Anticipation, Memory and Attention in the Early Works of Freud

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Abstract
This papers deals with anticipation within a dynamically organised psychic system. We start with Freud's attempt to conceptualise such a system, in particular in his *Project for a scientific psychology* (1950*a* [1895]). Three subsystems are distinguished here: perception, memory and consciousness. They interact with each other and with the environment and are governed by the pleasure principle. The memory system forms the first important element in thinking the anticipatory capacity of the psychic system, the attention mechanism the second. With these two elements it will be shown how Freud can provide a basis for a dynamical approach of anticipatory systems wherein: the particular history of the interaction with the environment, its inscription in a memory system and, the development of an attention mechanism are important.

Keywords: anticipation, memory, attention, historicity, psychoanalysis

1 Introduction: The Scientific Status of the *Project*

1.1 The *Project*: a Neurological or Psychological Theory?

The *Project* is without any doubt one of Freud's most important early works but also a very contested one. The central point of controversy in the debate that has taken place and is still going on concerning the *Project* is the scientific status that should be attributed to the theory that it contains. Are we dealing with a neurological theory or rather with the birth of a psychological theory in which the neurological language should be considered as a metaphor? These two options seem to echo the tension that is present in the text of the *Project* itself. On the one hand we indeed find a neurological terminology and even more than that: as is convincingly shown by Pribram and Gill in their book on the *Project* the concepts and insights Freud develops, for example his notion of quantity and the neuron theory, are firmly rooted in the neuroscientific research findings and theoretical developments of that time, and can up to a certain extend be taken as biological concepts that can be meaningfully linked with today's

neurophysiology[1]. On the other hand we have to take into consideration that Freud's clinical practice and the questions arising from it form the explicit starting point of his attempt to write a scientific psychology. To use his own words: "[the quantitative conception] ... is derived directly from pathological clinical observation especially where excessively intense ideas were concerned – in hysteria and obsessions, in which as we shall see, the quantitative characteristic emerges more plainly than in the normal. Processes such as stimulus, substitution, conversion and discharge, which had to be described here, ..., directly suggested the conception of neuronal excitation as quantity in a state of flow. It seemed legitimate to attempt to generalize what was recognized there" (Freud, 1950*a*: 295-96).

Freud started with his own private clinical practice in 1886 after he completed his internship with Charcot in Paris where he was introduced in the world of hysteria. In the papers he wrote between 1890 and 1895 we can see how Freud tackles the challenge his experience with Charcot offered him. Where Charcot was confronted with the impossibility to explain hysteria and hysterical phenomena on a purely anatomic or physiologic ground, Freud took things a decisive step forward by looking for an explanation in a different, i.e. psychological field.[2] His early theoretical developments concerning hysteria and psychopathology in general culminate in the book he wrote in cooperation with Breuer, *Studies on Hysteria* (1895*d*). In it he clearly distances himself from the idea that hysteria can be explained by a dissociation of consciousness that is grounded in a degeneration of the nervous system. This reductionist physiological explanation is replaced by a psychological one in which the mechanism of defence plays a central role. This turn to the psyche and psychological mechanisms gives then rise to a psychology of speech and of the unwillingness to know, a psychology of recollecting and repressing (Geerardyn, 1997: 126). In light of the *Studies on Hysteria* we can read the *Project* as Freud's attempt to create a theory that can explain the psychical phenomena and mechanisms he was confronted with in his consulting room. This theory can be qualified as a theory of memory and consciousness, since it are these functions the treatment operates on by means of speech. And the fact that the psyche rather than the brain is the object of his research might indeed explain the fact that Freud at a certain point 'mutilates' the neurological theories and classic mechanistic approach of his time in order to do right to his object (Van de Vijver & Geerardyn,

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[1] Pribram & Gill develop this argument further and argue with a lot of vigour that Freudian metapsychology can be seen as a "biological cognitive control theory based on an explicit neuropsychology" (Pribram & Gill, 1976: 14).

[2] See: 'Psychical treatment' (1890*a*), 'A case of successful treatment by hypnotism' (1892-93), 'Preface and footnotes to the translation of Charcot's Tuesday lectures' (1892-94), 'On the psychical mechanism of hysterical phenomena: Preliminary Communication' (1893*a*), 'Some points for a comparative study of organic and hysterical motor paralyses' (1893*c*), 'Lecture 'On the psychical mechanism of hysterical phenomena' (1893*h*), 'The neuro-psychoses of defence' (1894*a*), 'On the grounds for detaching a particular syndrome from neurasthenia under the description 'anxiety neurosis'' (1895*b*), 'Obsessions and phobias, their psychical mechanism an their aetiology' (1895*c*). These texts show how Freud starts out by searching for the psychical mechanism that can explain hysterical and other neurotic phenomena and how this search finally broadens to an attempt to provide a general explanation for genesis and organisation of the mental apparatus.

1992: xix). This implies that we can by no means accuse Freud of any reductionism but it is equally too simplistic to state that he used neurological language only in a metaphorical way. Freud wanted to develop a scientific psychological theory capable of describing the causality of linguistic and psychical phenomena, a causality that cannot be reduced to the functioning of the brain (ibid.: xxiii-xxiv).

1.2 The *Project* and the Question of Anticipation

In one passage of the *Project* it becomes particularly clear how Freud breaks quite radically with the scientist reductionist way of thinking to create room for the psychical as a relatively independent level of organisation. It deals with the question of satisfaction for the human infant in a state of life need: "... this innervation calls for an alteration in the external world (supply of nourishment, proximity of the sexual object) which, as a specific action, can only be brought about in definite ways. At first, the human organism is incapable of bringing about the specific action. It takes place by extraneous help, when the attention of an experienced person is drawn to the child's state by discharge along the path of internal change. In this way this path of discharge acquires a secondary function of the highest importance, that of communication, and the initial helplessness of human beings is the primal source of all moral motives" (Freud, 1950*a*: 318). So, according to Freud, the psychical emerges where the neurological machinery leaves the human infant helpless and necessitates an intervention of another human. Moreover, this intervention acts as an interpretation in that the adult 'reads' the external manifestations of the vain attempts of the infant as an expression of need, thus as a communication. One can say that the adult interprets the child's reaction as language, or that the adult *anticipates* the infant as a subject of a linguistic social bond. This brings us at the first idea concerning anticipation and dynamic systems we develop here. In line with the suggestions Van de Vijver (1998: 36) made we consider anticipation as a dynamic movement or behaviour that takes place between systems and their environment and that opens the possibility for each of the participants to be changed by it (Van de Vijver, 1998: 36). In an interaction of this kind: "(...) the goal(s) even if it is recognizable *aposteriori* and *globally*, is never fully driving the behaviour *apriori* and *locally*" (ibid.: 36)[3]. In that sense, the psychical system Freud develops in his *Project* has an anticipatory capacity that is primordially structured by the

[3] This definition of anticipation differs from Rosen's definition: "An anticipatory system is a system containing a predictive model of itself and/or of its environment, which allows it to change state at an instant in accord with the model's predictions pertaining to a later instant" (Rosen, 1985: 339). The difference pertains to the externalist stance Rosen expresses: "Anticipatory systems are to him not instances of complex, self-organizational and autonomous systems that are auto-constructive while building models from the environment. System and environment are taken to be separable here, and the problem of stabilization between these two separable poles is solved in quite classical Neo-Darwinian terms" (Van de Vijver, 1998: 35). In this paper we deal with strong anticipation, that is not, like weak anticipation, predictable. If we state that goals drive the behaviour of the system in anticipation this implies a differentiation of an anticipatory movement from a mechanistic movement. The goals are however not explicitated a priori, they are built during the movement, i.e. during the interaction of the system with its environment, and can only be identified in a retroactive manner.

anticipation of a desiring other, for instance the mother of the infant. Taking the different essential elements of this anticipatory system into account, perception, memory and consciousness can be viewed as the three principle subsystems Freud distinguishes. These subsystems interact with each other and with the environment and are governed by the pleasure principle. This allows us to show how Freud can provide a basis for a dynamical approach of anticipatory systems in which (i) the particular history of the interaction of the system with its environment, (ii) its inscription in a memory system and (iii) the development of an attention mechanism are of crucial importance.

2 The Anatomy and Fundamental Principles of Freud's Mental Apparatus

2.1 The Primary and Secondary Function

Two main hypotheses ground Freud's scientific psychology: 1. the notion of quantity and 2. the neuron theory. Psychic processes are defined as "quantitatively determinate states of specifiable material particles" (Freud, 1950*a*: 295) in that quantity distinguishes activity from rest while the material particles are identified as the neurons, which are guided by the principle of inertia and strive to divest themselves of quantity. This is possible because of the structural dichotomy of the neuronal apparatus in a sensory and a motor part. By means of a reflex movement the quantity that was received by the sensory neurones is transmitted to the motor neurones that allow an abreaction of the quantity through their connection with the muscles. This forms the primary function. Development on this level implies that these paths of discharge that result in a cessation of the stimulus are chosen and retained. This primary way of functioning falls short in case the stimulus comes from the interior of the body. The endogenous stimuli – "which have their origin in the cells of the body and give rise to the major needs: hunger, respiration, sexuality" (ibid.: 297) – bring the organism in the state of life need, that can only be resolved by means of a specific action that enables in the outside world the cessation of the stimulus. This state requires from the organism to withdraw from its primary way of functioning since the execution of the specific action supposes the temporary retention of quantity – the secondary function. It clearly are the endogenous stimuli – the drives as Freud will later call them – that bring an organism to a more complex way of functioning and transform the original inertia principle in a tendency to keep the amount of quantity as low as possible. This does not imply however that the original principle is replaced by the second one, but rather that the latter exists next to the primary way of functioning: "All the functions of the nervous system can be comprised either under the aspect of the primary function or of the secondary one imposed by the exigencies of life" (ibid.: 297).

2.2 The Memory System

Translated to the neurones this provides us with a distinction between filled and empty neurones. Further, the secondary function requires the hypothesis of the contact-barriers – resistances against discharge situated in the contacts between the neurones – and a memory, or "a capacity for being permanently altered by single occurrences" (ibid.: 299). This is the capacity of the memory cells or ψ neurones, which are to be distinguished from the perception cells or ϕ neurones. Thus we have two different neuron systems: 1. a perception system consisting of permeable neurones in which the contact-barriers do not play a significant role, and 2. a memory system of impermeable neurones that allows only a partial passage of the flow of excitation and that can be permanently changed by that flow. Next to these two systems Freud also distinguishes the consciousness system, ω, that is responsible for conscious awareness.

Every neuron of the memory system has several contact-barriers and the facilitation or *Bahnung* of each barrier is independent of all other facilitations. Memory is then represented by the differences between the facilitations of the barriers, by means of which memory can determine the direction of the flow of quantity in a decisive way, in that it decides which pathway through the system is chosen (ibid.: 300). Memory also reconciles the demands of both the state of life need and the principle of inertia since a facilitation can replace quantity: whenever a facilitation is installed, then the retention of the quantity itself is no longer necessary. In that sense memory serves the primary function and the development of the memory system, or still, every psychical acquisition, consists in the partial and topical lifting of the resistances in the contact-barriers (ibid.: 302). Strictly speaking then memory and memory system are not equivalent terms: memory is neither situated in the neurones, nor in the contact-barriers, nor in the facilitations, but is represented by the differences between facilitations. In this way Freud conceptualises memory as a dynamic process and the memory system as a system that receives stimuli from the outside world via the ϕ neurones and from the interior of the body via the ψ conduction paths. Against stimuli from the outside it is protected by the quantity shields or the nerve-endings of ϕ while no such protection exists against the endogenous stimuli. Up to a certain extent the anatomy of the system is built in such a way that it keeps off quantity. The system itself consists of ramified facilitations of different size which end in several terminal points (ibid.: 314). This has the following consequence: "The quantity of the ϕ excitation is expressed in ψ by complication" – this means that the quantity progresses along several paths and in this way several neurones are cathected – "its quality is expressed topographically, since, according to their anatomical relations, the different sense-organs are in communication through ϕ only with particular ψ neurones" (ibid.: 315). The endogenous excitation reaches the nuclear neurones of the memory system via the ψ conduction pathways.

3 The Organisation and Functioning of Memory as a Function of the Primary Experiences of Pain and Satisfaction

3.1 The Primary Experience of Pain

Freud distinguishes two sorts of primary experiences that have a decisive influence on the organisation and functioning of the memory system: the primary experiences of pain and satisfaction. The first is linked with excitation stemming from outside while the latter has to do with endogenous stimulation. When large quantities break into the memory system we experience pain, which can be considered as one of the most imperative psychical processes. Freud compares it to a lightning strike because the large quantities associated with pain cause a permanent and complete facilitation of the contact-barriers between the ψ neurones making them completely permeable. When the memory system is confronted with pain this gives rise: "1. to a large rise in level, which is felt as unpleasure by ω, 2. to an inclination to discharge, which can be modified in certain directions, and 3. to a facilitation between the latter [the inclination to discharge] and a mnemic image of the object which excites the pain" (ibid.: 320). These three processes act as a memory complex: when the mnemic image of the hostile object is freshly cathected the unpleasure and a tendency to discharge automatically arise. The process of remembering a painful experience does not involve external quantity, because here unpleasure is released from the interior of the body through what Freud calls key or secretory neurones. The experience of pain establishes a facilitation between the mnemic image of the hostile object and the key neurones, enabling these neurones to cause unpleasure whenever the mnemic image is reactivated.

3.2 The Primary Experience of Satisfaction

As we already mentioned above, the initial experience of satisfaction requires the intervention of foreign help. An accumulation of endogenous excitation in the nuclear neurones of the memory system will give rise to a state of urgency or life need. A child will then try to resolve this via the path of internal change or a reflex movement, which involves speechinnervation. The fellow human being notices the external manifestations of this vain effort and interprets it as the expression of a specific life need, thus as a *communication*. He can then perform the specific action in the outside world which leads to the experience of satisfaction. This experience too involves three processes in the memory system: "1. a lasting discharge is effected and so the urgency which had produced unpleasure in ω is brought to an end; 2. a cathexis of one (or several) of the neurones which correspond to the perception of an object occurs in the pallium; and 3. at other points in the pallium information arrives of the discharge of the released reflex movement which follows upon the specific action" (ibid.: 318). Also a facilitation is installed between this cathexis and the nuclear neurones according to the law of association by simultaneity which states that the barriers between neurons that are cathected at the same time become facilitated since the quantity flows more easily in the direction of a cathected neuron than in the

direction of an empty neuron (ibid.: 319). When one of these neurones is again cathected the excitation flows more easily in the direction of the neurones it was already associated with since the path between them is facilitated. Applied to the experience of satisfaction we can thus state that in case of a renewal of the wishful state the cathexis of the nuclear neurones will automatically transfer to the two memories[4].

Both the experience of pain and the experience of satisfaction leave residues behind, respectively affects and wishful states that will start functioning as imperative motives for the flow of quantity in the memory system. The wishful states lead to an attraction towards the mnemic image of the object wished for – the primary wishful attraction – and the experience of pain leads to a repulsion against keeping the mnemic image of the hostile object cathected – primary defence.

4 The Primordial Anticipation of the (M)Other

4.1 From the State of Life Need to Anticipation

Earlier on we stated that memory is represented by the differences between the facilitations of the memory system and that memory can be seen as a dynamic process that determines the flow of quantity in the system. Here we discover in which way the primary experiences of satisfaction and pain structure memory in that they realize a first fixation of certain facilitations, and hence of the differences between facilitations. They introduce historicity and particularity into memory, which can be linked with the fact that these primary experiences always imply an interpreting/interviening other. For the experience of satisfaction this has been explicitly stated, but it surely is an important element of the experience of pain as well[5].

This brings us back to the idea that the anticipatory capacity of the psychic system Freud is primordially structured by the anticipation of a desiring other. Let us consider therefore the initial situation of life need more closely. What we have here is a reflex-driven organism incapable of seeing to its own needs, a rudiment of a system to which we cannot attribute any anticipatory capacity in the strict sense, since it lacks a developed memory system and the capacity for abstraction. In other words, it lacks the capacity to build representations of past experiences that can potentially be extrapolated to particular future instances (Van de Vijver, 1998: 36). Living, as it where, in the tyranny of the here and now it nevertheless is actively engaged in an anticipation. It is *driven* to an interaction with its environment by excitation originating in its own body, by the drives he cannot escape from[6]. In this way, the organism is forced to overcome its habitual way of functioning and to adopt a more complex way of functioning that implies an orientation towards the outside world. This orientation is the prerequisite of

[4] Freud calls this the wishful activation (ibid.:319)

[5] In Freud's words: " (...) an object like this [the fellow human-being] was simultaneously the subject's first satisfying object and further his first hostile object, as well as his sole helping power. For this reason it is in relation to a fellow human-being that a human-being learns to cognize" (ibid.: 331)

[6] In his paper on 'Drives and their vicissitudes' (1915c: 120), Freud defines the drive as a constant force that is by definition active.

the anticipatory interaction that fundamentally changes the organism in that it enables the fellow human being to pull the organism into the anticipatory movement. While we could not attribute an anticipatory capacity to the organism per se we can surely qualify this desiring other as a truly anticipatory system for it has a developed memory and a capacity for abstraction. The memory system of the latter is a motive-structure, while his memory is a dynamic process the direction of which is determined by wishful activations and defences structured by representations of past pleasurable and unpleasurable experiences and that has a profound influence on the way he approaches the world surrounding him. The very way in which this fellow human being approaches the infant will thus be determined by his particular history; by the way this history structured his own memory.

4.2 The Anticipation Between Two Dynamically Organised Psychic Systems

Let us now consider the interaction between mother and child. In the ideal situation the child is a wished-for object, or stated differently, an object of desire Accordingly, it will be invested as such. However, the wish that invests the child implies a story for and about it, a story written well before it can read it, a story that anticipates the person it will become. It is through this story that the needs of the infant are interpreted by the mother, and it is in this way that the mother pulls the infant into the anticipatory movement that will fundamentally change it from a reflex driven organism into a subject of a linguistic social bond: its state of life need and the cessation of it will be marked by the signifiers of the story that was waiting for him. Through interpretation the mother sets the goal of the anticipatory movement of the infant – for example the need to be fed by her – and this goal isn't what drove the infant in the movement in the first place since it is installed in a retroactive manner: it became the goal only *after* the interpretation by the mother. As a consequence the identity of the infant is changed, which can be found in the structuration of its memory in the establishment of a first facilitation together with the attraction towards the primary object wished for – for example the breast of the mother. The infant can now anticipate on this object when in a state of wishful activation, or in other words it acquired an anticipatory capacity. *The process described here comes down to a movement that changes a reflex-driven organism in a system with an anticipatory capacity(i.e. an intentional system).* This change is of course not an endpoint and does not foreclose the possibility of further change, but rather is the prerequisite for it. Form and structure of any future interaction however will be at least partially determined by this primordial anticipation.

5 The Dynamic Anticipatory Structure of The Psychical System

5.2 Secondary Processes and the Ego

All we have described so far concerning memory and the functioning of memory and specifically concerning primary attraction and defence falls under the primary processes. The secondary processes, which can be considered as truly anticipatory processes, require the ego which Freud defines as a group of ψ neurones that is constantly cathected and that developed through repeated reception of endogenous excitation in certain nuclear neurones and in the accompanying facilitations, or elsewhere following: "the totality of the ψ cathexes, at a given time, in which a permanent component is distinguished from a changing one" (ibid.: 323). The changing part allows the ego to maintain a constant level of cathexis: when the level rises the ego will expand its range over more neurones; when it sinks the ego will narrow concentrically (ibid.: 370). Further, two barriers maintain the level of cathexis of the ego and prevent the release of unpleasure: one against motility – i.e. against the cathexis of motor images before the appearance of an indication of reality – and against a too strong cathexis of the wishful image – i.e. to prevent a hallucinatory wishfulfillment. When the motor images are cathected together with the wish, before the wished-for object is there in reality, pleasure will fail to appear and finally, because the continuous endogenous excitation, unpleasure will arise. The ego now has a general inhibiting influence on the primary psychical processes because it leads the excitation toward a side-cathexis and in this way prevents the psychical system of being damaged in two different situations. The first dangerous situation presents itself when the system is in a state of wishful activation, cathects the mnemic image of the object and sets going the related discharge when the object wished for is not present in the outside world. The system should also be able to foresee the re-cathexis of the mnemic image of a hostile object so that it can prevent the release of unpleasure by a side-cathexis. The ego thus needs an indication that can make it anticipate on these two situations. Here the attention mechanism comes in, of which the most important element is the indication of reality or the information of discharge from the system consciousness (ibid.: 325). Every external perception leads to a qualitative excitation of the consciousness system and accordingly to a discharge an indication of which will then reach the memory system, as does any other discharge. When the ego exercises its general inhibiting influence a wishful cathexis can only reach a limited intensity while external perception always leads to an indication of reality – no matter how intense it is: through experience the system can then learn to postpone the initiation of discharge until the indication of reality has arrived and in this way the experience of an hallucinatory satisfaction is avoided. The indication of reality can also help the system to anticipate on the possible cathexis of the mnemic image of a hostile object. In this case, the indication functions as a signal and learns the memory system to send out excitation in the direction the indication came from so that the ego can put up a side-cathexis that will then prevent the full release of unpleasure.

5.2 Thought Processes and Knowing

Where the ego and the indications of quality are introduced as conditions for the anticipatory secondary processes and where they initially serve the pleasure principle, they also introduce the possibility of thought processes and knowing. Most anticipatory thought processes Freud distinguishes are driven by a wishful activation. He considers knowing as something that is primarily attained in relation to a fellow human-being (ibid.: 331). A first important thought process arises from the situation in which the psychical system in a state of wishful activation is confronted with a perceptual complex that only partially tallies with the cathected memory complex of the wished for object. It can then actively search for an identity between the perceptual complex and the wishful cathexis. This situation will give rise to a state of expectancy and a primary form of judgement: the perceptual complex becomes dissected in a variable and a constant part. On the basis of this judgement a reproductive thought process takes place by which the connections of the dissonant part of the perception complex are then explored until the missing part of the wishful cathexis is found, while this wishful complex remains cathected (ibid.: 328). As a rule this establishes an image of the movement that has to be executed to attain the identity between perception and wishful cathexis. With the appearance of the indication of reality, discharge and thus release of pleasure is now possible. It is clear that attention plays a central role here for it is on the basis of the information of discharge in the system consciousness that the memory system will cathect certain neurones. In this way the neurones of the perception complex are precathected in the memory system, which implies that the perception finds part of its neurones precathected by the wish. The difference between the cathexis realized by the attention mechanism and the perception complex will then lead to the thought process.

5.3 Speech-Association and Indications of Speech-Discharge

It is of great interest for the psychical system to establish a general state of attention and expectancy – thus of anticipation – for *all* perceptions and not only for those that partially resemble the wishful object, because the wished for perception might be among them. In the same sense, it is important for the psychical system to know perceptions as far as possible, i.e. that it should be able to follow the chain of associations from the perception as far as possible. For this something is needed that retains the attention, indications of reality concerning the flow of excitation in the memory system (ibid.: 361-362). Here Freud introduces speech-association and the indications of speech-discharge which play an important role in development, since speechinnervation belongs originally to the path towards internal change. It is this innervation that in the initial experience of satisfaction serves as communication and makes the specific action possible. We can further distinguish two main forms of speech-association, the first of which concerns the association of a scream with an object that hurts: the information of one's own scream permits a characterisation of the object which makes it possible to pay attention to memories of it that incite unpleasure

(ibid.: 367). The second one consists of the tendency to imitate objects that produce sounds, which opens up the possibility to find the movement images of these sounds and thus to know and consciously remember them. This brings us at the path taken in order to know one's fellow human being. As we have seen the perceptual complex of the other is initially divided in a constant and a changing part. The latter can be understood through memory work that consists in the association of it with a message of the own body. Once speech-association has developed, it can function as a means to retain attention. Speech-association consists of the association of ψ neurones with the neurones of the sound representations who in their turn are associated with the motoric speech images (ibid.: 365). Discharge along this path produces information of speech-discharge, indications of quality that allow conscious thinking. So we can see how a subject, through his search for movement images that are compatible with the sounds a fellow human being utters, develops speech-association which allows a dialectic between the expectancy caused by the wishful activation and the information of speech-discharge.

The anticipatory capacity of the psychical system is thus mediated on the one hand by the dynamics between the three main subsystems of the psychical system – perception, memory and consciousness –, and on the other hand by the dynamics between the system and its environment, more specifically a fellow human being. These dynamics are always governed by the pleasure principle. Further, it is clear that anticipatory movements of a psychical system always imply, next to memory and a capacity for abstraction, a wishful activation and a related state of expectancy. In the anticipatory movement the ego and the attention mechanism play a central role. And a general state of anticipation is made possible by speech-association in which the fellow human being ones again plays an important role.

6 Conclusion

Starting from the question of the development and origin of an anticipatory psychical system, we were led to the hypothesis that the anticipatory capacity of a psychical system is primordially structured by the anticipation of a desiring other. Through this anticipation a structuration of the memory of the infant takes place, a first facilitation is permanently established together with an attraction towards the primary object wished for. The primordial anticipation changes the infant from a reflex-driven organism to a system with an anticipatory capacity that is part of a linguistic social bond. It also establishes the possibility for further change through anticipatory movement with the one restriction that the form and structure of any future interaction of an anticipatory nature will be at least partially determined by this primordial anticipation. This implies the introduction of historicity and particularity in thinking about anticipation and dynamic psychical systems. Further, we distinguished the memory system and the attention mechanism as two essential elements in the dynamic anticipatory structure of psychical systems. Freud's *Project* is in this way shown apt to provide a basis for a dynamical approach of anticipatory systems of which (i) the

particular history of the interaction of the system with its environment, (ii) its inscription in a memory system and (iii) the development of an attention mechanism are the corner stones.

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