientation of the main body segments -- feet, pelvis, chest, head and eyes -- at a given moment. The *axis* dimension is well known by physiotherapists who analyze the alignment of a standing body (e.g. Rolf, 1977; Feldenkrais, 1981).

Basic posture is often the first body issue a therapist needs to deal with. The first time a patient enters, he must discover where he will sit or lie, where the therapist will be, and if the therapist's *anchoring point* will be relatively static or not. In a classical psychoanalytic process, the patient typically ends up lying on a couch, while the therapist sits on a chair behind the patient's head. Most psychotherapeutic methods, even psychoanalytic psychotherapies, tend to use more flexible basic posture arrangements. Some therapists may, for example, use chairs that remain anchored in the same part of a floor for years, while others may encourage various forms of displacement in a room. It can be easily shown that analyzing the basic posture dynamics used by psychotherapists can be used to differentiate a wide range of psychotherapeutic methods. It can also be a way to distinguish different types of therapies within a method, as we shall see. Some patients can lie on a couch for years, and allow the therapy to focus on representations, memories, etc. Other patients are incapable of arriving on time, of remaining a long time using a single posture, and experience so many dramatic events in their lives that the therapy does not have the time to focus on representations and memories. I generally associate base posture with the regulation of how a situation organizes itself, and the *framing* of explicit communicative acts.

The situational options manifested through a base posture create basic physiological mobilizations that are well known to psychoanalysts. Here are some examples from Trygve Braatoy's (1954) *Fundamentals of psychoanalytic technique*:

> In the supine position on this couch, the patient's muscles have no postural work to do. For this reason, the tension they disclose is only determined by "psychological reasons," that is, by the patient's relation to the room including the person behind his back and by residual, chronic tensions in him. (p. 118)
> When a patient lies down on the couch his postural muscles, especially the muscles of his neck and back can relax: they have no anti-gravity work to perform. (p. 164)
> In its posture-releasing capacity it [the couch] helps to release respiration and emotion. (p. 236)

### 3.1.3. Connecting posture

There are two clear dimensions in posture: base and surface. Musicians work for hours to find base postures that support a certain freedom of arms and hands from the constraints of gravity, so that they can play as comfortably, dexterously and long as possible on their instrument. One can frequently observe a human need to include autocontact in the postural architecture, but humans have not yet found a plausible explanation for this need. Autocontact is frequent, unavoidable, but often considered negative and irrational. Autocontact is mostly associated with auto manipulative actions (e.g., playing with

one's hair or lips), but it actually involves much deeper postural phenomenon as shown by Rodin's *The Thinker*.

In this picture, one can see how autocontact can have a deep impact on a postural architecture. Base surface is composed of feet, thighs and buttocks. The rest of leg is considered as forming base posture beams because their two extremes are involved in base surface. Autocontact is composed of left knee, thigh, wrist and forearm; right hand and elbow; chin and lips. The right wrist and forearm are coded as forming connecting posture beams, because the parts of the body that are at both ends are involved in autocontact surface. Only the left hand could be coded as being clearly in surface posture.

Analyzing this posture with gravity in mind makes one perceive that connecting posture constructs something like a first floor on base, which protects the spine from transferring the weight of the upper body (head and arms) to the anchoring point (pelvis). Physiologically, the posture massively restricts abdominal breathing and therefore diaphragm movements.

The Thinker's connecting posture is so massive that it connects base to a nearly empty surface posture. That is the function of this type of posture, and the reason why Rodin chose to associate it to a purely introverted form of behavior. Any one who sees *The Thinker* will perceive that this person is not expecting to interact with external stimulation. If a person approached *The Thinker* to interact with him, *The Thinker* would need to modify the architecture of his posture in a dramatic way if he was willing to interact with that person.
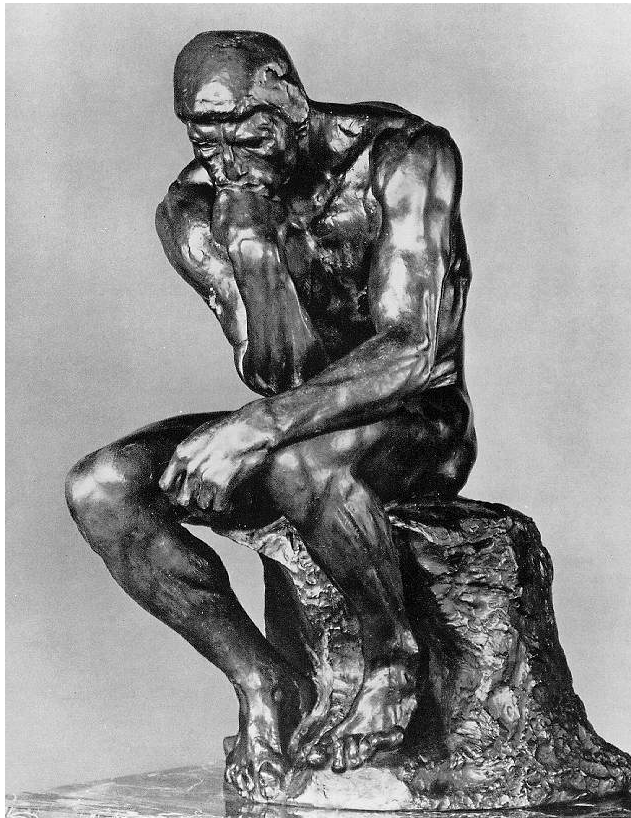
Rodin's *The Thinker* copied from http://www.falmouthschools.org/gturner/B-AlexM/ArtistBio.htm (October 22, 2004).

This dimension of postural dynamics has been largely overlooked; yet, when one analyzes current social behavior, one notices that it is the postural

dimension that often, although not necessarily, involves the greatest number of body segments (Heller, 1991, 1997a). The postural dynamic model assumes that this dimension of the postural architecture supports auto-regulative functions. Table manners that forbid autocontact would therefore be table manners that want to inhibit auto-regulative functions, with the hope that people attending a meal are mostly focused on eating and social interaction. Postural dynamics avoids associating a behavior to a particular meaning. Some colleagues think they display a form of knowledge of the body's communicative functions when they accuse others of being "closed" when they use an important connecting posture. Since Mehrabian's (1968, 1969 & 1981) studies, one tends to avoid such specific forms of labeling:

> The findings from all three of the decoding experiments suggest that greater relaxation, a forward lean of the trunk towards one's addressee, and a smaller distance to the addressee communicate a more positive attitude to the addressee than a backward lean of posture and a larger distance. *The findings do not provide much support for the hypotheses which relate more open postures and more direct orientation to more positive attitude inferred by an addressee*[3]. The later two variables, that is, openness and orientation, however do interact with several of the other variables included in the experiments in determining inferred attitudes. (Mehrabian, 1968)

As far as I know, Mehrabian's formulation remains the closest to what is known. Crossed arms may be indicative of "defensiveness" only if other body parts support this possible meaning. Many other functions can be associated to crossed arms and legs. The context is crucial in this case. It is therefore incorrect and unethical to professionally attribute defensiveness to a person because he or she has crossed arms. Associating a need for auto-regulation to a form of contempt for one's environment cannot be supported rationally. Even *The Thinker* may have momentarily withdrawn from a situation because he needs to think about how to contact others in a more efficient way, not only for himself, but also for their sake. Similarly, Philippe Rochat (2001, pp. 40-41 & 55) and Edward Tronick (Tronick et al., 1978) show the importance of what they call *double touch* for the formation of the self. Touching oneself lowers arousal, puts one in contact with one's boundaries, and has a reassuring effect.

Displacement and base posture participate in regulating where one is when, and in framing an interaction. Before one can have room to enter a detailed analysis of representations and trauma, patient and therapist must still discover a form of comfort that allow each of them to find ways to auto-regulate when they interact. Wilhelm Reich, Alexander S. Neil and Gerda Boyesen introduced the notion of self-regulation in the realm of psychotherapy. They assume that individual organisms have internal psycho-physiological repair systems that have been inhibited by social requirements. One of the aims of their psychotherapeutic methods is to free these self-repair systems from various forms of self-imposed tutelage, with the hope that in this process patients will improve their way of contacting who they are and of defending it. Self-regulation is used most often in theories that address the difficulty of coordinating intra- and inter-organism regulation systems:

> For example, in mindful attention to her own inner experience, my client made the connection between her tension and her belief; memories and body organization became clear, and she felt the emotional pain of this belief. Eventually,

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[3] Author's italics

she was able to appreciate, through her experience rather than her cognition, that this belief was not true. This was "new" information for her; she had previously been operating from the premise that she was not quite "enough" as she was. As she had the inner sense, in therapy, of trusting her own sufficiency, her tension naturally lessened, as did the extreme pressure she had placed on herself to achieve. This is the essence of self-regulation, which holds that a person will naturally adapt both perceptions and behaviors in accordance with the information from inner and outer environments. (Ogden, 1997)

Beebe's team is presently refining a model that explicitly includes self-regulation in their model of interaction and of transference dynamics:

> Infant research on face-to-face interaction addresses self-regulation patterns in the context of the interaction with the partner. The core question… – that is how infants sense the state of the partner – will of necessity be affected by how infants sense and regulate their own states, as well as by how they perceive and align with the state of the partner.… Self-regulation is also organized at the physiological level. It is essential to understand how inner and interactive experiences are linked at a physiological level. (Beebe et al., 2003)

Although Beebe agrees with the Reichian paradigm that intra- and inter-organism regulation systems are closely linked, her model does not contain its idealist components, namely, a) that intra- and inter-organism regulation systems are necessarily antagonistic, and b) that self-regulation is a perfect and pure instrument perverted by cultural, social, religious and economic regulation systems. Personally I prefer the term "auto-regulation" to "self-regulation", because I thus avoid discussions on the nature of the self and on whether there is a self that can be regulated by self and others.

3.1.4. Surface posture

Surface posture groups all the parts of the body that have not been classed in base posture or connecting posture at a given moment. This dimension focuses on fine motor capacities and explicit communicative behaviors. The dimension should be labeled "surface of posture", because these items are not strictly postural. One can distinguish items that are present by nature (e.g., the head is often in surface posture by nature) and items that require a postural organization to support their activity. This may typically be the head when it supports speech, mimics and uses (or exhibits) fine gaze coordination; or hands engaged in specific activities. In the case of such focused fine motor activity, one can understand the rationale of situating such items at the surface of posture like the foam of waves.

3.1.5. The coordination of postural dimensions

One part of the body can be in one dimension at one moment and in another dimension at another moment. When a hand rests on the seat of a chair, it is in base surface; when it touches the face, it is in auto-contact; and when it moves in mid-air or touches an object that is not stabilized it is in surface posture. A part of the body can be simultaneously involved in several dimensions. For example, as Rodin's *Thinker's* left thigh rests on the seat, it is therefore in base surface; as it also supports the left forearm, it is also in auto-contact surface. Other parts of the body connect postural dimensions. *The Thinker's* right elbow is in auto-contact surface, while his right shoulder is in surface posture, so that the right upper arm is a beam that connects autocontact surface and surface of posture. Using the postural dynamics code on a

concrete example shows that it allows one to deal with fairly complex postural constructions.

One of the implications of this complexity that is relevant for the understanding of Dolores's surface posture dynamics is a good grasp of some of these complexities, and of the functions of each dimension. When one sits, anchoring points tend to move at a slow rate (one movement every minute), while surface of posture items tend to move at a much faster rate (one movement every second at least). The correlation between postural dimension and mobility is not absolute, but fairly robust. This has been shown in a study made in Siegfried Frey's laboratory in Bern, which used the Time Series Coding System. This system codes the position of every part of the body at a given moment, and then all the changes of position that can be detected. The postural dynamics code was originally created as a complement to the Time Series Coding System, because that system did not categorize positions in function of gravity. The observation made by Frey et al (1980) is the following:

> A highly unexpected and surprising finding is the apparent tendency of averaged TSM (time spent in motion) to cluster into four distinct geometrically progressive levels, each level increasing the movement activity by a factor of about three…. The lowest activity level is defined by a cluster of four parts of the body (right and left upper leg, right and left shoulder) with a TSM value of about one. TSM values for trunk and right and left foot cluster at a level of about three. The third level is that of movement activity of the hands, which reaches a TSM value of about nine. Finally, the head has an average TSM value of about 26, which is again nearly three times higher than the activity level of the hands. These data point to the possibility that the degree to which different parts of the body participate in movement activity is much more highly structured than as thought before. Clearly, the findings need to be verified in a second study, since it is probably the first time that such data has been obtained from empirical investigation of non-verbal behavior.

As the anchoring point hardly moved (the buttocks), it was not included in the computations of this research. However, it would have defined a fifth level if it had been included. There are several discrepancies between the clusters observed in Frey's laboratory and the postural dynamic model. But they can be explained. For example, I am sure the low TSM values of the hands are due to the fact that they did not distinguish between hands resting on the chair or the body and hands in the air. However, these results show a) the existence of a stratification of behavior that requires further enquiry (that was one of the aims of my doctoral dissertation on postural dynamics), and b) the layers that are distinguished can be correlated with how heavily parts of the body are involved in regulating gravity constraints.

This mobility stratification has many exceptions that are informative because they can be considered as functional exceptions. For example, if surface posture events all become static, as if frozen, one can wonder what is happening, as in such cases the functions of surface of posture (e.g., explicit communicative monitoring) are deactivated. Similarly, if someone becomes hyperactive with the anchoring point, base can no longer efficiently support explicit communicative monitoring. A high anchoring point TSM can be experienced by others as a form of constant interruption of the communicative flow, and as obnoxious as a flea or a bee that buzzes around one's face when one is trying to convey a delicate message to others. People who begin to talk while walk-

ing, and who stop walking when they need to discuss a complex content, can experience the rationale that supports this discussion.

Because gravity is essentially an analysis of how an organism deals with gravity to accomplish a series of tasks, reading begins with displacement and base posture and ends with the finer dimensions of surface posture. For example, one first looks at how a pelvis is anchored on a chair, then how arms rest on crossed legs, and only then focuses on facial mimics, and the content of words. The model thus supports a bottom-to-top way of reading what is happening: beginning with situational factors and only gradually zooming to specific events of an interaction.

3.2. Propensity and postural dimensions

My intention is not to propose that displacement, basic posture or auto-contact are the most important events of an interaction. Such a claim would lead me into useless and often boring arguments. I prefer to think that they participate in different regulation systems that are composed of a variety of mechanisms. I tend to think in terms of *propensions*, defined (Heller, 2004c) as regulation systems that are composed of a wide variety of different mechanisms: e.g., muscular, nervous, hormonal, emotional, cognitive, communicative, cultural, economic, etc. Human hunger, for example, requires the coordination of all these dimensions (the needs of tissues, the sensation of hunger, how hunger becomes a conscious urge in a mind, finding food, cooking it, eating it with others, etc). I find it difficult to assume that one element of a propensity has a more central role than another. For example, I am not convinced that a person who feels an urge to drink Coca-Cola is always expressing the needs of her metabolism. In many instances, the urge is triggered by socio-economical factors. If it were not the case, Coca-Cola would not pay for the type of advertisements that they impose on most citizens of this planet. Displacement is preeminent in certain activities related to hunger (e.g., hunting, shopping), base posture in others (organizing a meal as a social ritual), surface posture in yet others (e.g., cooking, eating one's food). Autocontact is usually a strong issue during a meal in Europe, as people tend to involve many parts of their body in autocontact during meals, although this is often labeled as bad manners. By definition, all the postural dimensions are used in most of the situations I have mentioned (except displacement), but I have tried to convey the notion that they participate differently in the many regulation systems mobilized by human hunger. A similar analysis can be made for most instinctual and cultural propensities. The implication of this theoretical view is that it is difficult to be definitive on how central certain elements of a propensity are, or to evaluate their causal impact on how a propensity develops.

It is in this spirit that I shall use postural dynamics to scan regulation systems described by Beatrice Beebe in her case study. Reading her material with this model in mind allows one to focus on certain useful elements of the regulation systems involved in a psychotherapy, which would not have been highlighted, or would have been missed with other scanning procedures. I shall scan Dolores' psychotherapy process using one postural dimension at a time, beginning with displacement and ending with surface posture, so as to show what this method of scanning a psychotherapy process highlights.

4. Displacement

Beebe reports two main displacement issues in her case study: a child-hood trauma, and a threat to the psychotherapy setting. I will explore the possibility that there may be a link between these two displacement issues, and that Beebe's way of handling displacement issues in the present may have helped Dolores to find ways of dealing with the implications of the childhood trauma.

4.1. Three Mothers

Dolores' childhood displacement trauma was that she had three mothers in the first years of her life. She experienced five displacements of home, three organisms were the targets of her need of a mother, and social service may have supplied other, briefer substitute relations:

> Her biological mother rejected her daughter at birth. For the first two years of her life, Dolores had a foster mother with whom she had a close and affectionate relationship. Then her biological mother reclaimed her, and she never saw the "good" foster mother again. During the period with her biological mother, when she was approximately two to four years old, Dolores was emotionally, physically, and sexually abused. At four years old, she became mute which precipitated a year-long hospitalization. A photograph taken at this time shows child with a swollen, bruised face and a sullen stare. After the year in the hospital, Dolores was adopted by a loving family. She thus had multiple abrupt, total changes of her attachment systems, including the early disruption of the bond to the original biological mother. (Beebe, 2004a)

4.2. Living far from one's psychotherapist

> For the first year of the treatment, Dolores and I lived in the same city. How-ever, when she obtained a teaching job three hours away in a neighboring state, where there were no adequate mental health facilities, Dolores and I decided to continue the treatment. Every other week she came into the city for two double sessions in person, on two successive days; otherwise the treatment took place on the telephone. (Beebe, 2004a)

It is mainly because of the implications of this displacement issue for the treatment that Beatrice Beebe chose to use this case to illustrate the clinical innovations she proposes. Indeed, Beebe not only agreed to have telephone sessions, but she also agreed that the patient took with her a film of Beebe's facial behavior recorded during the session. Beebe accepted these modifica-tions of a classic psychoanalytic setting to avoid a repetition: when Dolores left the first mother, it was forever. Beebe felt that this time Dolores should be allowed a displacement experience that could be reversed. Dolores could thus learn that it is possible, and sometimes nourishing, to modulate her distance with another person.

The relevance of this preoccupation was supported by a preoccupation Dolores had for faces. Dolores was preoccupied with the faces of her child-hood, and she wanted to be able to find her own face in Beebe's face. The face of the first "good" mother, the one she had never been able to see again, was

often discussed, mirroring Beebe's face. Everything happened as if several mirrors reflected different images, so that Dolores was not quite sure of where she could situate her own face:

> In treatment, Dolores was preoccupied with faces and particularly the face of her first, good foster mother. She used the metaphors of the "good face" and the "bad face" for her foster mother and her abusive, biological mother, respectively. She longed for an attachment to me, and yet she could not look at me and often could not talk. Her facial and bodily expressiveness was inhibited, shut down. (Beebe, 2004a)

The early and persistent appearance of faces in the transferential dynamics of this therapeutic relation suggests that it is a powerful theme, influenced by a complex web of sub-themes. Beatrice Beebe associated this theme to the powerful impact of faces in early childhood. This theme is unavoidable. It is, however, precisely because faces have such a deep impact during the first year of life that leaving such a face -- never to see it again -- may be deeply traumatizing. Beatrice Beebe quotes a wide variety of literature and several examples that support this interpretation, such as the following dialogue:

> *Dolores*: I don't want to be so angry at the good face; I want her to help me.
> *BB*: You're angry at the good mother because she left you, and you're worried about being angry?
> *Dolores*: Yes. But I'm so ashamed of what happened. I don't want the good face to know about it. The good face didn't come back. (Beebe, 2004a)

Beebe's clearly expressed wish that she was willing to make a lot of effort to maintain contact with Dolores probably helped Dolores to reenact some aspects of her displacement trauma in ways that supported the repair systems we all have in us (Tronick & Weinberg, 1997). It also permitted her therapist to understand some of the deeper implications of the displacement trauma through a varied repertoire of dramatic events that she describes in her case study.

Comparing Beebe's interpretation of how faces interacted with each other in Dolores's mind and mine, allows me to specify some of the claims I make when I present postural dynamics as model. My claim is that it allows one to highlight dimensions of communicative behavior that are often overlooked, and that have a crucial impact during an interaction. On the other hand, I do not claim that postural dynamics replaces other existing systems. Beebe is quite right when she claims that infant research has robustly shown that faces have a particularly strong impact on infants during the first months of their lives. The extensive literature she quotes is only a small part of the many studies that support that hypothesis.

Her view is also strengthened by another tradition that spans from Jacques Lacan (1949) to Philippe Rochat (2001) on the importance of exploring how the gazes of others and mirrors allow a child to form of image of his face. There is a fine point here: one cannot see one's face with one's eyes, although one can touch it with one's hand. I am dependent on how others react to my face and its expressions to form an image of what I look like, of who I am, and of my impact on others (Stern, 1995). In other words, seeing how others react to one's appearance is also a crucial formative experience that was most probably not sufficiently available in crucial moments of Dolores' childhood. Beebe quite rightly explored the implications suggested by these models, since Dolores gave a lot of material on these issues as can be seen in the following quote from the first week of treatment:

> *Dolores*: I feel alienated from my face. My face doesn't feel like me. I don't have a face of my own. I look at other people's faces to see what my face looks like. My adoptive mother looked at me like a stranger. I didn't feel my face looked right. I couldn't look at her and find me. (Beebe, 2004a)

My focus on displacement does not contradict this analysis, but – and this is my claim – highlights other aspects of how faces danced around each other in the mind of Dolores; namely, the difficulty of expressing a sentiment that could be perceived as negative to a person she is attached to. Indeed, as an infant Dolores probably never really understood why she could not see her first foster mother again. She may have thought that being a bad girl may have caused a definitive displacement away from the first "good" foster mother. This point can be related to some of Judith Edwards' (2004a) comments on Beebe's case study:

> For the patient, the therapist's face essentially has two aspects, and it is the "bad" aspect, derived from both bad external experience and what is made of it internally, that holds the dread that it will destroy the good (Klein, 1946). Dolores enunciates this idea over and over in the treatment, both as her own personal dilemma shaped by her history and also a classic conflict in the human psyche.

I am assuming that if Dolores had not experienced such an early and severe displacement syndrome, regulating Dolores's displacement during the therapy would not have triggered such a powerful and creative countertransference in Beebe. In other words, postural dynamics may deepen Beebe's understanding of Dolores, but does not replace what she perceived and understood.

As my intention in this paper is to show how the dimensions of postural dynamics can be used to scan and organize psychotherapeutic material, I shall end here my discussion on displacement, and examine what can be learned from Beebe's case study when one looks at it from the point of view of base posture. The general assumption of the postural dynamic model is the following: the choices that are associated with displacement issues are more fundamental than those associated with basic posture, autocontact and fine motor activities. The rationale is that the more a part of the body is involved in gravity regulation, the more crucial the choices associated to that part of the body are. As displacement issues influenced the first years of psychotherapy, my assumption is that the need to address this issue was more important than the need to address other issues, and that attempting to address themes such as the dynamics of representations would not have been efficient at first.

5. Basic posture issues

Having distinguished four postural dimensions (surface, connecting, basic and displacement), one can assume that one event may have different implications for each dimension. I have just discussed how the "theme of the face" associated itself with the displacement dimension in various ways. Although she does use postural dynamics, Judith Edwards (2004a) spontaneously associated certain aspects of the face theme and what I call basic posture:

> The initially three times weekly treatment was conducted face-to-face. Beebe deliberately used this device to offer the 40-year-old patient, Dolores, a new, if at

times painfully difficult, experience of the mirroring (Winnicott, 1971, p.130), the affect attunement and very gradual up-regulating (Stern 1985, p. 138) of affects that Dolores felt had been mainly absent.

This is a good example of how base posture organizes itself in function of surface of posture aims. Edwards supposes that the seating arrangement was deliberately chosen in function of a set of therapeutic aims. There is a fine point here; which is that such a coordination is only sometimes explicitly and completely thought out. Even in such cases, the implications of a choice of strategy are often too numerous and too complex to be handled consciously. A choice of base posture arrangement is often partially imposed by rituals and habits, nonconscious cues, an improvisational skill (M.C. Bateson, 1994). It is thus rarely a "conscious" strategy.

Because the displacement issue was not yet in the foreground, the first year of Dolores' analysis with Beatrice Beebe is characterized by preoccupations related to basic posture. Quite correctly, from the point of view of postural dynamics, Beebe intuitively understood that she would have difficulties reaching Dolores until these preoccupations had been correctly attended to:

> Following a half dozen initial sessions during which she told me her story in a halting manner filled with intense emotion, …Dolores began to sit with her body oriented away from me, without looking, barely talking. She seemed out of contact, dissociated. At this early point in the treatment I tried many different strategies to make contact with her. I noticed that at various points, without looking, she oriented toward and then away from me. I suggested that, instead of trying to talk, perhaps we could begin by trying together to become aware of when she was able to move her body to be oriented to me and when she oriented away. Over the course of the ensuing months, Dolores began to elaborate on the metaphor. She would say, "I'm in your orient" or "I'm falling out of your orient." Dolores's ability to respond in this rather poetic way was very touching, and it helped us work on maintaining a sense of a bond. But it continued to be difficult to make contact with her with a more usual verbal narrative, and she continued to be dissociated for long periods without speaking. Eventually I experimented with moving my chair into a more "biological" face-to-face distance, the two chairs at right angles, with a small table in between. This distance is approximately that of usual adult face-to-face interaction distance, closer than usual face-to-face psychotherapy, but not as close as that between mothers and infant. This arrangement facilitated my making contact with Dolores: she seemed more aware of my presence, and the long dissociated periods became less frequent and prolonged. We have maintained this arrangement. How was I affected by not being able to "get" Dolores's gaze or face? I experienced her muted face and voice as fear, rather than as withholding. I felt patient, as when I was interacting with the infants of my research. I tried to have no agenda but to stay with her, to try to sense what she felt and follow what she said. Dolores frequently told me how important I was to her. I am certain that, if she had not been as forthcoming in this regard, I would have had a much more difficult time, and the treatment would have taken a very different course. Her own generous and loving approach to me was a critical catalyst in the treatment. (Beebe, 2004a)

In this quote one can easily feel the pervasive impact of unsolved issues associated to base posture (I tend to write "base posture issues" in such cases), and how they prevent one from approaching more complex issues such as auto-regulation, focused interactive processes, specific affects or representations. Beebe's knowledge of nonverbal communication supported a capacity to frame a mostly silent negotiation that manifested itself through base posture regulations. She was able to accept and integrate a postural dialogue through which the patient can explore intimate ways of being with her thera-

pist. From the point of view of postural dynamics, this was a deep move. I do not believe that one can do much fine-tuning before displacement and base posture issues are framed by at least a momentary acceptable compromise.

After the first year, Dolores went to work in another town. As displacement came to the foreground, base posture regulation systems became at first more chaotic. By base posture regulation systems, I mean intra- and interpersonal mechanisms that require the participation of base posture activity. Beebe's comment on one of these sessions is the following:

> Although Dolores's words often are barely audible from the videotape, the rhythm of her words is usually detectable. I generally repeat what I hear her say, because I am straining to understand her words. Although I may have been aware of some of my nonverbal behavior, most of it was out of awareness. For example, I …was being "quiet" with my body in the first section I describe, but only after I examined the tape did I realize how completely quiet I had become, so that I could adjust to her level of fearfulness. I am aware that I also slow down and reduce my level of activity when I interact with infants. But for Dolores I did so in an even more dramatic fashion. (Beebe, 2004a)

During this period Dolores avoided orienting head and eyes towards her therapist, while Beebe (2004b) "was continuously oriented to her and looking at her". This was maybe the best base posture attitude to have with that particular patient, but it may be useful to note, for the future, that Nikolaas and Elisabeth Tinbergen recommend a slightly more nuanced nonverbal dialogue. Their proposition is that for autistic patients, eye contact is "too much". If the therapist avoids looking at the child, the child will look at the therapist's face, and may eventually come closer. If the therapist encourages the child to approach using gentle and kind eye contact, the child will run away.

> What we invariably do when visiting, or being visited by a family with young children is, after a very brief friendly glance, ignoring the children completely, at the same time eliciting, during our early conversations, friendly responses from the parent(s). One can see a great deal of the behaviour of the child out of the corner of one's eye, and can monitor a surprising amount of the behaviour that reveals the child's state. Usually such a child will start by simply looking intently at the stranger, studying him guardedly. (Nikolaas and Elisabeth Tinbergen, 1972a).

These observations are arguable (Heller, 1987), so I am not trying to suggest that what they wrote proves that what Beebe did is wrong. However, as a case study is designed to inspire others, I find it worthwhile to mention that there exists on such issues a wide range of strategies that have already been explored.

6. Connecting posture

Beebe noticed that the way she and Dolores autoregulated when together changed considerably during the 10 years of analysis she reports on. The evolution was gradual. According to Beebe (2004a), in the initial year of the treatment "Dolores was preoccupied with self-regulation: withdrawn, muted, gaze avoidant, regulating terror and deadness". She sent messages to her therapist, but found it difficult to integrate the therapist's signal. After the ninth year of treatment, Dolores did not need to use so much effort on auto-

regulation, as she felt more "comforted". She was finally able to interact with her therapist, and could interact in such a way that analysis in the traditional sense, focused on representations and the integration of past experiences, was finally possible.

From my perspective, Dolores was maybe focused on her self-regulation during the first year of therapy, but she was not auto-regulating efficiently. In my model, auto-regulation *connects* base to surface, which is what can be observed during the ninth year. This connection dimension was absent at first. One needs autocontact to feel one's body and feelings during an interaction. It forms an intimate space in the more global space, and provides time for attention to focus in fleeting ways on oneself. Dolores and Beebe were only able to systematically explore auto-regulation issues after base posture and displacement issues had become more explicit in the therapy. Thus, in the middle of the second year, Beebe (2004a) observes that there exists some space for explicit auto-regulation:

> With each sentence, I slightly change the pattern of the way my hand is self-soothing my face, registering my own efforts to regulate my intense feelings with Dolores. Dolores's feet are visible in the videotape at this moment, and her toes wiggle, then rub up against each other, self-soothing.

As the therapy advanced, auto-regulation became an increasingly manifest dimension of the therapeutic dialogue:

> Dolores was making a concerted effort to tell me some more about her early history. It was extremely difficult for Dolores to tell me anything concrete. We might spend an entire session struggling to make it possible for Dolores to communicate one piece of information. During this period, at the point at which she might begin to discuss any of the details, she would become agitated, her body would tighten, and eventually she would hold her breath, as if in an effort to hold everything in. She would hold her breath for long periods, unable to stop, until she would begin to panic. Eventually I began to try to get her to synchronize with my breathing. I made soft, rhythmic sounds as I breathed in and out. Dolores called it the "breathing song." Together we began to be able to anticipate when an episode of breath-holding was about to begin, and we would do the breathing song together before she became extremely agitated. Over the course of the next couple of years, the breathing symptom gradually became less frequent.
>
> In another dramatic expression of her difficulty of communicating the details of her early history, she would abruptly fall into a deep sleep after revealing something particularly painful. The sleep would last for the rest of the session, and she could not be awakened. I would sit near her head, and while she was sleeping I would softly tell her what had just happened and why I thought she had to fall into a deep sleep. Then I would stay next to her while she slept and every once in a while softly tell her that I was there while she was sleeping. Toward the end of the session, she was able to wake up and would listen while I again told her what I thought had happened. Gradually she would be able to reorganize. I would walk with her around the room until I felt she had regained her full consciousness and could leave.

For me, these strategies, as well as others, were part of a *contingency filtering process*. I will now detail this notion. Dealing with the complete package of stimuli coming from the others was at first painful for Dolores. She needed to filter these inputs. Telephoning was ideal, because body-to-body interaction was filtered out. Beebe could not see how Dolores' body was reacting to what she was saying, and Dolores did not need to react to whatever body signal Beebe was sending. This is a good way of introducing the notion of contingency, which is frequently used in infant research. Gergely and Watson (1999,

p. 101) define "Contingency perception" as the capacity of an individual to be "sensitive to the existence of contingencies between their behavior and environmental events". Beebe and her colleagues show that in their relationships with others, infants deeply appreciate various forms of contingence such as matching. Contingency is the impression that there is a causal relation between what one does and what others do. Beebe (2004b) associates the notion of contingency as used by Gergely and Watson to that of 'bi-directional interactive regulation'.

Later, as she knew Beebe used video, Dolores asked if she could have a film of the session that only showed Beebe's face. She did not want the whole body or a recording of the interaction; she wanted only the therapists' face. When she was at home, she would look at these films. We know that during sessions, she was not very responsive; but I suppose that at home she could take her time to respond to whatever Beebe was expressing. What Dolores was avoiding is the pressure of having to improvise on the spot, during every second, a reaction to all the stimuli that travelled in the therapy room. In her room at home, she could view a sequence several times, let it sink in, and then have the leisure of feeling whatever came. My hypothesis is that abuse is a form of imposed hyper-contingency. The child has to react on the spot in certain ways to the needs of the abusive adult.

Beebe's use of film in this therapy again shows how a single event may have a different implication for each dimension distinguished by postural dynamics. The main reason why films of Beebe's face were introduced in the therapy ritual was to solve some of the implications of displacement. This procedure reduced the pain of Dolores during the weeks when she could not see her therapist, and probably reassured Beebe that the therapeutic relation could continue. However, that explains the use of films but it does not explain the need to have films that only show Beebe's face. For this second point, the notion of a need to a) maintain contact, and b) in a filtered way, provides an elegant explanatory model of what happened. The following dialogue published by Beebe (2004a) may help the reader to enliven the spirit in which the filmed dialogue was experienced:

> Dolores's Use of Viewing the Videotapes to Foster an Internalization Process: Making My Faces on Her Face Two and a half Years into the Treatment
> These are notes taken during a session on the telephone. While she was alone, Dolores had been looking at the videotapes taken a year and a half into the treatment, described earlier.
> Dolores: I was looking at your face looking at me. I saw the way it's different when I'm with you.
> BB: You saw it watching the video?
> Dolores: Yes.
> BB: What did you see?
> Dolores: I saw that you were seeing me. I wasn't seeing you when I was with you in person, but later, when I was watching the video and I saw you, I felt much more real.
> BB: Wow.
> Dolores: Yes. In a way that, when I am with my feelings alone, sometimes I don't. But when I saw my feelings on your face, I felt more, feeling my feelings. I felt kind of familiar. But I don't *feel* them, necessarily, when I'm alone.
> BB: That's very interesting. "To feel them" means what, really?
> Dolores: When I'm alone with them I feel more confused. When I see them on your face, I can read them better. When I'm having them all by myself, there isn't any sense to them—that's part of what feels so bad, nobody to make any meaning.
> BB: Can we make the same meaning when we're talking on the phone, now, without the faces?

> Dolores: I need to see, or I need to *feel*. I have the picture of you, looking at me, and I like it; you never take your eyes away from my face. But now, on the phone, your voice floats on the ear, floats away. I want your eyes looking at me.
>
> *Beatrice Beebe's comments*: This session shows how Dolores began to use watching the videotape as an adjunct to the internalization process. Internalization can be reconceptualized as an expectation of an interactive process in which the inner organization is based on reciprocal coordinations, joint bidirectional interactive patterns, that regulate the exchange. … Watching the videotapes provided a format in which she could actually see and take in more information from my face. And, recall, videotaping was her idea. From my research on the facial interchange between infants and mothers, I am convinced that she needed to see my feelings for her in my face, as well as hearing my emotions through my voice. The videotape gave us a powerful way to do that. At this point in the treatment, she still was not looking at me, and we did not yet completely understand the dynamics behind this behavior.

Sleeping in the therapy room was maybe a way of testing contingency, of finding ways of waking up in a world made of conscious and nonconscious contingencies in a comfortable way, without having to split. When she woke up, knowing that the session would only last a few minutes more, she could appreciate being in an interaction in which she could appreciate being where she was; in which she could have the impression that she could participate in the framing of what was happening; and in which she could feel comfortable enough to filter events, to take her time, and to auto-regulate.

7. Surface posture

7.1. Lack of access to surface of posture data

Initially, I met Beatrice Beebe because she wanted my comments on how facial behavior participated in her interaction with Dolores. She was interested in the part of me that was an expert in the usage of Ekman and Friesen's Facial Action Coding System to analyze psychotherapeutic interactions (Heller & Haynal, 1997b). As surface of posture contains fine motor action, it is difficult to comment on it by reading written material. To have something worthwhile to say on the facial expressions of Beebe and Dolores recorded on tape, I would need to spend some time viewing tapes that, for ethical reasons, cannot travel. I did not have the time and energy to do this at the time (January 2002). If ever I do have the time to view these tapes meticulously, I would be able to propose observations of how surface of posture was involved in these sessions. Having rapidly scanned through some of these films, I saw that a lot was happening in this dimension, and that interesting counter-transferential reactions could be isolated. This is, however, work to be done at a future time.

Surface of posture is the dimension on which research on nonverbal communication has mostly focused (Beebe is one of the experts in this area), while the lower dimensions of posture have tended to be ignored since the 1970's. I have therefore focused on the lower dimensions of the postural dynamics of Dolores's therapy with Beebe, because it is on these dimensions that I felt I could contribute informative insights on this process.

7.2. A solidified surface posture

There is however one aspect of surface posture that stands out in Beebe's case study: a solidification or freezing or dampening or inhibition of some surface posture functions. I introduced this point in section 3.1.5: The coordination of postural dimensions. During the first year, it expressed itself in the following way:

> I used all modalities to try to reach her: the rhythm and intonation of our voices, our breathing rhythms, our head and bodily orientation, as well as my steady gaze, the dampening of my bodily activity, and my facial response. Although I was aware of some of my own nonverbal behavior, most of it was out of my awareness. Only after reviewing in detail the videotaped interactions I describe later, in preparation for writing this paper, did I become aware of the full range of my nonverbal behavior with Dolores. (Beebe, 2004)

We also saw that instead of having mobile eye contact dynamics, Dolores had a tendency to look away from Beebe, while Beebe had a tendency to look all the time at her patient. It is the extent of the polarization that is informative, as some discrepancy between therapist and patient is expected. There is a fine point here, which is described in our study on facial behavior in interviews between a doctor and suicidal patients (Heller et al, 2001): we distinguished a) a current repertoire, and b) a slight accentuation of current differences. The expected behavior of a therapist is that he or she looks in the direction of the patient between 90% and 50% of the time, while patients in crisis may display any behavior, ranging from 0% to a 100% of the time. During some moments, the therapist's habitual variance was narrowed in function of the patient's risk of committing another suicide attempt. The nuance proved highly predictive of that risk. During the first year of therapy, one might find a similar pattern in the interactive pattern of Beebe and Dolores. That the therapist looks at the patient more than a patient in crisis looks at her therapist is "expected"; but it may be that the polarization is particularly strong on both sides. One would need to have a closer look at the films to see a) what percentage of the time Dolores was not looking at Beebe, and b) what percentage of the time Beebe was looking at Dolores. If the two figures are extreme, and eye orientation static, one would have an example of a freezing of expected gaze mobility, which may indicate a loss of current gaze interactive dynamics (Starkey Duncan & Donald W. Fiske, 1977).

This freezing of surface of posture expected mobility is already described by Beebe (2004a) to Dolores in the first week of treatment:

> **BB:** It seems you feel your face stopped moving and your eyes stopped seeing.

We have already seen that Beebe was posturally 'silent', but that does not mean that fine motor functions were inhibited. On the other hand, Dolores's surface posture functions seem to be at times as static as the other postural dimensions. This is what I referred to when I used the adjective "solidification". During the second year, Beebe (2004a) observes that she also has a relatively static surface of posture, even if she is oriented towards Dolores:

> My body is completely still. I am careful not to make sudden movements. In contrast to my usual high-energy style, I have lowered my arousal to the very bottom of my range. I am leaning forward, with an intent, direct, sustained focus. I am paying very careful, tender attention to Dolores. I listen to every word and

am clearly working hard to understand what she says. It is as if nothing else in the world exists for me except for her. Dolores does not look at me.

A bit later, in the same session Beebe observes more of the same:

My chin moves upward, in a greater focus of attention, and my body is completely still. This may convey to Dolores how intent I am on what she is saying and feeling.

In such a position, face and hand seem to belong to base posture. Nine years later, surface of posture begins to find its functions:

Dolores's face has undergone quite a transformation. It is soft and hesitant, but her emotions are visible. She is slow to make eye contact but can sustain a steady gaze at times. At some point in the session, she can usually open up into a smile. At the beginning of every session in person, there is still a question of how long it will take her to take off her sunglasses. I feel very shut out when she wears them, and it is a sure sign that she is feeling distant when she does not take them off for quite a while. Usually these days she takes them off quickly. But more time will be needed before she will be able to look at me in a more ongoing and sustained way. (Beebe, 2004)

When one analyzes the therapeutic process described by Beebe by focusing on the postural dynamics involved, one can sense how difficult a reconstruction process is. In this last passage, we can see that Dolores slowly comes out of her shell, and begins to accept an intersubjective interaction in the sense of a *contact* in which her intimate self openly and explicitly attempts to enter in a dialogue with another intimate self. This last quote shows how fragile Dolores still is, but also shows the immense ground she has covered in a relatively robust way. The case history taken as a whole is remarkable in the sense that Beebe writes a detailed description and understanding of this reconstruction process which mobilizes a wide variety of dimensions of Dolores considered as an individual organism, made of flesh and experiences, and her capacity to accept that she needs to and can interact with other organisms.

8. Conclusion

8.1. Nonverbal communication and psychoanalysis

There are several aims in such an article. The first one is to show how a system that analyzes nonverbal behavior can helpfully scan a series of psychotherapy sessions without intruding on the perspectives of a particular psychotherapeutic school. In this case, I hope I have given new concrete examples of how bodily dimensions participate in a psycho-analytic process, and how a model produced in the field of studies on non-verbal communication can usefully participate in the organization of the often incredibly rich material produced by a psychotherapeutic process. The insights produced by the usage of a coding procedure to scan a psychotherapy process have their limits, as they only take some of the available material into consideration; but these limits also allow one to focus on certain events that psychotherapists cannot easily focus on, and make them tangible and explicit.

Another expert on the usage of nonverbal communication in psychoanalysis, André Haynal (1991), elegantly described the parallel processing that can

occur when nonverbal communication is used on films of psychotherapy sessions. His view is that the clinician perceives, through transferential dynamics, events that no coding procedure can detect; and that studies of bodily behavior allow one to detect important events that remain intangibly in the background for a psychotherapist's attention. My hope (Heller, 1992) is that if one could improve existing methods so that psychotherapists and researchers could collaborate using André Haynal's vision, psychotherapy could become even more effective than it is. The perspective defended by my position is that the perceiver has a set of innate and acquired competencies that no scientific method can equal (Frey, 2001), and blind spots that can easily be compensated for. This perspective was opened by Gregory Bateson's comments on his analysis with Birdwhistell of a particular series of surface of posture events that occurred while Bateson lit a cigarette during a therapy session (Birdwhistell, 1970; Winkin, 1981).

8.2. Beatrice Beebe and postural dynamics

Although Beatrice Beebe did not have postural dynamics in mind when she worked with Dolores, she agrees that what I have described is relevant to her work:

> Heller understands and has elaborated my fundamental message: Dolores had to do more than "restructure her ideas," change her representations or fantasies or even her relationship with me. She had to reconstruct her entire "bodily communicative behavior." And to do so took tremendous "inner creativity and courage". (Beatrice Beebe, 2004b)

She joins the chorus of people I have already quoted on the need to coordinate nonverbal communication methods and psychoanalysis, when she writes:

> Heller highlights the importance of the implicit, nonconscious, out-of-awareness mode: "most of life and conscious experience is guided by nonconscious processes." (Beatrice Beebe, 2004b)

I hope that this presentation can be followed by other examples of complementary and mutually supportive collaborations between psychotherapy and other modalities.

9. Postural dynamics and Beatrice Beebe

Some patients comfortably accept a psychotherapeutic frame and easily interact with their therapist. In such cases, using the postural dynamics code may be useful in some cases only (Trygve Braatøy, 1954). Often such cases have a more urgent need to use methods that focus on a surface of posture analysis, which requires a wide range of existing methods such as the time series notation, analysis of facial expression and vocal intonation, and most of all a focus on verbal content. A wide range of researchers have published volumes on how such methods can be combined (Elma Bucci, Edward Tronick, Daniel Stern, Ekman and Rosenberg, Heller (2001), Beatrice Beebe, etc.)

Other patients do not comfortably adapt to a psychotherapeutic setting. For these patients, psychotherapy requires strategies that focus on these difficulties, such as those proposed in psychotherapies for children, narcissistic and borderline structures and psychotic patients. In some cases compulsive, phobic and hysteric patients also require this sort of attention. The issue is also relevant when there exists important social or cultural differences (Hall, 1966) between a therapist and a patient. Postural dynamics is often useful when one needs to scan and organize the complexities that regulate setting and individual particularities. It is not the only tool, but it is a basic one. One can use postural dynamics as checklist to situate difficulties that can then be associated with other models

One aspect of the model is fairly rigid. One should, when one can, first deal with displacement issues, then basic posture, then auto-regulation and then surface posture (explicit communicative strategies through expressions and content analysis). This is a model. Beatrice Beebe did not know this model, so she did not follow it, but she knew the literature that inspired this model. I do not follow it rigorously, either. I do not even try to impose an intellectual position to a patient, but take the material he or she brings. However, I have several internal checklists, and postural dynamics is one of them. I noticed that the relevance of this checklist was spontaneously demonstrated by Beebe's case study. The regulation processes I associate to each postural dimension did not appear in the same order as the model assumes, but therapeutic resolutions followed this order appreciatively, with various forms of overlapping. The model assumes that solving a base posture is one thing; solving how base and connecting dimensions are coordinated is another. One therefore necessarily needs to come back to base posture during the whole therapy process, just as surface posture is there from the first telephone call onwards. The fuzzy logic of Beebe's case study of Dolores showed that only once displacement had been dealt with did she become able to address more efficiently base posture and auto-regulation issues; and it is only after these basic communicative issues had found a livable rhythm that depth analysis became possible. The sequence is not rigid, but works nicely.

References

Bateson, Gregory & Mead, Margaret (19*42). Balinese character. A photographic analysis*. New York: Special publications of the New York Academy of Sciences, Volume II.

Bateson, Mary Catherine (1994): *Peripheral Visions. Learning along the way*. New York: Harper Collins Publishers.

Beebe, B. & Lachmann, F. (2002). *Infant research and adult treatment: Co-constructing interactions*. Hillsdale: Analytic Press.

Beebe, Beatrice; Rustin, Judith; Sorter, Dorienne & Knoblauch, Steven (2003). An expanded view of intersubjectivity in infancy and its application to psychoanalysis. *Psychoanalytic Dialogues*, 14 (1), pp. 89–98.

Beebe, Beatrice (2004a). A Case Study. *Psychoanalytic Dialogues*, 13 (6), pp. 805–841.

Beebe, Beatrice (2004b). Reply to Commentaries. *Psychoanalytic Dialogues*, 14 (1), pp. 89–98.

Birdwhistell, Ray L. (1970). A kinesic-linguistic exercise: the cigarette scene. *In Kinesics and context: Essays on body motion communication*, pp. 227-250. Philadelphia: University of Pennsylvania Press.

Braatøy, Trygve (1954). *Fundamentals of psychoanalytic technique*. New York: John Wiley & Sons.

Duncan, S D, Jr, & Fiske, D W. (1977). *Face-to-face inter action: Research, methods, and theory*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Edwards, Judith (2004a). Commentaries on a case study by Beatrice Beebe. *Psychoanalytic Dialogues*, 14 (1) pp. 73–87.

Feldenkrais, Moshe (1981). *Body & mature behavior. A study of anxiety, sex, gravitation & learning*. New York: International Universities Press Inc.

Frey, Siegfried; Jorns, Ulrich & Daw, Walid (1980). A systematic description and analysis of nonverbal interaction between doctors and patients in a psychiatric interview. In S.A. Corson (Ed.). *Ethology and Nonverbal Communication in Mental Health*. New York: Pergamon Press.

Frey, Siegfried (2001). New directions in communication research: the impact of the human body on the cognitive and affective system of the perceiver. Michael Heller (Ed.). *The flesh of the soul: the body we work with*, pp. 256-282. Bern: Peter Lang.

Gergely, G. & Watson, J. S. (1999). Early socio-emotional development: Contingency perception and the social-biofeedback model. In P. Rochat (Ed.). *Early Social Cognition: Understanding Others in the First Month of Life,* pp. 101–137. Mahwah, NJ: Lawrence Erlbaum Associates.

Hall, E.T. (1966). *The hidden dimension*. New York: Doubleday & Co.

Haynal, André (1991). *Psychanalyse et science face à face. Epistémologie. Histoire*. Meyzieu: Césura Lyon édition.[4]

Heller, Michael (1991). *Postural dynamics and social status*. Doctoral thesis presented at Duisburg University.

Heller, Michel (1992). Corps et évaluation de psychothérapies: un rêve à réaliser. *Psychothérapies*, 2, pp. 111-121.

Heller, Michael (1997a). Posture as an interface between biology and culture. In Ullica Segerstrale & Peter Molnar (Eds.). *Nonverbal Communication: where nature meets culture*, pp. 245-262. New Jersey: Lawrence Erlbaum Associates, Inc.

Heller, M. & Haynal, V. (1997b). A doctor's face: Mirror of his patient's suicidal projects. In J. Guimon (Ed.). *The body in psychotherapy*, pp. 46-51. Basel, Switzerland: Karger.

Heller, Michael; Haynal-Reymond, Véronique; Haynal, André & Archinard, Marc (2001): Can Faces Reveal Suicide Attempt Risks? Michael Heller (Ed.). *The Flesh of the Soul: the body we work with*, pp. 231 – 256. Bern: Peter Lang.

Heller, Michael (2004). Behind the stage of interacting faces: commentary on Case Study by Beatrice Beebe. *Psychoanalytic Dialogues*, 14 (1), pp. 53-63.

Heller, Michael C. (1987) *The eye block, schizophrenia and autism: a study on interdisciplinarity*. Published on my web site www.aqualide.com, http://www.aqualide.com/upload/texte/text9.pdf on 22 October 2004.

Heller, Michel (2004c). Ce que le corps nous enseigne sur la topique de l'âme. *Adire*. 20, pp. 293-346.

Klein, Melany (1946). *Notes on some schizoid mechanisms*. In the Writings of Melany Klein, Vol. 3, pp. 1-24. London: Hogarth Press.

Lacan, Jacques (1949). *Le stade du miroir comme formateur de la fonction du Je*. In Jacques Lacan, Ecrits I, pp. 89-97. Paris: Editions du Seuil, 1966[5].

---

[4] Published in English by The University of California Press, as Psychoanalysis and the Sciences: Epistemology-History.

Mehrabian, Albert (1968). Inference of attitudes from the posture, orientation and distance of a communicator. In Michael Argyle (Ed.). *Social encounters. Readings in social interaction.* Har-mondsworth: Penguin Books, 1978.

Mehrabian, A. (1969). Significance of posture and position in the communication of attitude and status relationships. *Psychological Bulletin*, Vol. 71, pp.359-372.

Mehrabian A. (1981). *Silent messages*. Belmont: Wadsworth.

Ogden, Pat (1997). Hakomi integrative somatics: hands-on psychotherapy. In Christine Caldwell (Ed.), *Getting in Touch, the guide to new body-centered therapies*, pp. 153-178. Wheaton (Ill.): Quest books.

Rolf, Ida P. (1977). *Rolfing. The integration of human structures*. New York: Harper & Row.

Rochat, Philippe (2002). Naissance de la co-conscience. *Intellectica*, 1, (34), pp. 99-123.

Stern, Daniel N. (1985). *The interpersonal world of the infant*. New York: Basic Books.

Stern, Daniel N. (1995). Self/other differentiation in the domain of intimate socio-affective interaction: some considerations. In Philippe Rochat (ed.), *The self in infancy*, pp. 419–430. Amsterdam: Elsvier.

Tinbergen, Elisabeth A. & Tinbergen, Nikolaas (1972a). Early childhood autism – an ethological approach. *Advances in ethology.* (Supplements to Z. Tierpsychol), 10. pp. 1-53. Berlin & Hambourg: P. Parey.

Tinbergen, Nikolaas (1972b). *Early childhood autism – an ethological approach*. In Niko Tinbergen (Ed.). The animal in its world. Exploration of an ethologist, 1932-1972, Volume Two. Laboratory experiments and general papers. Cambridge, Massachusetts: Harvard University Press.

Tronick, E. Z.; Als, H.; Adamson, L.; Wise, S. & Brazelton, T. B. (1978). The infant's response to entrapment between contradictory message in face-to-face interaction. *Journal of the American Academy of Child Psychiatry.* 17, pp. 1–13

Tronick, E. & Weinberg, M. K. (1997). Depressed mothers and infants: Failure to form dyadic states of consciousness. In L. Murray & P. Cooper (Eds.). *Postpartum depression and child development*. New York: Guildford Press.

Winkin, Yves (1981). *La nouvelle communication*. Paris: Editions du Seuil.

Winnicott, D.W. (1971). *Playing and reality*. London: Tavistock.

---

[5] In English: Lacan, Jacques (1949). The Mirror Stage as Formative of the Function of the I as Revealed in Psychoanalytic Theory. In *Écrits - A Selection*. Tavistock Publications, 1977.