## Affect in the Context of the Infant's Lived Experience: Some Considerations

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I would like to raise some issues about affective experience, the memories of affective experience, and how such memories become representations. We will be talking, then, about three different forms or domains of experience; the actual—time present—affective experiences, i.e. the lived experience; the memory of that experience; and the representation of that experience or similar ones. I believe that this approach will raise some of the central questions.

One of the main problems in thinking about affective experiences concerns how we represent them. In any event the representation of affective experience is, in large part, what we deal with, as clinicians, since affective experiences are presented to us as memories and stories and representations.

Here is a simplified outline that I will use for that progression from lived affective experiences, to memories of them, to representations. Think of any kind of lived experience that is affectively loaded. If you are a baby you may be experiencing it for the first time. We assume for theoretical reasons that the baby can have a lived affective experience for the first time. (It may not be true but it is a useful heuristic.) So the baby had a certain lived affective experience for the first time and it goes into memory. Now it is a specific memory of something that has actually happened (subjectively). Then the baby has a similar lived experience again. It becomes the second specific memory of that kind of lived event. By the time the baby has registered the second or third similar specific memory, his mind will start to operate on those two recalled affective experiences and will do the things that we now expect human minds to do beginning from very early on in life. They will identify patterns to try to see what was the same in each of those recalled experiences (memories). That is, they will search for the features that are common to each memory. These are the invariant features. Other features that change from one memory to the next are the variant features and can be discarded, so to speak, from the composite memory which starts to form. This composite memory of invariant features is a prototypic memory.

An example of this process of prototype formation is clearly seen in an experiment performed on 10 month-old babies (Strauss, 1979). The baby is shown a series of schematic drawings of a face. Each drawing is different in the placement of the eyes, or length of the nose, or the placement of the ears, etc. At the end of the series the baby is 'asked' (using a visual preference-habituation paradigm) which drawing of

those you are about to see best represents (is seen as most familiar relative to) the whole series of drawings already seen. The baby will choose as the most familiar (representative), a picture of a face that he has, in fact, never seen, but one which is the mathematical average of all of the positions of the features that he has seen. This is what is meant by forming a prototype of a series of specific memories. It is important to note that the prototype has, in fact, never been experienced, it is a construction from reality—but represents reality as multiply experienced. So as to avoid having your mind cluttered with specific memories, we merge (and lose) most specific memories by subsuming or integrating them into prototypic memories, so that we are left with fewer specific memories, for the sake of more generally useful prototypic memories or representations. The above example seems to be generally applicable even though it concerns an experimentally manipulated visual perception, and we are interested here in lived-affective experience.

Suppose instead of a series of pictures we took something enormously complicated and affectively laden, like what Sunday evenings were like at home when you were a child. Much went on on 'Sunday evenings'. Roughly predictable events, meals, rituals, types of conversations, cast of characters, feelings, tones, and more. Even amidst this complexity we can identify certain constellations of invariants and come up with a prototypic Sunday evening that comes to mind.

Let us take another example, this time from the life of an infant, a playful event with laughter between a caregiver and a baby, which is an enormously common event that hopefully occurs many, many times a day, seven days a week. Accordingly, the baby is in the position of having an enormous number of instances of this positive affective experience and an enormous number of opportunities to abstract prototypes of what it is like to be in the situation of laughing with somebody who in this case is your mother.

In these examples, 'Sunday evenings' or 'laughing with mother', i.e. what we are calling the affective event is, in fact, a lived-event that contains affects, motives, cognitions, actions, perceptions, etc. From the point of view so far outlined, a central issue will concern which invariants (affect, motor actions, perceptions, etc.) of the lived experience is the infant capable of registering, or likely to notice and identify? Which of these invariants are privileged because of the infant's constitution or maturational age? Which, if any, invariants have a dominating salience so as to play a more central role in the formation of prototypes and representations? Depending on the answers to these questions, the very nature of the lived-experience (as a subjective event) as well as its specific memory, as well as the nature of the prototypic memory and representation that could result will all be different.

Let us imagine three different points of view and see what differences they will make in our conception of lived-experiences and their representations. This first point of view is that pleasure and unpleasure among all the attributes of infant experience occupy a privileged position as preemptive attributes in defining the subjective unit of a lived-event and, therefore, play the core role in determining the overall nature of representations. This position adheres most closely to that position of Freud's that holds the pleasure principle in the forefront of considerations on these matters. In essence, this position holds that among the welter of features in any lived-experience, the organism's first task is to 'evaluate' and react to the internal state of excitation build-up or discharge so as to keep internal nervous excitation at a minimum. We can call this position that of the centrality of hedonic tone. The problems with this position are two-fold.

First, it specifies that the infant's primary (or even exclusive) focus and sensibility is directed toward his internal state of hedonic tone. This internal focus has, so often, been assumed to be so pre-emptive that it does not allow the infant the liberty even to be attentive to the external events that may or may not be related to his internal state. In its extreme, one ends up with a 'normally autistic' infant. Given such a state of affairs, all lived-experiences will be confined to internal states of gradations of pleasure/unpleasure and the other possible invariants of lived-experience (action, perception, etc.) go unnoticed, at least initially.

As the infant becomes more mature, and the 'stimulus barrier' less operant, the infant will be in a position to take more notice of the external events that may be invariant features of certain lived-events, along with an identifiable gradient of pleasure/unpleasure. The door seems to have been opened to a new kind of lived-experience and representation, but only partially. The centrality or privileged place of hedonic tone is never given up—and all other attributes of experience (e.g. perceptions of external events) become part of the representational world as associated (learned) satellites to the hedonic tone which remains at the centre—and remains the sole criterion by which such episodes can be categorized. This is the position of Freud in much of his early writings and of most psychoanalysts when describing the very young infant. It clearly defines and limits the nature of lived-experience and thereby of memory and representation, which will be of global experiences of internal states gradually including small associated pieces of 'external' events or even other internal events. Freud's description of the hallucinated breast by the hungry infant is an exception and belongs to a different viewpoint.

This position is not only the product of psychoanalytic thinking. Biologists such as Schneila (1959) began a tradition of research which indicated that the organism's first task was to evaluate the strength of stimulation of any event and to determine whether it would approach or withdraw, based on the evaluation. Survival favoured the avoidance of strong stimulation, the approach to mild-moderate stimulation, and the ignoring of very weak stimulation. This is a different version of the pleasure principle since it seems to require an evaluation of the external milieu rather than of the internal state (although this is not always clear, nor necessary) and become the dial-setting, so to speak, for pleasure, and approach is reset at moderate stimulation

(excitation) not at a falling or zero excitation where Freud had placed it. Nonetheless, the centrality of hedonic tone-excitation-stimulation remains undiluted as the most basic and salient attribute of experience.

In a different vein, Emde has shown that as the baby gets older, mothers show a progression of confidence, in judging different aspects of the baby's internal state (1980). In the youngest babies, the mothers were more confident about judging hedonic tone, and as the infants got older, states of consciousness, and older yet, discrete affect states. He suggests that this progression in maternal attribution may parallel an actual progression in the infant. I believe that this is a widely held assumption, the consequences of which are that the infant's earliest lived-experiences, memories and representations are hedonic-tone limited, bounded or defined. The 'stimulus barrier' has been reintroduced but for different reasons, and conceptualized differently.

There is little argument that hedonic tone and level of excitation-stimulation occupy among the highest hierarchical positions in human experience. What remains to be argued is whether pleasure and unpleasure are to be seen as a continuous spectrum or dichotomized into separable pleasure (good) and unpleasure (bad) experiences. And secondly, under what conditions the other attributed lived-events gain entry into the subjectively felt world of lived-experience and thereby into the landscape of memories and representations or become the predominant attributes.

The second point of view we will take up assumes that hedonic tone is not experienced along a continuous gradient but is dichotomized, perhaps even sharply, into two separable and differentially categorized lived-experiences—pleasure and unpleasure. This position is a variant of the position of the centrality of hedonic tone and might be called the centrality of the separate experience of pleasure and unpleasure. But this variation results in different lived-experiences and representations.

This variation can be derived in one of two ways. One can take the position of the centrality of hedonic tone and then add to it the mechanism of splitting as did Melanie Klein (1952). The result is two separate and impenetrable types of lived-experience—pleasurable and unpleasurable conditions are sufficiently distinct that the organism needs to make dichotomous action decisions—e.g. to approach to withdraw. One could also consider here the weight of cultural evidence suggesting the commonality of good-bad dichotomous categories concerning objects, persons and events. There is also an accumulating body of evidence suggesting that the nervous system is equipped with a system for the rapid and independent (from cognition) evaluation of the hedonic value of a stimulus (Zajonc, 1986) and that such a system should operate very early in infancy.

There are some experiments that bear on the issue of the independence of positive and negative experiences so far as memory is concerned. Manic patients given a list of items to remember will recall more of them when they have returned to the manic state, than when they were in an intervening depressive state. The same is true for manic-depressives taught a list while in the depressive state—i.e. they remember more of the items when again in a depressive state

(Bower, 1981). This controversial research lends some support to the idea of affect (hedonic) state-dependent learning (or recalling). What is just as striking as the affect-state-dependence, is the lack of it, e.g. the depressed patient will also remember items he has learned when manic (and vice versa), however not as many. In brief, while there may be some affect-state-dependent features of memory organization, it is equally clear that attributes of experience encountered under (encoded during) one hedonic state are readily accessible (retrievable) when in another hedonic state. Splitting into impermeable realms of experience—as asked for in some psychoanalytic theories with infants (e.g. Klein, 1952). Certain adult patients certainly experience this kind of splitting (Kernberg, 1980), however the distinction between splitting as a defensive event and state-dependent memory as an encoding-recall event needs to be maintained, especially when considering the young infant.

The third point of view would state that affects are not necessarily privileged attributes of experience. There are three variations of this point of view. Firstly, affects really are privileged attributes but some of life gets encountered under conditions of low or neutral affect. Such conditions are usually obtained in laboratory experiments. The experimenter tries expressly to minimize affective and hedonic variables so as best to study cognition or memory or perception under conditions or relatively neutral affect. The major experimental corpus in developmental psychology is the result of working under these conditions. Most of what we know about infant memory, affect (even), categorization and representation comes from this approach, which makes it abundantly clear that the perceptual, cognitive, motor, sensory, etc., attributes of lived-experience will be memorialized and represented even when affect—as one of the attributes—of the lived-experience is not very marked. (For example, see the experiment of Strauss described above.)

It is exactly on this point that many psychoanalysts contend that such controlled experiments (affective attributes minimized) are irrelevant for the lived-moments of clinical interest—which generally are those when the affective attributes of the experience are assumed to be quite considerable.

Such criticisms are important correctives in the sense of reminding us that more experimentation must be done wherein marked affect or hedonic tone is one of the salient attributes of the experimental situation. Such attempts are now increasing.

Nonetheless, the following points need to be made: (1) The majority of clinically relevant moments in a developing person's life need not occur under conditions of marked affect (at the time). Such moments are rather the daily and ordinary events

of what life is like to lead, and what is expectable in a relationship with self and others (Stern, 1985). Such events account for a considerable part of clinical material that during formation did not necessarily contain affect as a striking attribute, only as one of many. (2) While some affect may be a necessary ingredient in any memory—at least in the form of interest so that attention is appropriately distributed—there is no reason to believe that affect plays a special role in the organization of memories—i.e. that affect acts like the glue, the core, the organizing theme, etc. that holds together the other attributes of perception, action, etc. so as to create the memorial event. Such a notion is often behind—as a metaphor—how we imagine that affect works to create lived-moments, their memories and their representations. There is no evidence for such a view.

A recent experiment in our laboratory tested whether babies would remember a puppet better (one week later) if the experience with the puppet was accompanied by positive rather than neutral affect. The infants remembered equally well in either case. The presence of positive affect as one of the attributes of the experience did not make remembering any easier (Nachman et al., 1986).

A second variation of the position that affects are not necessarily privileged attributes of experience suggests that during a lived-experience any one of the attributes of the subjective event may have the central role during that particular lived-moment. Thus, for some kinds of experience the central attribute could be the motive, or the perception, or the motor act, or the state of consciousness. This viewpoint shares much with the idea of Pine (1981) that the infant occupies, in the course of a day, many different moments of experience, that are best considered as organized by different prevailing influences. (Pine's argument is directly largely to the problems of a child being in only one developmental stage and working on only one life-issue, e.g. anality, autonomy-independence, rather than on the rapid shifts from moment to moment in the prevailing attribute.) However, his argument is readily usable in this context as well. This kind of solution makes eminent clinical sense—in that most memories seem to be dominated by one attribute that acts as the key to the moment-in the sense of creating, delineating, and organizing the moment—memory. In such a system, affect, per se, need not have the privileged role for any given lived-moment, memory, or representation, but it could—or it could give over such a role to another attribute. In either, one of the attributes is fulfilling this assumed central role of organizer of the lived-moment and core of the memory, etc.

But suppose there is not need for one or another attributes to assume a central role? That is, lived-moments do not necessarily organize around a central and privileged (even momentarily attribute—rather all attributes are equal as far as memory is concerned. This viewpoint represents the third and most extreme version of the problem that affects are not privileged attributes of experience so far as the creation of a clinically relevant representational world is concerned. In this model the lived-moment might be schematized as (see Figure A below): where the boundary is hashed because it is not certain what are the boundaries of a subjectively

lived-moment, and the separate attributes are given equal status in this moment, and equal structural roles in the organization of the moment. This model allows for the greatest flexibility and allows for a greater range of interconnectedness of representational structures and in that sense is closest to what is clinically evident.

In the previous model where affect is given a central role, the lived-moment and its representation could be schematized as follows (see Figure B below): where the boundary of the moment is clearer since it can be defined in terms of the onset-offset of the central affect experience. Furthermore, the other attributes of the experience are organized and accessible only via the attribute of affect. In the model just prior, any of the other attributes could take the central, defining role that is shown here for affect.

Figure 1

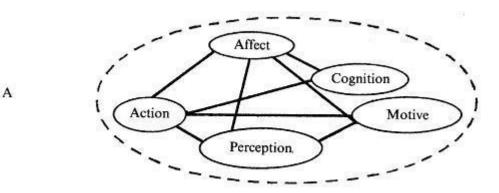
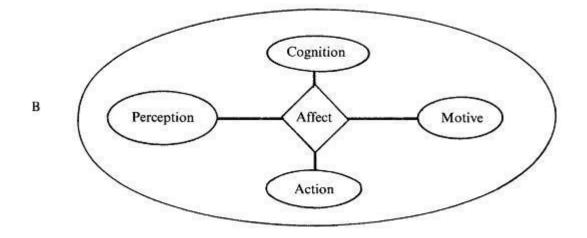


Figure 2



I have gone into some detail and speculation here because the different weight and role we give to different attributes of an infant's lived-experience will ultimately determine how we conceptualize the nature of his subjective experience and its representations. It will also define the very unit of experience which makes up our subjectivity, the general rules whereby memories have access to other memories, and the structure and integrability of some of our representations. Finally, the differential consideration of the various attributes of lived-experience will open up different paths for 'distortion' on the infant's part, and for different kinds of fantasy formation.

## SUMMARY

Affect is considered in the context of the infant's lived-experience. It is considered as one of the attributes of experience, among many (cognition, perception, motive, action). Several different positions concerning the relative weight and role allotted to affect compared to other attributes are discussed along with the implications of each position for defining the infant's subjective, memorial and representational world.

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