### The Forgotten Child

The fragile power of memory provides us with a general sense of who we are and where we have been, even though it hides many of the specific incidents that helped shape us.

Daniel L. Schacter Searching for Memory

In the Introduction we stated that for "walking heads" the concern is that of a split-off childhood world in which the door to the inner nursery is locked. The child who is present there has been forgotten and is not allowed to come to life, but should play dead as much as possible, with all the subsequent consequences. At the same time, we know that our own childhood is not always readily and plainly accessible, even for adults without the problems mentioned above. In this chapter I would like to dwell upon the different factors that may play a role in this accessibility. In other words, what is ever really normal where memories of our childhood are concerned?

### **BOLTANSKI**

Christian Boltanski is a French installation artist who works primarily with household objects and photographs. In 1998, in the basement hall of a Paris museum, he placed large racks against the walls, filled from floor to ceiling with folded children's clothes. The fact that the small garments were piled up this way reinforced the feeling of melancholy and sadness, invoked by the absence of the original owners. He had called his first work (1969) "Search for and presentation of everything left of my childhood" (Recherche et présentation de tout ce qui reste de mon enfance). He tried to show that

this part of myself had vanished forever and that the elements bearing witness to it were fragile: amateur snapshots and objects that had lost their meaning. I realized then that I . . . was carrying "a dead child" inside of me, that a part of my life had disappeared. One of the things an artist tries to do is to show reality and at the same time to protect it from oblivion and death, a quest that is doomed to fail from the beginning. [Boltanski 1998, p. 2]

The ruinous effects of time are the central theme in Boltanski's work. Through the passing of time we lose everything, not only other people but ourselves as well.

The one thing that remains of our altered self during our lifetime is memory. Memory offers us the possibility of ascribing significance to people and objects, and of seeing ourselves as the one we once were. We thereby provide ourselves with continuity in time. Recently, I came upon a photograph I had not seen in years, taken by a school photographer when I was eight years old. What I saw was a somewhat shy little boy at a large desk. He seemed nice enough to me. If this sounds a bit detached, that was precisely how it felt at first. I noticed that initially I was looking at the picture with some disbelief. Was that me? Only when I began to recall other things from that period was I able to restore the continuity, but I also realized that in a way Boltanski is right. The child of that time no longer exists, that is to say that he can never be resuscitated in that appearance and with that inner world of experience. Boltanski calls this "death" and, from that perspective, we would all be carrying "a dead child" inside us.

Still, this is obviously not the whole story. The child of that time no longer exists, but at the same time it survives inside me in all kinds of ways and thereby has an effect on who I am today. Research is giving ever more

support to the clinical notion, which has been around for many years, that our childhood experiences play a substantial part in determining how we face life as adults (see, for example, Cassidy and Shaver 1999, Fonagy et al. 1995, Leckman 1999, Sroufe 1995, Sroufe et al. 1999). In the present time of genetics and neurobiology, too, this notion continues without abatement.

Neither do our brains simply reflect the deterministic unfolding of complex genetic programs, nor are we victims of environmental determinism inscribing indelibly on a tabula rasa. Throughout development and maturity, genes and environment are involved in a set of complex and almost inextricable interactions. Everything we learn . . . physically changes the brain. [Hyman 2000, p. 89]

Therefore, if we wish to know who we are and why we feel, think, and react as we do, then it is of great importance to have access to our past, including our childhood. This is even more important when it is a matter of a split-off childhood world, as is the case with "walking heads."

In what follows, I shall clarify that this access is not by any means always self-evident. There are quite a few "accessibility problems" and I will discuss four factors that can play a role therein. The first three, to be dealt with in this chapter, are directly linked to memory function. The fourth factor, to be discussed in Chapter 2, refers primarily to psychological motives that can create accessibility problems.

## ACCESSIBILITY PROBLEMS AS A RESULT OF THE IMMATURITY OF EXPLICIT MEMORY

Memory can be subdivided broadly into explicit and implicit memory (LeDoux 1996, Schacter 1996). The distinction was first made in 1985 by Graf and Schacter, based in part on certain experiments that showed an implicit influence of experiences that were not explicitly remembered.<sup>3</sup>

Explicit memory is concerned with the storage of events and facts and, thus, among other things, contains our autobiography. In principle, the knowledge stored in this part of our memory can be consciously remembered. However, memory does not function like an archive from which someone can order a specific recollection so that subsequently an exact copy of the original event will be delivered. As will emerge in this and the next chapter, all kinds of obstacles are present in the memory process and

these may involve both the functioning of memory and the applied de-

fense system.

Thus, I do remember that school pictures were taken, but the images are vague and indistinguishable from one year to the next. I have clearer recollections of the school, the classes, and the teachers. In order to be able to summon such reminiscences, they must first be stored in the explicit memory system. One of the elements that play an important part in this storage is the hippocampus, a specific structure of the brain. The hippocampus does not begin to work at full speed right after birth. Not until a child is about three or four will the necessary brain structures have matured enough to be able to store verbally structured recollections in the memory (Clyman 1991). On a psychological level, this means that at this time a child has a sufficiently stable self-concept to be able to have an autobiographical memory: that was when this happened to me in such and such a situation (Bower and Sivers 1998).

All of the above suggests that experiences during the first three or four years of life are subject to amnesia, known as infantile amnesia. Although some researchers claim that this form of amnesia might not be absolute even when it concerns the preverbal period (Bauer et al. 1998, Christianson and Lindholm 1998, Toth and Cicchetti 1998), it still seems that, based on the available empirical research, it is out of the question that experiences from the first years of life are being stored in explicit memory and can then be consciously summoned later on (Nelson and Carver 1998). A considerable part of our childhood experiences is thus not accessible to conscious memory.

This data has important clinical consequences. For example, when a patient remembers an event that presumably occurred when he was one year old, based on our knowledge of the development of the brain we would do well to realize that this recollection cannot at that moment be stored in the explicit memory system as a verbally structured recollection. Therefore, it must have come into being some other way and not through the actual event but, for instance, by having been told to the patient by someone else at a later time (Olds and Cooper 1997).

Does this mean, then, that the experiences of the first few years are lost, precisely in a period when the brain is at its most malleable stage and its capacity for learning is correspondingly great? As can be expected, this is not the case, since those experiences are registered in implicit memory, our second memory system.

## ACCESSIBILITY PROBLEMS AS A RESULT OF STORAGE IN THE IMPLICIT MEMORY SYSTEM

Implicit memory works through brain structures that undergo a more rapid maturation process than the structures involved in explicit memory. First of all, the implicit memory system stores information having to do with the learning of specific skills and habits, such as walking, talking, biking, swimming, or driving a car. The automatic ways of being in the world are also part of implicit memory, including our reactions to danger and the self-evident models of how to deal with other people (Campbell 1998). The patterns that matter here take place outside our consciousness in a self-evident way. Thus, much of the implicit memory system contains what Van Leeuwen (1987) refers to as "silently self-evident" material: "When you're talking with Peter, he always stands right on top of you. He isn't aware of it himself, but it does make you feel rather uncomfortable." "He eats just like his father." "The way she behaves when there's company always reminds me of her mother." "Nick has a new partner again, just as disagreeable as the previous one, only younger." "Do you get it? She suffered so much from her father's drinking and here she is marrying a man who is an alcoholic!" "He gets into fights everywhere he works. He can't understand it himself, but he is fired from every job."

These ways of being in the world and the relational patterns that go with them may be seen as memories, but memories of which we are not conscious at the moment they are expressed. The relational patterns concerned should not be seen as consisting of images, but rather as closely linked, interrelated events that follow one another along specifically established lines (Fonagy et al. 2002). They become visible in our being and our behavior. A person may notice these implicit recollections as behavior patterns when they are brought to his attention, as can happen in psychoanalysis (Fonagy 1999a): "You were right when you told me that. I started paying some attention to it and I do always move a step closer toward people when I'm talking with them. I always thought it was odd how people constantly seemed to be backing away from me."

Events that led to such patterns are no longer accessible to memory. Thus, the adult who is able to maintain a reasonable stability of the inner image of himself and the other, will not remember the innumerable times his parents left but also returned again, greeting him warmly. Nor does he think of all those moments that they reacted lovingly and attentively to

him when something bad happened. Instead, he has assembled all these emotional experiences into the implicitly established pattern that makes him able to console himself, to tolerate being alone and continue being himself even when the person he loves is not present (Clyman 1991, Sandler and Sandler 1998).

In the same vein, someone who is constantly unsure of himself and wonders whether other people really like him, will not remember the innumerable times that he was ignored as a child, that there was no response to his feelings and needs, and that at times of conflict he was made to admit he was wrong even when he was not. Instead, he quite naturally assembled all these experiences into the implicitly remembered conviction that he is not worthy of attention. He continuously relays the message, both to himself and to others, that he does not take himself seriously and that people need not take his feelings into account. This conviction, or more properly stated, this completely self-evident "knowledge" that it is impossible for another person to take him seriously and to understand him, has grown into a pattern that forms the foundation of his personality (Fonagy 1999a).

Our moral development, too, travels a substantially implicit path. Thus, a person generally does not consciously remember under what circumstances he mastered the moral rules that drive his behavior. It happens almost automatically, comparable to the way we learn the grammatical rules that drive the use of our mother tongue (Kandel 1999).

Thus, by being stored in the implicit memory system, our childhood experiences form the basis for the relational patterns that determine our interaction with ourselves and with others. Stern and colleagues (1998) call this our "implicit relational knowledge" into which emotions, cognition, and behavior become integrated. This "knowledge" may be seen as a response to the dual task of relational development that faces us as children: How do I relate to myself? And: How do I relate to others? The influence of the implicit patterns we thereby develop is not limited to childhood, but plays an important role in our behavior and our expectations of others throughout our life, particularly in intimate relationships (Lyons-Ruth 1999).

We could also call the totality of these relational patterns our "implicit life scenario," a term that I prefer over "implicit relational knowledge." It is my opinion that the term "scenario" better clarifies that in these relational patterns it is not merely a question of our self-evident behavior, our self-evident expectations in relationships, and our self-evident interpreta-

tions of the world. It is, furthermore, a question of our self-evident attempts to have others react in the way we want them to react, so that they may contribute to the implementation of our life scenario. In other words, we want to make our life scenario into a movie in which we play the main part and, in that endeavor, we are always looking for suitable cast members and extras.

It will be clear how important it is to have as much insight as possible into the knowledge stored in the implicit memory system.

Appreciating the pervasiveness of implicit influences on our thoughts, feelings, and behaviors provides an essential insight into the fragile power of human memory. If we are unaware that something is influencing our behavior, there is little we can do to understand or counteract it. The subtle, virtually undetectable nature of implicit memory is one reason it can have powerful effects on our mental lives. [Schacter 1996, p. 191]

Our prejudices and stereotypical opinions are a good example of this. To a large extent, both of these are based on what is stored in implicit memory and is a part of our implicit life scenario. I would like to deal with this at greater length because it is of such importance in sufficiently gauging the value of the subtle and sometimes deceptive performance of implicit memory.

To understand better how self-evidently this subtle action operates, we should realize that our evaluations of a given situation and our reactions to it take place by way of the structures of implicit memory, first of all, and therefore happen unconsciously, in the sense of outside our consciousness (LeDoux 1996). Only secondarily, based on what the physical process has gotten started, do we put into words what is happening and do we become conscious of feelings, such as a feeling of fear, for instance. In dangerous situations this can have significant advantages for survival, but it also makes us more vulnerable in our ability to make judgments. After all, the evaluation system by which we are constantly scrutinizing the world for situations of danger should not be too thorough but should categorize things broadly and quickly. At first glance it is wiser to take an animal that resembles a bear for a bear. There will always be time for refinements later on.

The same mechanisms can play a role in prejudices and stereotyping. What is especially important to our survival is what we can see on the outside. Physical characteristics such as skin color or hair length are enough

to activate race or gender stereotypes, regardless of whether the person in question actually demonstrates behavior associated with that stereotype. This automatic activation of a specific viewpoint appears in all kinds of situations and probably shapes our first reaction to the other person whom we do not yet know. Once activated, such a viewpoint can have an effect on the way in which we treat someone and may also persist in our behavior in other situations. The fact that these evaluations, and the feelings and attitudes based upon them, are automatically activated also means that we don't question their presence in our inner self or their influence on our thoughts and behavior. A certain prejudice about a group of immigrants, for example, may then seem like an equally reliable observation as the observation of their skin color (LeDoux 1996).

For the first three or four years of our childhood only the implicit memory system is available to us. Childhood experiences from that time, which are stored exclusively or especially in implicit memory, will by definition be accessible only with difficulty. I will provide a brief clinical example of this.

An analysand visits her aged aunt and starts talking about old times. Among other things, the aunt tells her that as a baby of seven months she had come to visit and that the aunt had become very frightened because a girl next door, who was six, wanting to lift the analysand from the crib, almost dropped her, but managed just barely to hold on to her by the ribbons of her little shirt. When the girl screamed, the aunt came running, and saw the analysand dangling beside the crib, blue in the face. When questioned, the analysand's mother confirms the story and it now suddenly becomes clear to the analysand why she always dislikes things around her neck and actually cannot tolerate necklaces and tightly buttoned blouses. Even the collar of a suit jacket tends to give her a constricted feeling. Of course, we cannot state with complete certainty that there is a connection between this constricted feeling and the event that took place when she was seven months old, but the possibility exists. She may remember the event "physically." If one can speak of such a connection, she is certainly not able to make it herself and it becomes possible only through the statement of another person, her aunt in this case.

After the third or fourth year, when the explicit memory system is sufficiently developed, the various aspects of an experience are established in both memory systems. Alongside the implicit life scenario, an explicit scenario now comes into being. The latter is concerned with ways of being in the world and with internal images of the relationships between ourselves

and others, which we can in principle be conscious of, depending on the possible defenses applied: "I am afraid of dogs because I was bitten by a dog when I was five." "When I grow up I want a man just like daddy." "I already wanted to become a doctor when I was ten." "My grandpa was a true socialist. I went into politics because of him."

Now it becomes possible to both develop and store fantasies, which are based on what has been implicitly established as well. On the one hand, it may concern fantasies that try to explain what happens to us in relation to others and to make this comprehensible. For example: "It is logical that my life is this way, that people taunt me, that my mother is always moody, because I am bad and mean, inside I'm a filthy mess, and anyone who comes close to me can see that. It's logical that nobody wants anything to do with me, especially my mother." On the other hand, it may also concern fantasies that are meant to offer a counterbalance to the painful reality so difficult to bear, for example: "I don't need anyone, especially not a mother, because I'm quite capable of doing it all by myself. My bag is always packed and, wherever I may be, I can leave at a moment's notice." I will come back in greater detail to this complicated relationship between fantasies and the implicit life scenario in Chapter 3.

It matters a great deal whether an experience is fixed in the implicit memory system alone or in the explicit one as well. One example will clarify the difference that arises from the explicit memory's participation or lack thereof. Two children, an eleven- and a two-year-old, burn themselves on a stove. Both of them make a connection between stove and pain, both of them have a vague, uncomfortable feeling when they have anything to do with a stove or something that resembles it. However, only the eleven-year-old can put this in the context of a memory of the specific event and say, as it were: "Ah yes, I feel this way right now because I burned myself so badly on that stove that time" (Wimer Brakel and Snodgrass 1998). The two memory systems also show a certain overlap and constant repetition can transform explicit memory into implicit memory. This can be seen, for instance, in the process of learning how to drive. At first, we must consciously remember all sorts of actions, but after a while it becomes an automatic, unconscious motor activity, incorporated into our implicit memory (Kandel 1999).

To summarize, so far I have mentioned two factors that may play a role in problems concerning the accessibility of memories of one's own childhood. The first one has to do with the slow maturation of explicit memory, the second one with the nature of implicit memory.

The knowledge that is stored in explicit memory uses symbolic concepts and is represented in language or internal images, such as thoughts, convictions, and fantasies. In principle, from the age of three or four on, because of the brain's maturing, and depending on the applied defenses, this explicit knowledge can be stored in such a way that it can become available in the form of memories later on. These are the same memories to which Boltanski alludes.

The knowledge in implicit memory is not "remembered" but "enacted" (Clyman 1991, p. 352). It becomes visible only when, for example, our attention is drawn to specific forms of behavior as can happen in treatment (Fonagy 1999a). This knowledge is not influenced by infantile amnesia but remains present as a continuing factor in our emotional functioning for the rest of our life. As our implicit life scenario it also forms the basis for the ways in which we deal with other people. It concerns the patterns of relationships between ourselves and others, where how we behave selfevidently in all kinds of situations is stored, how we look at ourselves and at others, what our expectations of contacts with others are, and how we will try to have others react to us. This does not mean that these patterns are an exact reflection of our actual experiences as a child. Because our perception of experiences is never "neutral," these patterns are inevitably distorted by the desires and fantasies that were at play at that particular time, but none of this is accessible to conscious recollection (Fonegy 1999a; see also Chapter 8).

# ACCESSIBILITY PROBLEMS AS A RESULT OF MEMORIES BLURRING OR CHANGING

A third factor that may play a role in problems dealing with accessibility to the world of our childhood is created by the fact that through the years memories may blur or change. We must realize that this concerns knowledge stored in the explicit memory system exclusively. This is also the knowledge meant in common parlance when we speak of "memories."

The story is quite different for knowledge stored in the implicit memory system. This is probably indelible knowledge and, as long as it is left to its own devices, not easily influenced (LeDoux 1996), as is quite understandable from an evolutionary point of view. We should not constantly have to discover and rediscover how we can best hold our own in the world and which situations are dangerous and are better avoided. We also experience

the relative indelibility of this knowledge in everyday practice. For example, when I had the door to my consultation room changed so that it would no longer open into the room but outward, it took a while before I no longer needed to make the motion consciously. Only after having done so for a certain period of time did I manage to break the habit of the previous automatic motion somewhat. Somewhat, because when I am lost in thought there are times that I still make the old motion.

In this case, it concerned a pattern with an inanimate object, namely the door to my consultation room. Patterns that involve our contact with another living being are, of course, more complicated but equally indelible. The influence they exert can change only by directing our attention to the presence of these patterns. The fact that conscious attention is needed to be able to change anything in the influence of the implicitly established patterns with which we are in the world—our implicit scenario—has important clinical consequences. I will come back to this in greater detail in Chapter 7.

While implicit memories are relatively indelible, explicit memories may blur or change over time and thus will be more difficult to be summoned later on. I will mention six points that can play a role herein.

A first point is the fact that we remember events better when they are emotionally more important. Research shows that this has to do with an improved way of memory storage that takes place under the influence of adrenaline (LeDoux 1996). Thus, one can imagine that certain memories can no longer be summoned because the events to which they refer were so insignificant that they were stored without sufficient intensity and rapidly grew blurred.

A second point in this connection concerns the selectivity of our memory. The storage of explicit memories depends to a great extent on our attention (LeDoux 1996). That which does not have our attention is not or is poorly stored and subsequently we cannot remember it. The more we dwell upon something, the better we store it and the more profuse our memory will be. A good example of this is the encounter with a person at a time that we are preoccupied with something else and therefore do not give him our full attention. At a subsequent meeting this can make us feel that the person looks familiar—"I am sure I know you"—without knowing where to place him—"But where from?" (Schacter 1996).

A third point is common forgetting, which appears simply because time passes. Much of what we store in our memory we then forget again, because it serves no purpose and has no meaning any more and therefore we

don't replay it in our memory. This last point, it seems, is of particular importance in the extent to which memories resist gradual blurring. Blurring is probably a result of the diminishing strength of the connections between the neurons that are involved in the representation of a specific event. When we think back to something on a regular basis or speak of it with others, these connections are actually strengthened and the event in question will be more clearly remembered (Schacter 1996).

A fourth point is shaped by the fact that memories can change under the influence of the "present remembering context" (Stern 1995). What is meant by this concept is that our memories are constantly subject to change because the situation of the moment, with all the feelings, thoughts, and observations that are part of it, determines which networks in the memory system are activated and which fragments subsequently arise and turn into a memory (Stern 1995). The content of our explicit memories is therefore also dependent on the internal and external situation in which we find ourselves at the moment of remembering. That is how a somber mood will color a person's memories, making them more somber, and also lead to his reflecting more upon unpleasant experiences (Schacter 1996). For instance, we also see this retrospective distortion when someone is asked how he felt about a specific issue years ago. His current opinion appears to be highly important for the answer he will give to this question (Schacter 1996). The same is true with respect to relationships. When, for example, the relationship with a partner has come to an unpleasant end, it inevitably colors the entire romantic attachment to that person. This retrospective adaptation of our memories to our present situation obviously has to do also with our need for security and predictability, which is also applicable to the image we have of ourselves. I will come back to that in greater detail in Chapter 3.

Moreover, the fact that certain memories arise at one moment but not at another is connected to the "present remembering context." A good example of this is parenthood. The presence of a child brings all sorts of memories of one's own childhood to the fore again (Groen-Prakken and Ladan 1999). In that connection one can speak of context-dependent memories, in which we depend on certain "memory passwords." Thus, I clearly recall how, years after having traveled around Ecuador, I caught the smell of a burning open fireplace one chilly summer evening in The Netherlands and was suddenly back in the early dawn among the wood fires of Otavalo, where short, heavily laden Indians were leaving for the marketplace in silence. Without this memory password I probably would

not have remembered the event with the same intensity and clarity. Therefore, in the process of remembering we depend to a great extent upon the correct memory passwords. It is quite conceivable that we are not conscious of parts of our past because we do not run into the passwords that will bring the sleeping memories to life. This could be one of the factors that render the meeting with people we have not seen for a long time so emotional. These old friends provide us with passwords we ourselves could not generate but which help us to remember things that would otherwise remain asleep (Schacter 1996).

The fact that the process of remembering depends so heavily upon the context in which this remembering takes place also means that we must be careful about describing memories as "forgotten," or as "repressed" and subsequently "retrieved" (Bower and Sivers 1998). Under a given circumstance a person's emotional situation can acquire the significance of an internal context and as such may become part of the memory of that circumstance. Ending up in a similar emotional situation again, can subsequently shape the memory password that will make a memory emerge, which until that moment was inaccessible (Bower and Sivers 1998). It is conceivable that what we call "the lifting of repression" in psychoanalysis consists primarily of creating a situation in which the analysand will be distracted as little as possible by the outside world and, in dialogue with the analyst, begins to give optimal attention to his inner world with the emotional memory passwords there present, whereby memories that seemed to have been forgotten come to the fore.

A fifth point in the blurring and changing of our memories concerns the vulnerability of our "source memory." This refers to our ability to indicate very precisely where and when something occurred. Research shows how readily our source memory fails us (Schacter 1996, Bower and Sivers 1998). This does not mean that we can grow confused only about where and when something occurred, but also about whether something actually did occur or whether we merely imagined it. The memories' clarity and amount of detail do not resolve this uncertainty. A memory of an imagined event can have great clarity and can give the impression of a remembered observation of an event in the outside world. In such a situation, the only thing that is able to offer us a decisive answer is the source information we have at our disposal.

As is easily understood, problems with our source memory can lead to far-reaching and sometimes dangerous distortions of our memories. Schacter gives the example of a man who was arrested on suspicion of rape,

because he answered exactly to the description of the perpetrator as given by the victim of the rape. It later turned out that shortly before the rape took place, he had been part of a live television broadcast, which offered him a conclusive alibi, whereupon he was set free. For the woman in question, it was clearly a matter of an inadequate source memory. She recalled the man's face but did not realize she had seen it on TV just before she was raped (Schacter 1996).

Out of our need to exercise control over the world of our experience, the information from the implicit memory system, too, can contribute to source confusion. For instance, when a specific emotion appears without our understanding of what this emotion is linked to, as in the example of the person who burned himself on a stove at age two, it is possible that we generate incorrect sources. This could be in the form of an imagined event, for instance, so that we can make it comprehensible to ourselves as to why we were feeling the way we were feeling at that moment (Schacter 1996). This is also an example of the manner in which information that is stored in implicit memory can unknowingly influence our life drastically.

Finally, there is a sixth point that plays a role in the blurring or changing of explicit memories. I suggested that we remember an emotionally important event better than an unimportant one. Generally speaking, this is correct but it no longer applies when the stress present at the event is too great or too protracted or, phrasing it differently, when it is a matter of trauma. In such a case, under the influence of excessive concentrations of stress hormones, the hippocampus will in fact function less well; thus, the event in question will not be stored in the form needed for it to be properly articulated later on. For people who have experienced serious traumas, such as Vietnam veterans or victims of child abuse, it appears that the hippocampus has actually withered somewhat (LeDoux 1996).

Stress hormones do not have the same influence on the structures of implicit memory. In fact, they probably even promote the storage in this system. Therefore, all of this makes it possible for someone to have deficient conscious memories of certain traumatic events and at the same time very strong implicit, that is, unconscious, memories that will then be expressed in emotions that are experienced as strange and not easily placed (LeDoux 1996).

In experiments with animals it seems that the above-mentioned damage in the hippocampus can occur as well although later on, when the animal has been separated from its mother at an early age. The resulting stress reaction is stored in the implicit memory system and leads to hor-

monal changes at an older age, which in the end will damage the hippocampus and secondarily affect the explicit memory system (Kandel 1999).

The above also explains why traumatic childhood experiences are better remembered if attention, support, and explanation around such an experience were offered by the parents at the time (Christianson and Lindholm 1998). Through their "development aid" the parents prevented the events in question from having a traumatizing effect, so that no damage to the explicit memory system could be produced.

#### IN CONCLUSION

At the beginning of this chapter I asked what is actually regarded as normal where memories of our childhood are concerned. I have demonstrated that this question cannot really be answered because there are all sorts of factors directly linked to the way in which our memory functions that may have an effect on the availability of childhood memories. To some extent, this has to do with the influence of time and of the continuous processing to which our memories are exposed. As will be obvious, with all this we find ourselves already halfway toward the role and the meaning of psychological motives that will be discussed in the next chapter.