

From 62 interviews on "the worst and the best episode of your life": relationships between internal working models and a grammatical scale of subject-object affective connections* .

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Summary

Authors try to demonstrate, through experimental work, that only some formal properties of the language, as subject-object grammatical connections and distribution of positive and negative hedonic words between them, have a significant discriminating power among attachment groups. Attachment groups were previously classified through Hazan and Shaver (1987) autoclassification of "attachment types", that is tracking subject general orientation towards any object without asking the subjects to enter in mental interaction with specific objects. Authors did not use Main's Adult Attachment Interview (Main & Goldwin, 1984),. since it performs a classification of subject's attachment with specific objects from infancy, while their conception stresses the idea of internal working models (IWM), as plastic motivational forces giving sensuous orientation in face of any kind of past or present object. Since IWM are supposed to be more active when evoking negative experiences, "worst" episodes (of life, or of last few days), were asked to experimental subjects. "Best" episodes were also assessed, since authors hypothesis is that some stable and potentially maladaptive structure of IWM should be reliably assessed even in favourable relationship conditions. Statistical analysis of the results of the linguistic scale of "Subject Object Affective Connections" on 62 subjects, allow the consideration that each attachment type is presenting different expected positive/negative distribution of hedonic condition between subject and object both in "worst" and "best" relational conditions. A coherent "unconscious belief" could also be found for each group corresponding to different expected influences of the object on subject's well-being.

Research on attachment processes (Bowlby, 1969, 1973, 1980, 1988, Ainsworth, 1982, Main, 1996, Fonagy et al. ,1996), assumes the presence of internal working models of interaction (IWM), that were formed during infancy and may support unconscious beliefs and expectations in the adult. In recent years several investigators have highlighted the existence, in adult subjects, of a reliable relationship between internal working models and style of language. Main & Goldwin (1984) proposed the use of scales for language evaluation (scales of "experience" and scales of the "mind"), in order to assess attachment types from Adult Attachment Interview protocols. Fonagy (Fonagy 1996, Fonagy et al. 1991), is tracking the pathological dysfunction of internal working models by studying Main's interviews from the

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standpoint of "Self Reflective Function" levels. Both these authors reliably discriminated adults' stable styles of thinking through careful assessment of some formal properties of language (precision versus vagueness, coherence versus incoherence of statements, metacognition versus concrete thought etc.), rather than its semantic contents. Formal properties of language were therefore indicated as expressive vehicles of mental representations that were formed during development and remained beyond conscious control. The pivotal role psychoanalysis attributed to language as a unique key of access to unconscious experience, was therefore repropounded to the general attention through controlled studies on the evocative power of individual narratives about infancy.

With the aim of following the evolution of narrative style during psychoanalytic interaction and to individuate key moments of the process, Bucci (1995,1997) proposed that high level symbolic language could be connected with non verbal systems of emotional parallel processing, through "referential" links. Bucci empirically demonstrated, through the computerised assessment of the evocative power of words, that increases in the patient's "Referential Activity" demand the intervention of the analyst. A potential connection between verbal choices and recurring unconscious models of interactive emotional processing was therefore confirmed.

Other attempts at reliable assessment of unconscious self-other patterns in the psychotherapeutic process were developed, without explicit reference to developmental theorisation. Luborsky, for example, proposed to infer the dominant relationship themes in patient's discourse ("Core Conflictual Relationship Theme", Luborsky & Crits-Christoph, 1990), from recurring explicit contents of narration. Reliable assessment was reached, from tape-recorded sessions, for linguistic redundancies of subject's "wishes", object's "responses" and "responses" of the self. Other recurring models of interaction were pragmatically inferred from patient's narratives as "FRAMES of mind" (Dahl,1988),"Role Relationship Models" (Horowitz & Eells T., 1993) and others. Finally Spence (1995) recently proposed the co-occurrence of the me/you linguistic correlation in therapeutic discourse as a vital indicator of a functional therapeutic relationship. All these findings depose for a structured and stable organisation of prototypic memories of self-other interactions that inform psychotherapeutic processes and all suggest significant connections with parallel developmental findings about internal working models' persistence in adults. Most of these authors working on process research, however, though implicitly sharing the contemporary developmental focus on self-other representations, took their pragmatic options without focusing on the potential gap between unconscious mental representations and semantic contents of the narratives. Difficulties were encountered in assessing both the essential structure of a generalised intrapsychic pattern as its range of variation in varying contexts of interaction. The consequence was an ambiguity, that sometimes remained, when defining self-other patterns of interaction, whether a general pattern such as an internal working model can be inferred, as opposed to an average behavioural pattern, when comparing interactions with different objects in different narrative contexts.

Following a developmental point of view, we propose a new interactive measure of narratives that tracks only some potentially stable features of the narrative texture that we think could be attributed to the unconscious influence of internal working models. We started from the consideration of an existing isomorphism

between models of interaction and grammatical relationships of subjects and objects as governed by verbs in individual's narratives. We hypothesised that interactions with different objects may intuitively be grouped in sensuous memory of interactions as "worst" and "best" for one's own self, rather than for explicit semantic contents. Grammatical positions of subjects and objects together with distribution between them of positive and negative affect's arousal, are the linguistic features we have chosen. These are the expressive properties of language that we thought as relatively independent from the specific objects that are evoked in the narratives. Therefore our pivotal assumption is that different types of grammatical connections of subject with objects and the distribution of positive and negative affects among them, could be highly correlated with different working models of experience.

Internal working models

Our developmental point is that the adaptive meaning of internal working models for the individual lies in the availability of an enduring state of "self efficacy" (Broucek 1979) or "felt security" (Baldwin et al. 1997), thus facilitating subject's sense of protection during the exchanges with his/her objects. The functioning of internal working models can be explained as the result of particular memories that are not linked to distinct external features of the object (Stern, 1986, Emde, 1988), but to the object's expected influences in determining subjects' states (Sander, 1985). Since the perception of objects occurs under the effect of such memories, objects are forced to react to selective expectations. We may conclude that such memories from infancy have a part in determining the behaviour of the objects, thus favouring the clinical phenomenon of 'repetition compulsion' through idiosyncratic defensive schemata influencing new relationship experiences. Therefore we proposed that the functioning of internal working models could be governed by "prototypic sensuous expectations of safety" (Seganti, 1996), reporting the hedonic effects of earlier relationships on subjects' internal states together with the auto-regulative reactions that were felt as necessary in the aim to negotiate the negative influence of others. Westen (1997) also recently proposed that learned orientations in affects' regulation could be a base for a psychoanalytical sound theory of motivation.

Following infant research, there are two fundamental adaptive strategies to cope with inevitable misattunements occurring in the relationship with objects. The first is the "auto-regulative" strategy that stresses individual auto-organisation when faced with expected negative experience from the objects. The second is the "etero-regulative" strategy forcing individuals to expect protection and well-being from their objects. The prevalence of one of the two strategies has to be considered as a stable personality trait. Ainsworth (1982) and Main & Goldwin (1984), both demonstrated that a reliable classification of three distinct and enduring attachment styles could be achieved, both in the child and in the adult, starting either from the infant's behaviour or from the adult's narration of relationships. In the case of "avoidant" or "dismissing" style, we propose that object's incapacity to align itself to subject's states is expected and a main auto-regulative component is present in subject's behaviour. In "anxious resistant" or "preoccupied" style, subjects seem prone to feel they should be supportive for their objects even in difficult relational situations. Finally we propose that the third, "secure

autonomous", attachment style could be defined as a synergetic integration (or a stable compromise formation) of withdrawal and approach mechanisms that sustain both the relationship and the individual.

Research hypothesis

We wanted to demonstrate that subjects that were classified in one of the three main attachment types (avoidant, anxious-resistant and secure), could be discriminated from their narratives through their differing grammatical distribution of affective arousal through subject and object.

Starting from the hypothesis that internal working models have an adaptive role during negative experiences, we presumed them to be specifically activated in prototypic forms during the narratives of negative events. We also followed the hypothesis that non-prototypic forms of them ("variations") should also appear, in the form of defensive and potentially disadaptive features, even in the narrative of positive events. Thus our method of assessment was originally named the Prototype and Variation Method (PVM, Seganti et al 1994). We therefore proceeded by comparing subject's auto-classification of attachment style with the narratives of both "worst" and "best" episode of their life.

Since prototypic expectations of the influence of others were intended as being relatively independent from specific narrated facts, negative and positive events were indifferently compared when drawn from experiences regarding either the same or different objects from past or present. Our expectation regarding the "worst" episode for the avoidant group was to find a higher concentration of negative items (or less positive items) regarding the perception of the objects rather than the subjects. The anxious group was expected to show higher positive items (or lower negative items) related to objects rather than subjects. Our final assumption was that the secure group should be posited in the middle of the two extreme groups and have a higher variability of connection types. Regarding the "best" episode, our expectation was that, beyond the demonstration of the supposed subject-object variables correlation within the same group, our study could also reveal significant differences in the conception of what's "best" for different groups of attachment.

Design of the research.

Procedure

78 subjects were asked to respond to a questionnaire. Auto-definition of attachment type (Hazan & Shaver, 1987) was asked first and followed by the request to write the "worst and the "best episode of your life" (Seganti & al. 1995). Each episode was assessed through a Scale of Subject Object Affective Connections that expresses the intensity of each type of affective connection alongside each episode. The results of the scale were compared for overall statistical significance (Multivariate Analysis of Variance) and for discriminant power of discourse variables between different groups (Discriminant analysis)..

Sample

The sample mainly consisted of students from various courses. The questionnaire was anonymous. Of the 78 initial subjects (male 42%, female 58%), the totality responded to the auto classification, while only 62 responded to both auto-

classification and "worst" and "best" episodes. Mean age was 25 years ranging from 17 to 36.

Classification of attachment

We needed a reliable and fast instrument in order to classify attachment types in a relatively large sample. AAI (Adult Attachment Interview) by Main (1986) was excluded both for technical and for theoretical reasons, since it performs a classification of subject's attachment with specific objects from infancy. On the contrary our conception stresses the idea of internal working models as dynamic forces from infancy giving prototypic sensuous orientation towards any kind of past or present object. Therefore our choice between different instruments fell on self-evaluation of general attachment types from Hazan & Shaver (1987). This instrument asks each subject to recognise himself/herself in one of three short vignettes corresponding to one of the three main attachment types. Reliability of the instrument has been retested in several studies (Baldwin et al; 1977) and validated through correlation with an attachment style questionnaire, based on the three dimensions of "close" "depend" and "anxiety" (Collins & Read 1990). It has to be considered, however, that Hazan & Shaver attachment types may not correspond with Ainsworth and Main attachment styles, with the former probably indicating adult's more general orientation with respect to any object before entering into specific mental interaction, while the latter indicating attachment as it was historically developed with respect to main objects from infancy.

Fig 1. From Hazan & Shaver (1987). Attachment Type Measure

Question: which of the following best describe your feelings?

1) (*Secure*) - I find it relatively easy to get close to others and I am comfortable depending on them and having them depend on me. I don't often worry about being abandoned or about someone getting too close to me.

2) (*Avoidant*) - I am somewhat uncomfortable being close to others; I find it difficult to trust them, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

3) (*Anxious*) - I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me and won't want to stay with me. I want to merge completely with another person, and this desire sometimes scares people away.

Narratives of life episodes

After responding to the auto classification of attachment type, subjects were asked to write the one episode they considered as the "worst" of their life, i.e. the one they felt had left the most negative consequences on themselves. When subjects could choose fortuitous accidents, they were recommended to describe their own feelings and the role of the main object of the narrative. Ample freedom in the choice was also recommended and a maximum time of 30' was also proposed. Regarding the "best" episode of life, the one that had left a positive mark on subjects' lives, we suggested that it could sometimes be a solution or an opening of the "worst" one.

Assessment of the narratives: "Scale of Subject/Object Affective Connections"

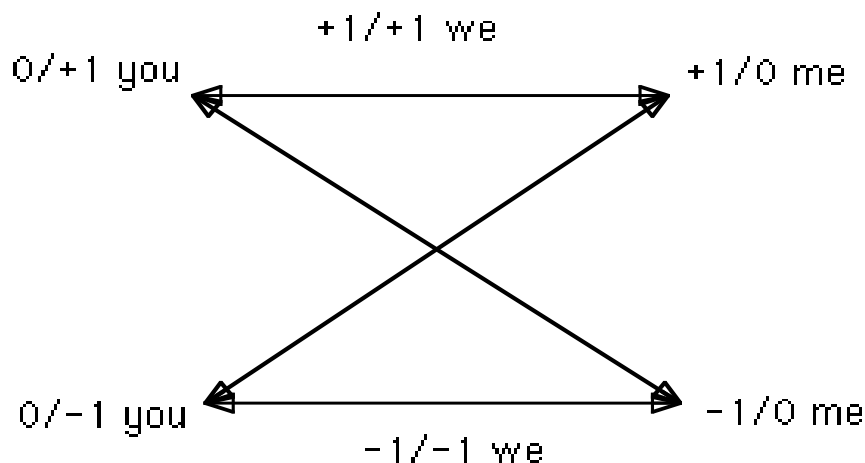
Subjects' and objects' grammatical positions and consequent distributions of positive and negative affect arousal were assessed for each narrative. The system of assessment that we created is based on the previous agreement of independent judges

on the score of single word positive and negative evocative power. A fixed score is therefore attributed to each word, although if this score may vary depending on its attribution to the sole subject or to the sole object or to both. In order to quantify subject-object influences during the interviews, either in a positive or in a negative sense, we used a linguistic scale that we called "Scale of Subject / Object Affective Connections" (Seganti, 1995). The scale quantifies words expressing subject's hedonic experience of himself and of his subjective objects. The positive or negative intensity of each connection is assessed on a 6 point scale (+3/-3)¹. The Scale therefore attributes to each word a fixed positive or negative score (neutral and ambiguous words are not scored). The result of the scoring (fig. 2) is eight items, two are positive and negative for the sole subject, two are positive and negative for the sole object, two are positive or negative for both and two positive for one and negative for the other. Scores of single words in the phrase are attributed under the domain of the verb so that each word attribution to the subject or to the object depend on first/third person verbs. First person of the plural(*we*) distributes positive or negative experience to both subject and object of the phrase. Finally, if a verb having a direct object complement distributes a passive and active condition between subject and object, a positive word can remain positive for the subject and become negative for the object (or the contrary). *This last feature of the scale allows us to track the ambiguities of relational discourse despite our use of unambiguous scoring for single word affective content. It therefore has to be noted that our system of assessment puts strong emphasis on the distributive role of the verb in regard to its complements .*

Fig 2. Scale of Subject/Object Connections. The scheme indicates the 8 different types of connection. Four are independent from the relationship and four are relational. Short examples for each different type of connection are given

¹The scale was pragmatically created by trying to follow the expressive "force" of words and to reach reliable independent judgement on it. It was clear from the beginning that it would be easier to use positive and negative judgement on a scale extending from -1 to +1. This solution, however, minimizes differences of expressive force among different words. We noted that a four and a six point scale could also be reliably used with good interjudge agreement, while over 6 points of range agreement abruptly decreased. As a practical procedure for assigning the intensity scores, we followed these rules: if the word was expressing activity/passivity, one point (+1 or -1) , one more point if expressing positive /negative hedonic tone, one more if expressing advantage/disadvantage for bodily self. A dictionary of 500 words was created through consensus of three independent judges with a percentage of agreement of 75% for three judges and 86% for two (Cipollone, 1996). When there was complete disagreement we proceeded to group discussion and eventually refrained from scoring the word.

SUBJECT/OBJECT POSSIBLE CONNECTIONS



INDEPENDENT FROM RELATIONSHIP	RELATIONSHIP ITEMS
SUBJECT + "I'm doing (1/0) something good (1/0)"	SUBJECT + / OBJECT + "We are doing (1/1) something good (1/1)"
SUBJECT - "I'm doing (1/0) something bad (-1/0)"	SUBJECT - / OBJECT - "we are doing (1/1) something bad (-1/-1)"
OBJECT + "You are feeling (0/1) good (0/1)"	SUBJECT + / OBJECT - " I make* (1/-1) you* (1/-1) feel (1/-1) good (1/-1)"
OBJECT - "You are feeling (0/1) bad (0/-1)"	SUBJECT - / OBJECT + "You make* (-1/1) me* (-1/1) feel (-1/1) bad (-1/1) "

*verb distributing activity and passivity between subject and object with direct object complement

The output of the scale expresses the intensity (by means of the positive and negative "force" of the words) with which each different type of positive and negative connection as experienced by the narrating subject.

Output of the Scale:

% relationship items				% independent from relationship			
S+/O+	S-/O-	S+/O-	S-/O+	S+	S-	O+	O-

For each single episode, either "worst" or "best", scale shows the percentage of each score in respect to the totality of scored words.

Since the differences in length of the interviews did not allow for a comparison on absolute data, the final results (fig. 2) of the whole episode were expressed as percentages for each of the eight items in respect to all the items of connection.

Working on percentages of connections seemed to us appropriate to render the "global" experience of the teller and of the listener who are both compelled either to follow the grammatical intertwining of negative and positive items and to oscillate from subject to object and to both, all as in a sort of "script" of interactive expectations.

Results

A) Classification of attachment

Among 78 subjects responding to the attachment vignettes, 60% (N=47) classified themselves as secure, 24% (N=19) as avoidant, 16% (N=12) as anxious. The percentages were very close to those obtained by Hazan & Shaver(1987) in a larger sample (S. 56%, Av. 25%, An. 19%) and replicated through other studies (Collins & Reed, 1990).

B) Results from the Scale of Subject / Object Affective Connections.

We proceeded first to a general assessment of all positive minus all negative items attributed to both subject and object throughout the entire episode. We called the measure "global subject positiveness" and "global object positiveness", or subject and object state of well-being for either a "worst" or "best" episodes: Since this first measure was created to stress positive and negative distribution through subjects and objects, aligned relational items were not computed in it.

$\text{Global Subject's Well-being} = \{(S+) - (S-)\} + \{(S+ O-) - (S- O+)\}$ $\text{Global Object Well-Being} = \{(O+) - (O-)\} + \{(S- O+) - (S+ O-)\}$
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Multivariate Analysis of Variance

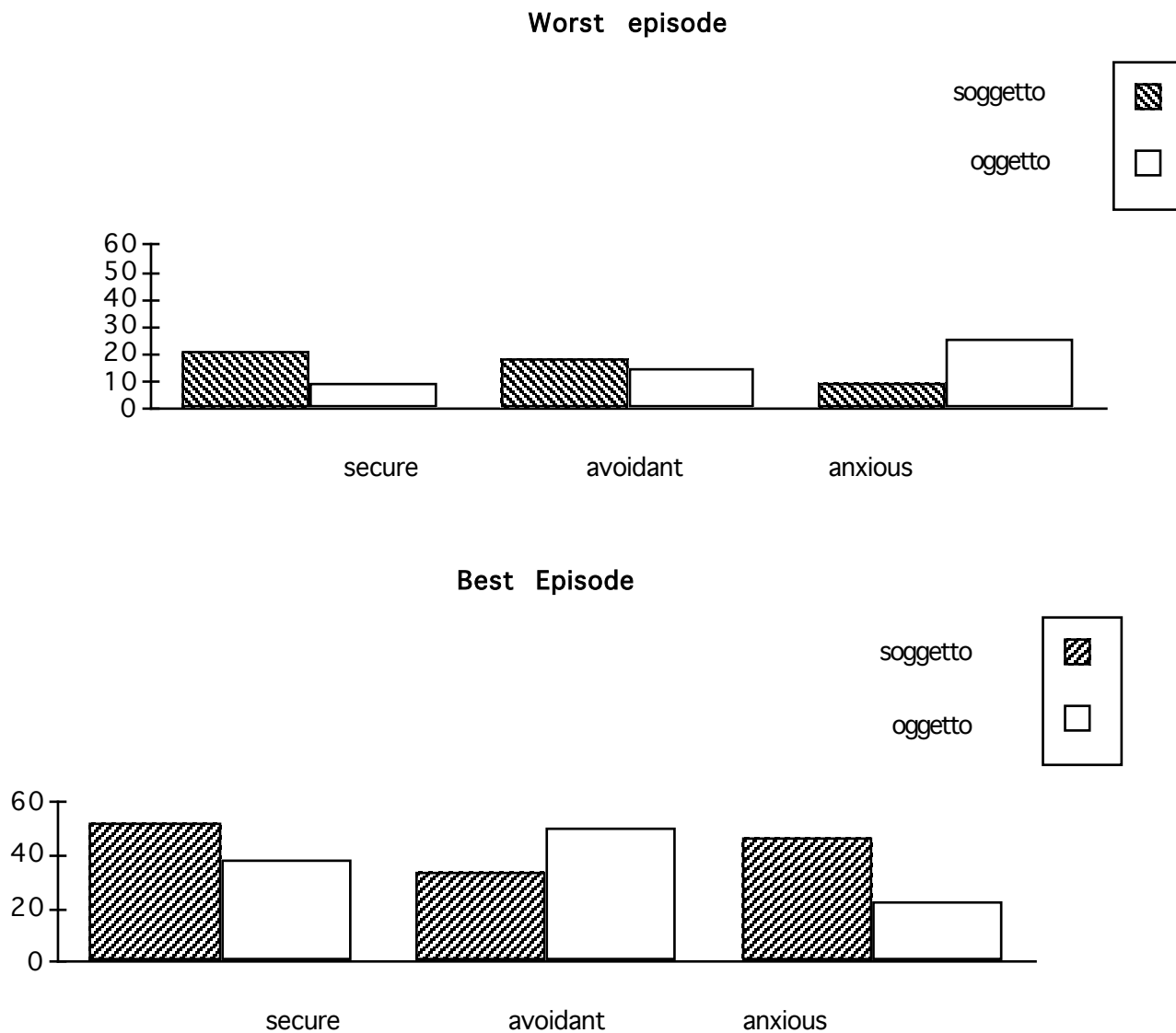
Through M.A.V. we checked the overall significance of the statistical interaction among attachment groups, worst and best episodes, subject/object global state of well being. High order Episode/Subject-Object/Group/ interactions were highly significant (p.=.000).

As we can see from fig. 4 secure subjects significantly show a characteristic higher alignment of subject-object experience in both episodes. The overview of the results for the insecure groups shows a characteristic trend of subject/object misaligned experience of well-being both in best and in worst episodes (in opposite directions for avoidant and anxious subjects). *Global evaluation of the episodes suggests that secure subjects do transpose the same style of relationship from "worst" to "best" episode and maintain a higher continuity in subject-object reciprocal positions. On the contrary both insecure groups seem to oscillate (in inverse directions) from subject to object dominant positions.*

Examining inter group significance in "worst" episodes through post hoc comparisons, our prevision about a higher negativity of the object's position in avoidant rather than in anxious subjects was significantly confirmed when comparing the position of the objects in the two groups (5 and 25 respectively p.=0,01). *This result confirms that avoidant subjects, in stressful relationships do take their objects in more negative (or less positive) consideration than anxious subjects do. On the contrary anxious subjects, when in stressful relationships, have a higher (or less negative) consideration of their objects than any other group.* Avoidant subjects also significantly differ from anxious subjects for the position they give to their objects in "best" episodes

(50 and 22 respectively, $p=0.002$). *This result is confirming that the two extreme groups, in favourable conditions of relationship, show significantly opposite perceptions of object conditions.*

Fig 4. Means of subject's and object's global measures of well-being attributed to the subject and to the object (all positive items - all negative items) in "worst" and "best" episode of 62 subjects. Graphics are separately showing attachment groups means for the subject and the objects of the narrative. High order statistic interactions between attachment groups:/ Worst and best episode/ Subject versus object /, were significant ($p = .000$)



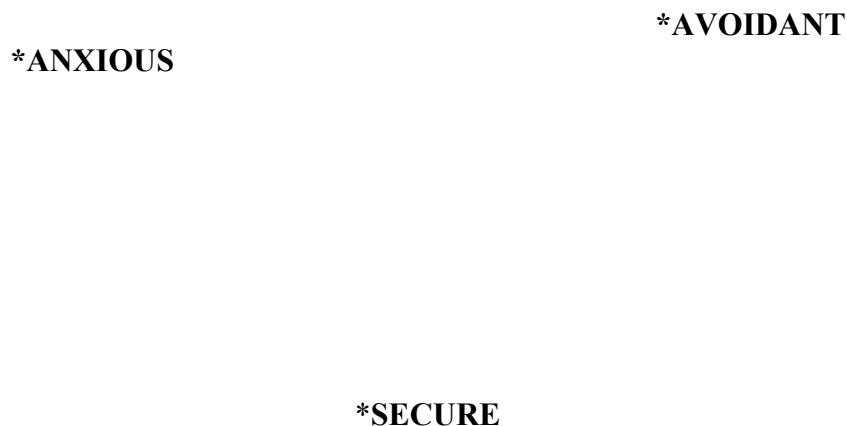
Secure subjects, in the "worst" episode though significantly differing from anxious subjects (21 and 9 respectively for the subject, $p = 0,025$ and 9 and 25 respectively for the object, $p = 0,015$), do not significantly differ from avoidant subjects. Secure subjects, however, differentiate themselves from avoidant subjects in favourable conditions, showing much higher well-being for the subject in the "best" episode (52 and 33 respectively $p = 0.001$). With regard to the theory of internal working models, a

peculiar defensive asset could be differentiated for each of the extreme groups when confronted with the negative experience of the "worst episode". Subject/object connections in "best" episodes" also confirmed that a significantly different quality of positive experience could be attributed to each group in terms of different subject-object positions in the discourse.

Discriminant Analysis

In order to test the power of classification of our system of assessment, two discriminant functions were calculated. We performed the Discriminant Analysis (fig 3.) on the outputs of all the 16 discourse variables (fig 2) for all subjects, using attachment vignette choice as the grouping variable.

Fig. 3. Plot of the three group centroid on two discriminant functions derived from Subject/Object Affective Connection variables. The first discriminant function separates avoidant from anxious subjects on the horizontal axis ($p=.00001$). The second function separates secure subjects from the two insecure types on the vertical axis ($p=.002$).



The first discriminant function separated the avoidant subjects from anxious-ambivalent subjects ($p=.00001$). The second function separated secure subjects from the two preceding groups ($p=.002$). Together the two functions correctly re-classified 89% of the avoidant subjects, 83% of the anxious ambivalent subjects and 75% of secure subjects, with a total of 81% for all subjects. The secure group showed a larger amount of subjects that were not correctly re-classified as secure, thus confirming our hypothesis that the secure relational strategy could be a hybrid when confronted with the other two strategies. These results confirm, that our scale of subject-object connections, when applied throughout the episodes, does show highly significant

statistical correlation when compared with the auto-classifications of attachment proposed by Hazan & Shaver (1987).

Post hoc comparisons were newly performed with all 16 discourse variables of our scale in order to detect those parts of the narratives that were giving a major contribution ($p > .05$) to each group characteristic scores in respect to the narratives from other groups.

Narrative characteristics for each group

A) Avoidant / anxious-ambivalent

Some examples follow, showing the type of phrase that reliably contributes to the differentiation of the scores of avoidant subjects in respect to anxious subjects. In the characteristic avoidant narrative of worst episodes, long sentences charge the object with negative items, while the subject appears to be overwhelmed in anxious narratives. *The next examples show how the essence of "avoidant style" in critical situations, could consist in an unconscious belief that the object lies in negative conditions and does not contribute to subject's well being.*

From 25M (avoidant) "worst" episode: "Mother's illness"

"I feared (-2/0) that my* (1/0) poor (-2/0) sweet (2/0) mother (1/0), could (0/1) be menaced (0/-3) by a cloud (0/-1) of mortal (0/-3) obscurity (0/-2) "

* words that are accorded with "my" are attributed to the subject even if the rest of the phrase is in third person, i.e. attributed to the object.

From 12F (avoidant) "worst episode: "Crisis of son"

"The child (0/1) was in a state of shock (0/-3) and was suffering (0/-2) for three hours* (0/-1) without° (0/-1) ceasing (0/1) to stop (0/1) his head* (0/1) and acting (0/1) as if he were mad (0/-2)

* neutral words take the sign of preceding word when present.

° negations take the contrary sign of subsequent word.

The next examples identify the anxious subject as the one who, in stressful conditions, could follow an unconscious belief to be completely dependant on object's good conditions and not to be able to maintain good conditions by him/herself

From 50 M (anxious), "worst" episode: "Paranoid mother"

"she inflicted (-3/3) on me (-1/1) long-lasting (-1/1)) accusations(-2/2) and offences (-2/2) "

From 12 F (anxious), "worst" episode "Depressive state"

"Something is always lacking (-2/2) to me (-1/1), something is always (-1/1) lacking (-2/2) to me (-1/1), the sense (-1/1) of life (-1/1), the enthusiasm (-3/3) of living (-1/1)."

In all above examples the length of the sentence can be noted, together with the quantity and the force of expressive words that distribute negative affective states. Repeated linguistic features of this kind concur in increasing the percentage of items of the same type throughout the episode.

C) Avoidant and anxious-ambivalent in "best" episodes.

In "best" episodes, positiveness for the sole subject is significantly higher in anxious subjects both as compared to avoidant or secure subjects while the positive object is

higher in avoidant than in both anxious and secure subjects. *The next example shows characteristic object's positive presence in the avoidant subject's narratives of "best" episodes.*

From 42 F (avoidant), "best" episode: "Mother-brother reconciliation"

"He waited (0/-1) outside the door (0/1) and she went (0/1) to the window and smiled (0/2) and both (0/1) waved (0/1) to each other (0/2) with their hands (0/1) "

The next example shows anxious characteristic reinforcement of independent positive subject in favourable conditions.

From 43 M (anxious), "best" episode : "The day of my marriage"

"I felt (1/0) as if I were in a wonderful (2/0) dream (2/0) and in peace (2/0) with everybody(1/0)"

Fitting in with their unconscious belief that objects well being is dependant on themselves in negative conditions, avoidant subjects, in favourable conditions, could feel they are renouncing better conditions in favour of their objects. Anxious subjects, coherently with their belief of depending on the object's well-being in worst conditions, in favourable conditions could experience their objects as renouncing to better conditions in their favour.

Secure Subjects

In worst episodes secure subjects differ from anxious and avoidant when examining the differences through positive relationship variables. *This result also qualifies the secure subject as the one that has a higher capacity to reduce relational conflictuality while in negative relationships.*

In best conditions secure Ss. show a significant surplus of subject/object shared positive scores. *It is therefore possible to state that secure subjects have a higher capacity to participate and make their objects participate in positive relationships.* An example follows of the equilibrated and prolonged positiveness that characterises secure subject's experience in "best" episodes:

From 15F (secure) "best" episode : "Independence from family"

The fact I received(1/1) from him(1/1) trust(2/2) esteem(2/2) and love(2/2), even if from an unfamiliar(-1/-1) person(2/2), gave(1/1) me(1/1) a great(1/1) deal of energy(2/2).

Clinical discussion

The results that we have proposed allow us a reconsideration of internal working models' adaptive role, by directly correlating it with interactive negotiation of tensions between subjects and objects. Failures in interactive negotiation could have determined a rigid expectation in subject/object distribution of tensions that characterise insecure groups of subjects even when in favourable conditions of relationship. A hypothesis has already been proposed in the literature (van Uzendoorn & Bakermans-Kranenburg, 1996, Blatt & Felsen, 1993) that an avoidant organisation of personality could more probably develop self-centred psychopathologies, while an anxious organisation could be oriented towards object-oriented pathologies. Secure subjects also

seemed to be more protected from pathological developments. Our experiment on a normal sample suggests that the better equilibrium attributed to secure Ss. in respect to extreme groups, could be attributed to higher confidence in maintaining the subject's well-being through relational contact. On the contrary the extreme groups seemed to have weaker (or specific and potentially idiosyncratic) expectations of improvement from relationships.

A hypothesis that we propose for explaining pathological evolution is that the tensions between subject and object dominant positions that appeared in the extreme groups, could possibly be one of the main causes of internal working models' potential disorganisation. Failures in real relationships could lead to the pathological collapse of the internal working models' defensive role, thus splitting it into two conflicting internal working models and hindering the continuity of the subject's self. When applying the hypothesis of internal working model's collapse to anxious subjects, we have to take in account that, in our sample, these appeared to expect to be dependant from their objects' well being in negative relational conditions. Conversely, in the best episodes they seemed to associate their conception of well being with a significant degree of individual's independence from the object. We may wonder if, under inappropriate relational conditions, this trend could be developed to the point that expectations of well being for the subject could pathologically shift in the direction of the liberation from objects' influences, with consequent development of an avoidant model of interaction. Since an unconscious belief to be dependant from the objects remains from negative conditions of experience, disorganisation of the anxious model could occur, thus shifting towards an avoidant model and back. On the other end avoidant subjects showed an opposite situation thus expecting their objects to depend on them in worst episodes. One hypothesis of pathological disorganisation is that this trend could be developed in favourable conditions until the point that the expectations of personal well being could paradoxically correspond to their negative expectation, i.e. of relating with an object being completely dependant on their own well being, thus favouring the interfering development of an anxious model.

We therefore propose the hypothesis that both insecure and secure subjects, when evolving towards pathology, could experience juxtaposed anxious and avoidant trends without integrating them in a healthy model of experience (an equivalent of Main's disorganised model of attachment). Pathological developments could be attributed to the prior action of intrapsychic defences against the relationships, as compared with relational systems that are leading to subject-object negotiations. Pathological defences against relational commitments could cause negative chain effects on the relationships themselves and thus reinforce intrapsychic defences in the direction of splitting and idealisation of positive and negative subject-object expectations.

Conclusions

Our experiment confirmed the hypothesis that expectations about the influence of any object on subjects' internal states could have a leading function in individuals' internal working models of experience. Our research demonstrated a strong individual correlation, not an identity, between expectations in stressful and in favourable relational conditions. IWM can therefore be described as adaptive and stable defensive

structures supporting global intuitive theories of the mind. Explorative trials that we are performing tend to confirm average stability of subjects' expectations with any object, when subjects are asked to tell "worst and best episodes of last three months" at six months of distance.

We understand that the interest of research should not only be in the demonstration of internal working models' stability, but mostly in following either their disadaptive changes and their potentialities of development. We are therefore planning further experiments trying to show instability (or perhaps hyperstability) of our measure of subject/object affective connections in pathological groups or when faced with intervening traumatic and healing variables. We expect that hyperdefensive elaboration of traumatic past and present relational issues, that we already indicated as a possible cause for internal working models' disorganisation, could be confirmed through extensive data. Disorganisation has already been demonstrated through decreases in SRF (self reflective function, Fonagy, 1997) and reliably correlated with other pathological indexes. Our measure could follow defensive elaboration of traumatic experiences within different relationships by comparing "best" and "worst" narratives of the session², of the therapeutic relationship, of the relationship with X, etc.

In perspective, the measure of subject/object affective connections, when compared both with Main or Hazan & Shaver attachment types, could comprehend a larger individual and situational variability of the subjective experience of individuals' internal working models functioning through relevant relationships. Since the measure is potentially computerisable it could also be applied in large samples. We think that our work could be considered an initial contribution to the reliable detection of different defensive strategies that individuals use in coping with negative experiences and in pursuing their personal conception of well being.

References.

- Ainsworth M.D.S. (1982). Attachment :retrospect and prospect. In C.M. Parkes & J. Stevenson-Hinde(Eds.). *The place of attachment in human behaviour*. New York: Basic Books.
- Bowlby J. (1969). *Attachment and loss. vol. 1: Attachment*. New York: Basic Books.
- Bowlby J. (1973). *Attachment and loss. vol. 2: Separation*. New York: Basic Books.
- Bowlby J. (1980). *Attachment and loss. vol. 3 Loss sadness and depression*. New York: Basic Books.
- Bowlby J. (1988). *A secure base*. London: Routledge.
- Bretherthon I. (1991). The roots and growing points of attachment theory. In *Attachment across the life cycle*, Murray Parkes C. Stevenson Hinde J. and Marris P.(eds.).London: Routledge.
- Baldwin M., Keelan J., Fehr B., Enns V. and Koh-Rangarajoo E. (1997) Social Cognitive Conceptualisation of Attachment Working Models: Availability and Accessibility Effects. *Journal of Personality and Social Psychology*.
- Brouceck F. (1979).Efficacy in infancy; A review of some experimental studies and their possible implications for clinical theory. *Int. J. Psycho-Anal.*, 60: 311-321.
- Bucci W.(1995) The power of the narrative. A multiple coding account. In Pennebaker J. (ed.), *Emotion disclosure and health*. Washington D.C.: APA Books.

²Reliable assessment of "worst" and "best" relational episodes of psychotherapeutic sessions was performed by computing positive and negative responses from the object and responses of the self following Luborsky's rules of codification (Seganti et al. in press)

- Bucci W. (1997) *Psychoanalysis and cognitive science. A multiple code theory*. London: the Guilford Press.
- Cipollone E. (1996) Il metodo dei prototipi e delle Variazioni. Tesi di laurea Facoltà di Psicologia Roma.
- Collins N. & Reed S. (1990) Adult attachment, working models and relationship quality in dating couples. *Journal of Personality and Social psychology*. vol. 58? 4, 644- 663.
- Dahl H. (1988) Frames of mind. In H. Dahl, H. Kächele & H. Thomäe (eds.), *Psychoanalytic process research strategies* (51-66). Heidelberg: Springer.
- Emde R. (1988) Analysis terminable and interminable. *Int. J. Psycho-Anal.* 69, 283-297.
- Fonagy P., Steele M., Steele H., Moran G., Higgitt A. (1991). The capacity for understanding mental states: the reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*. 2, 3, 201-218.
- Fonagy P., Steele H. and Steele M. (1996) Associations among attachment classification of mothers, fathers and their infants. Evidence for a relationship specific perspective. *Child Development*, 67, 541-555.
- Fonagy P. (1996) Self Reflective function. Unpublished Manual.
- Hazan C. & Shaver P. (1987) Romantic love conceptualised as an attachment process. *Journal of Personality and Social Psychology*. 52, 3, 511-524.
- Horowitz M.J. & Eells T. (1993). Case formulation using role relationship models configurations: a reliability study. *Psychotherapy research*, 3, 57-68.
- Luborsky L. & Crits-Christoph P. (1990) *Understanding transference: The core conflictual relationship theme method*. New York: Basic Books.
- Main L. & Goldwyn R. (1984). Predicting rejection of her infant from mother's representation of her own experiences: A preliminary report. *International J. of Child Abuse and Neglect*, 8, 203-217.
- Main M. (1996) Introduction to the special section of attachment and Psychopathology: 2 Overview of the field of attachment. *Journal do Consulting and Clinical Psychology*. vol. 64, 2, 237-243.
- Sander L. (1985). Towards a logic of organisation in psychological development. In Klar K. & Siever L. (eds.): *Biologic response styles: Clinical implications*. Washington: American Psychiatric Press.
- Seganti A. (1995) *La memoria sensoriale delle relazioni. Ipotesi verificabili di psicoterapia psicoanalitica*. Bollati Boringhieri. Torino.
- Seganti A. (1995) Prototypic expectations of safety: *Int. J. Psychoanal.* vol. 76, 6, 1245-1255.
- Spence D. (1995) When do interpretations make difference? A partial answer to Fliess's Achensee Question. *J.A.P.A.* vol 43, 3, 689-712.
- Stern, D.N. (1985). *The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology*. New York: Basic Books.
- van Uzendoorn & Bakermans- Kranenburg. (1996) Attachment representations in mothers, fathers, adolescents and clinical groups: a meta-analytic search for normative data. *Journal of Clinical and Consulting Psychology*, 64, 1, 8-21.
- Westen D. (1997) Towards a clinically and empirically sound theory of motivation. *Int. J. Psychoanal.*, vol. 78, 3, 521-548.