

Abstract

The use of associations with dream reports, although being diffused and greatly useful in psychotherapy, has so far played a limited role in dream research not directly finalized to therapy. On the other hand, it is difficult to investigate a basic property of dreaming, that of establishing connections, without searching for information beyond the dream report: indeed, the simplest and likely most effective way of obtaining this information consists in asking the dreamer for associations. Well-defined and rigorous methods are however necessary for research approaches which aim to achieve a better understanding of how the dreaming mind operates by processing and combining the dreamer's memory sources: we propose an experimental protocol ("Associations for Dream Reports Protocol") aiming to give a contribution in this direction. According to this protocol, the dreamer completes a form which asks him or her to describe a recent dream, to name key words or short phrases that characterize the dream, and, for each word or phrase, to provide associations that allow possible episodic sources, definite in space and time, to be identified. To be more effective, the method takes advantage of the presence of a researcher while the dreamer is completing the form: the terms of the interaction between dreamer and researcher are subjected to marked restrictions and rigorously defined. The protocol was applied to a homogeneous group of participants; the observed link patterns presented interesting phenomena, whose occurrence presented high statistical significance.

Keywords: dream associations, episodic dream sources, links among dream sources, dream bizarreness, shift of the present concern

Introduction

The purpose of this paper is to describe a well-defined protocol for eliciting associations with dream reports in order to recognize and analyze the episodic memory sources of single dreams.

The objective of this research has been motivated by the observation that the role of associations with dream reports presents a basic dichotomy between methods of dream analysis that are centered on the use of dreams in therapy and methods that aim at an understanding of the dreaming phenomenon not directly addressed to therapy.

Most therapeutic approaches to dream analysis require information that goes far beyond the data given by dream reports. This data is generally obtained by means of a variety of forms of associations provided by the dreamer. Historically, this began with the method of free associations introduced by Freud and its modifications and extensions introduced by the Jungian idea of amplification. Almost all of the numerous therapeutic methods described, about two decades ago, in the book “New perspectives of dream interpretation” (Delaney, 1993) were, more or less explicitly, based on associations provided by the dreamer. This is still valid today; for instance the first stage of Hill’s model (see, e.g., Gupta and Hill, 2014; Kline and Hill, 2014) provides an effective way of obtaining associations.

The situation is completely different if methods of dream research not finalized to therapy are considered: they are generally focused on the properties of dream reports, i.e. verbal descriptions, provided by the dreamer himself or herself, of the dream experience, with the exclusion of further elements, such as comments or attempts at interpretation. However, in addition to the successful use of associations in therapy, various reasons, both phenomenological and theoretical, suggest that the search for the memory sources of dreams, for which associations are generally the most effective tool, can be helpful for the

scientific study of dreaming. From the phenomenological point of view, it is easy and common to observe that significant elements of the dream experience clearly correspond to precise elements of the wakefulness experience of the dreamer; it is therefore hard to think that a deep understanding of a dream could omit considering this fact. Theoretically, we can distinguish between “bottom-up” and “top-down” generation models of dreams (Nir and Tononi, 2010): according to the bottom-up view, supported in particular by Hobson’s model (Hobson and McCarley, 1977; see also Hobson et al., 2000), dreams are due to a synthesis, performed by high-order brain areas, of data produced by low-level sensory areas. Differently, according to the top-down view, dreams begin as wishes, abstract thoughts and memories which are enriched with perceptual features. The role of memory sources for the top-down models is obvious: in fact, according to these models, the sources of a dream are placed at the beginning of its construction and are the basic key for understanding its meaning. However, this role is also fundamental, although less obvious, for the synthesis phase postulated by the bottom-up models, because these models, far from excluding memory sources, put them at the end, instead of the beginning, of the dream construction. The significance of dream sources is underlined by a very simple cognitive representation of the psychophysiological system of dream generation as a system having memory sources as inputs and the dream experience as output (Cavallero and Cicogna, 1993).

The rather poor role so far played by associations in scientific research on dreaming (apart from research directly connected to therapy) should not be viewed, in a historical perspective, as an actual limit; on the contrary, it has allowed important results to be obtained. In particular this is demonstrated by the effectiveness of the Hall/Van de Castle method, which, proposed in 1996 (Hall and van de Castle, 1996; Domhoff, 1996; see also

Schredl, 2010), has been diffusedly applied in the successive years up to now. In fact, this method has led dream researchers to obtain definite quantitative data confirmed by rigorous application of statistical tests. It has also inspired the introduction of new questionnaires covering various aspects of the dreaming experience (see, e.g., Aumann et al., 2012; Schredl et al., 2014), the study of the relationship between dreams and dreamers' personalities (see, e.g., Blagrove and Akehurst, 2000), and the application of analysis methods based on word search approaches (Bulkeley and Domhoff, 2010). Indeed, focusing on dream reports has conferred scientific rigor to the study of dreams, while the use of associations has been generally assessed as poorly rigorous, and this assessment has often been grounded on good reasons. Associations, however, could provide new interesting results if a rigorous method for obtaining and investigating them was created: in fact, associations can offer a deeper understanding of the dream experience.

In the light of these considerations, our research has consisted in a search for methods, based on well-defined protocols, of analyzing single dreams taking into account the memory sources identified by means of associations. We have acquired information from the dreamers themselves for the simple reason that the one who best knows the episodes of the dreamer's life is likely to be the dreamer himself or herself; in fact, the use of associations is not necessarily dependent on abstract assumptions, such as the Freudian view of the association process as a kind of time reversal of the dream building process. As will be reported in the following sections, the results obtained are promising; we have also encountered some important limitations, which, however, have cast some light on certain interesting aspects of the dream phenomenon.

The first stage of the method that we applied consisted in asking the participants to complete a form by providing associations and relationships among the associations to

potentially recognize the sources of a single dream. We felt that an analysis of memory sources exactly definite in time and space could lead to understanding the process of dream construction in a more effective and enlightening way than an analysis founded on general assertions expressed by the dreamer. As will be reported in the Results session, the memory sources often regarded distant past episodes, as well as recent events and present concerns of the dreamer.

The second stage, which did not involve the dreamer, consisted in a search for connections among the sources. Indeed, a basic property of dreams is that they make connections: Hartmann (1998) has very effectively insisted on this point. Various data in the literature confirm this property of dreams: even young children are able to connect different experiences in their dreams (see, e.g., Siegel and Bulkeley, 1998); the recovery process of people affected by traumatic experience is accompanied by an increasing interweaving, during dreams, of the trauma with other experiences (Barrett, 1996). Furthermore, the occurrence of the phenomenon that Freud called “condensation” (i.e. reference of a single item of the dream experience to more than one waking experience) is very frequent in dreams, thus witnessing the existence of complex connections: for this reason, condensation should be credited with a phenomenological value, independently of the validity level of the Freudian theory. For each of the dreams examined, we identified link patterns between different dream sources according the following criterion (Barcaro et al., 2005): possible links exist when the associations relating to different sources contain words that either have the same stem or are semantically very close. Then we checked whether it was possible (Barcaro et al., 2005; Barcaro and Rizzi, 2010):

- a) to recognize simple sub-patterns that included links, called “pervasive”, which connected more than two sources and therefore could be expected to fulfill an

important function in the building of the dream;

- b) to apply the following “heuristic rule”: the context changes given by links among sources are such as to make negative elements in the current life of the dreamer (“present concerns”) less negative or even reverse them into positive;
- c) To check whether later associations added a second present concern, generally more significant, to that indicated by earlier associations (“shift of the present concern”);
- d) To check whether the context change recognized according to the heuristic rule (b) was actually realized in the dream experience (“representative value of the dream experience”).

The participants in the research were generally motivated by marked interest in the possible meaning of their dreams; for this reason, a further stage of our protocol consisted in informing them about the properties of the link pattern among the memory sources of their dream, underlining that it was not a proper “interpretation”, whatever this term might mean, but simply a possibly enlightening presentation of results obtained by a well-defined method.

Method

Participants

The basic group of participants was homogeneous for gender and motivations: it consisted of twelve women, who were interested in the dreaming phenomenon and in particular were curious about the meaning of their own dreams. Indeed, women were generally more willing to participate in this study: this fact confirmed a well-known result in the literature, regarding marked gender differences not only in dream content, but also in attitude towards dreams (for a review, see Schredl, 2007). Also age (between 34 and 48 years; mean 40.9,

standard deviation 4.3) and culture (all had attended high school in Tuscany) were fairly homogeneous.

We analyzed twelve dreams, one per participant. Three participants applied the protocol to two dreams: we chose by chance the dream to analyze.

We also applied the protocol to four men, in the same age range as the woman group and with the same kind of school experiences. The results obtained from the men participants were only viewed as a possibly interesting addition to the data set, but were not considered for the statistical analyses.

Measures

The form

Each participant was asked to complete a form (“Associations for Dream Reports Protocol”), which contained twelve boxes to be filled in.

Box 1 of the form asks the participant to report a recent dream (not earlier than two weeks). If the report is longer than five lines, the participant is asked to only consider a part of the dream while filling in the subsequent boxes.

Box 2 asks the participant to select from the report four words, or short phrases, that the dreamer views as best characterizing the dream. This criterion has been suggested by the effectiveness of the StoryTelling method proposed by DeCicco (2007), which allows an insightful narrative to be obtained, alternative to the dream report: indeed, DeCicco’s method is based on a preliminary selection of a small number of significant words.

The four boxes from the 3rd to the 6th ask the participant for associations with each of the four words (or short phrases) indicated in the 2nd box. The four boxes from the 7th to the 10th are to be filled in with new associations to the same words: this repetition has proved far from useless, as will be clear from the Results session. The last four boxes

(from the 9th to the 12th) ask the participant to shortly formulate hypotheses about possible conceptual links between the episodic memories reported in the boxes from the 7th to the 10th.

The text of the “Associations for Dream Reports Protocol” is shown in the Appendix.

Procedure

Preliminary applications of the protocol had showed that the participants found it rather difficult to complete the form by themselves, without the assistance of one of the researchers. On the contrary, the fact of being assisted greatly encouraged them to effectively fulfill their task. We will reflect on this fact, which was unexpected at least in its extension, in the Discussion section. Since we obviously realized that this might undermine the criterion of rigor at the basis of our research, we decided to limit our interaction to the following five modalities:

- a) When the participant gave an association that was very generic, far from episodic, to say “Could you give a precise episodic example?”
- b) When the participant asked if she could write an association even if she did not clearly understand the reason for it, to say “Certainly, it will be probably interesting”.
- c) When the participant, after writing a fairly detailed association, was uncertain whether it made sense, to say “Certainly it does, it will be interesting”.
- d) When the participant said she had no idea about what to write, to say “Perhaps something is occurring to your mind”; if nothing occurred, to say “No problem, you may give no answer”.
- e) When the participant said that she was only able to repeat a previous association, to say “No problem, you may either give no answer or write something similar to what you have already written”.

Furthermore, preliminary application of the protocol had suggested the following modification (which actually turned out to be necessary for two out of the twelve participants): whenever the number of missing answers was more than four, we asked the participants for associations to other words, or very short phrases, of the report, as to obtain at least eight answers.

Qualitative analysis and statistical analysis

As will be shown in the Results section, some phenomena occurred for all or almost all of the twelve dreams that we studied. The significance of these phenomena was first assessed according to criteria of qualitative analysis (Hill et al., 1997; Hill et al., 2005), by applying frequency labels: “general” for all cases (or all but one) and “typical” for more than half of the cases but less than all cases but one. A simple statistical analysis, based on the binomial test, was also carried out: in fact, as each of the twelve dreams belonged to a different subject, the experimental data could be considered as independent. According to the binomial distribution, a phenomenon occurring for all of twelve independent cases could be assessed as occurring for at least 75 % of the cases with statistical significance $\alpha < 0.05$, while a phenomenon occurring for ten out of twelve cases could be assessed as occurring at least for 55% of the cases with $\alpha < 0.05$ (of course, it can be expected that the actual frequencies of occurrence are greater).

Results

Nine of the dream reports were shorter than 80 (Italian) words. Three (n. 2, n. 6, and n. 10) were longer and only a part of their dreams was considered for the analysis.

An example of dream report, translated from Italian, is the following (n. 2), which was divided into two parts:

[First part] “I was sleeping [in the dream]. In the kitchen of my house they were having dinner, while I was not. They were my family: father, mother, mother’s brother, and my elder brother. They were relaxed having dinner. I heard my mother cry out. I hurried to the kitchen (the kitchen had a sliding door). A giant snake had entered from the kitchen through the opened door. Since they had not noticed it, I made them realize.”

[Second part] “Then I fled away up a staircase, in the house of my maternal grandmother. I was unable to reach the balcony on the fourth floor. I am sure it was that house because of the marble and the color of the wall.”

The first part (73 Italian words) was only analyzed. The dreamer had no doubt that the kitchen was exactly that of the house of her parents, and that the staircase was that of her grandmother’s house. To fill in the form, she associated with the following four words: mother, brother, cry, and snake.

For ten participants, the protocol was not modified by adding new words to the initial four in the 2nd box, while in one case it was necessary to raise the number of words to associate with to six and in another case to seven.

In eight cases, some additions to the dream report were made in the course of the associations. In the following case (n. 1), the addition was particularly interesting:

[Report] “I was having a picnic with people living in my same block of houses and with some others living nearby. I did not know the place of the picnic, but the landscape was very relaxing. There was a black wolf and there were some of my sister’s colleagues beside a small lake.”

[Later addition] “We had gone there to go away from Bruna, one living in the block where I live, who had a pass that allowed her to go to the Pope.”

Each of the dreamers identified at least five possible sources of her dream. A fairly

large number of memories referred to episodes of adolescence. The earliest memories regarded: going unwillingly to school at five (participant n. 5); seeing, at six, a smaller child stumbling (n. 9); riding a bicycle at six (n. 11). Indeed, participant n. 9 associated an item of her additional dream (not included in our analyses) with her cousin biting her when she was two: she added that she remembered that episode well. In all cases, all the sources regarded episodes that were well-known to the dreamer also before the dream. For all of the participants, a precise present concern was among the sources. Still for all of them, either a second present concern was identified, or the first present concern presented a semantically important variation: in other words, a “shift of the present concern” took place. For instance (n. 2), an association focused on the health of the dreamer’s mother was followed by an association about work problems that the dreamer had to face because of her mother’s illness. In ten out of the twelve cases of shift, the concern identified later appeared to be more important than the first. For instance, the sources of dream n. 3 included three concerns: the first regarded a change in job place, the second expressed a feeling of revenge towards her (woman) boss (with an idea of taking her place), and the third regarded the inadequate acceptance of a new relationship on the part of the family. Two participants (n. 1 and n. 6) had a concern regarding temporary motion difficulties; all the other present concerns regarded either relationships with family’s members, or work difficulties, or relationships with partners. In the Discussion session we will shortly reflect on the fact that present concerns always regarded the needs and wishes of the dreamer.

Significant links among associations were found for all the participants. For instance, a recent unpleasant encounter that had happened while the dreamer was watching horse races was linked (through the idea of "race") with her joyful first races on a bicycle during childhood (n. 11). In cases like these, the “heuristic rule” formulated above in the Method

section could be immediately applied. A work problem that arose during a transfer to a certain town was linked to a happy experience with the dreamer's partner in the same town (n. 3). A health problem involving a block in movement was linked to the recollection of skating as a young girl (n. 6). An immediate application of this rule was possible for ten out of the twelve dreams, often offering a plausible explanation for the existence of the recognized links among sources. In another case (n. 10), the application of the rule, although not immediate, was however clear. In fact, the dreamer recollected that her father had given her a small object representing the Holy Family; when she also associated with her father often quarreling with her mother and often frightening the family, she ironically added that these were his true gifts: in fact, an overcoming of dependence from her parents was a major present concern of the dreamer.

In all cases, pervasive links, i.e. connecting more than two sources, were found. According to the terms of qualitative research, the existence of pervasive links can therefore be labelled as "general": this phenomenon can be viewed as an interesting aspect of the complex network structure of the connection among dream sources. Differently from the other links, pervasive links sometimes did not refer to precise items (such as "horse"), but to more general concepts (such as "solitude"). The list of pervasive links is the following (asterisks indicate that the item was also part of the dream experience): (n. 1) trip* (to the mountains recently, to Rome for a protest march in the past, to Mexico in the past), (2) animals* (her brother loved animals, she was afraid of them, her father warned her about boars when she was a child), (3) solitude (her father suffered from solitude, during train trips she had nice companions, she was not alone because of a new partner), (4) door* (door of the house of her childhood, door of her grandmother's wardrobe, door of the house where she was now living), (5) changing quickly* (icons of a smartphone

display, nurses of an acquaintance, friends of the dreamer), (6) travels* (with her daughter two years ago, with her parents during childhood, with a partner about ten years ago), (7) relaxation (she relaxed with her husband at the sauna, her father relaxed meeting a foreign woman, during childhood she never relaxed), (8) caring after (she had been caring after her mother, her mother was caring after the dreamer's children, a friend was caring after his grandson), (9) suspicions* (her mother was suspicious, the dreamer's boss was suspicious, her godmother was suspicious when she was a child), (10) family* (current practical problems of family organization, an object representing the Holy Family, family difficulties during adolescence), (11) winning (at seventeen she was a winner, in a recent relationship she had been a loser, she was afraid of being a loser after changing jobs), (12) freedom (her boss had prevented her from realizing a project, she had felt free while horse riding, she had felt free travelling with her husband).

The representative value of the dream experience was a "typical" feature of the dreams, which was clear for ten of the twelve dreams. For instance, a dreamer who was suffering from a temporary difficulty in motion (n.1) dreamed of walking to the mountains; she was also having some problems with a threatening man nicknamed "wolf": in the mountains she saw a wolf who wanted to attack but was unable to. In her dream, participant n. 4 blocked a door preventing a mysterious threatening man to enter: she remembered that during her childhood she had suffered from sharing her room with her grandmother and would have liked to be alone; she also recollected that during adolescence she had not wanted her father to enter her room. Sometimes a thorough understanding of the representative value of the dream experience was gained by taking into account the complex link pattern among associations. For instance, for participant n. 6 an important concern, lately recognized, was that of having to see a doctor, and another

data provided by associations was that the positive relationship with her daughter was important. Well, she dreamed of meeting a doctor with a white coat belonging to her daughter: a powerful example of condensation.

Significant information about memory sources and links about them was often given in the responses to boxes from the 7th to the 10th, which asked for new associations with the same words as the previous boxes, and in the responses to boxes from the 11th to the 14th, which asked for hypotheses about links between pairs of sources. For instance, participant n.4, while connecting two episodes regarding her father's behavior during her adolescence, only filling the 12th box added that she had always blamed her mother for accepting that behavior. In the Discussion section we will reflect on these forms of delay in the responses.

When the form was completed, a short, necessarily rough, pre-analysis of the links among sources was carried out according to the criteria above indicated in the Method section (recognition of word-stem recurrences or recognition of pairs of semantically very close words) and its results were made known to the participants. In all cases, the participants were surprised by the fact that deep feelings, of whose intensity and importance they were however aware, were present in the dream in a clearly understandable shape. After that, they sometimes commented and added new information, which of course was not considered for the statistical analyses. In some cases, this further information was particularly interesting: for instance, a dream (n. 6) ended with the dreamer skating; the memory of a past relationship appeared to be important in the light of the associations; well, she recollected very lately that she had sometimes gone skating with that partner.

With regard to the four men that completed the form, phenomena qualitatively and quantitatively similar to those observed for the woman group were found for three of them.

The same holds for the all the additional dreams reported by three of the women participants. These phenomena were not observed for one of the men dreamers: he filled in the form by repeating (however interesting) associations with only two (very recent) episodes.

For each of the five phenomena described above, the results of the qualitative and statistical analysis applied to the group of the twelve women participants are indicated in Table 1.

Discussion

Our study was focused on the detection and analysis of phenomena that, in spite of their specificity, should be viewed as important, and probably fundamental, in the process of dream construction. The occurrence of these phenomena, together with their high statistical significance, was “general” or “typical” (according to the terminology of qualitative research) in the group analyzed. Certainly, the data were collected from a definite group of people (women of a certain age range, a certain social and cultural background, and a marked interest in understanding their dreams). However, it can be reasonably assumed that the obtained results can have a more general validity.

A discussion can be interesting about some limits of our method. One was that a condition for obtaining interesting results was the presence of a researcher while the dreamer was completing the form. Certainly, in order to define the protocol in a rigorous way, we constrained this interaction to very few and very cogent modalities. A first reason for this need for interaction was that the participants found that a search for appropriate associations required some effort and they were not sure that what they were writing was appropriate. A second, more important, reason was that they found great encouragement in

the fact that somebody, in this case one of the researchers, showed interest in their dream and was able to advance hypotheses about how that dream had been built by their minds. Indeed, dreaming is an individual experience, but dream sharing is a social experience that can deeply involve the dreamer. The researchers were interested as well in observing that the dreamer recollected episodes that were clearly connected both to the items of the dream report and to other episodes previously recollected: in fact, these complex connection patterns provided clues for better understanding the ideas and feelings that were at the basis of the dream construction.

A second limit of the method was that, although the protocol was directly focused on the recognition of dream sources, the more significant ones were generally not the first to be provided. In particular, associations given in the boxes from the 7th to the 10th of the form were generally more detailed and more clearly related to the dream report than those given in the boxes from the 3rd to the 6th. Also this limit was however enlightening with regard to an important feature of the dream experience. In fact, these delays in providing significant associations can be explained as due to some mechanism that kept the dreamer momentarily unaware of even obvious (a posteriori obvious) connections between her dream and her waking life. Certainly, this mechanism was different from the Freudian censorship, because it had nothing to do with properly “unconscious” contents: after any delayed recognition, the dreamer was surprised for both the appropriateness of her new recollection and for the unexpected delay.

Probably a similar kind of involuntary reticence was the reason why two of the participants were unable to find a sufficient number of associations with the four selected words: indeed, when they were asked to associate with other words, they were immediately able to provide associations, also realizing that the four originally selected words were not

those that best characterized the dream report.

A further limitation was that not very many people accepted to participate in the experiment. Indeed, to provide detailed associations with episodes of one's own life implies willingness to share private feelings, i.e. personal contents that generally are only shared in situations of close friendship (or during psychotherapy). Certainly, this problem does not exist if no additional information to the dream report is required: for instance, the fact of dreaming of being at horse races can be shared with no problem, but this does not hold for an association with a personal emotionally negative experience at a horse race. Furthermore, the study of the links among sources often evidenced even deeper personal feelings than those evidenced by the mere recognition of sources. All the participants in this study showed trust in the correctness of the researchers and were willing to collaborate without reticence.

The observed phenomena allowed significant dream features to be observed from new points of view. For instance, elements of bizarreness appeared as due to a high degree of condensation. Dreamer n. 12 dreamed of being Julius Caesar's wife and giving him advice: in this way, she "condensed" three basic memory sources, i.e., that of being able to exchange advice (with friends and with her husband), that of cultivating a specific interest in ancient history, and that of trusting her new boss. In this case, the representative value of the dream experience was obvious: she was at the same time able to give important advice, to exploit her knowledge of ancient history, and to represent her boss as a great emperor.

In addition to bizarre elements, also dream items presenting a marked symbolic value could often be accounted for on the basis of the dreamer's experiences. For instance, dreamer n. 7 dreamed of a sand storm, a noteworthy "central image" (Hartmann, 2008; Bilsborrow et al., 2013), and associated this element not only with a general assertion ("In

my life there have been some storms”), but also with difficulty to breathe, precisely her son’s difficulty to breathe during a past illness episode. Another example is given by the above mentioned Holy Family: this item was associated by the dreamer with a precise gift that the dreamer had received. In other words, the symbolic role of certain items appeared to be somehow triggered by a not yet symbolic, originally experiential meaning.

We have observed that altruistic present concerns (such as “I am suffering because mother is ill”) were generally replaced (by means of a shift of the present concern) by more “selfish” concerns (such as “the time I am dedicating to mother is causing some difficulties to my work activity”). We think that it would be a mistake to view this fact as somehow diminishing or slightly unpleasant; on the contrary, “selfish” concerns can lead to a deeper awareness of one’s own rights, and thus, indirectly but importantly, to the rights of other people. For instance, conflicts with family can help understand that not all family relationships are actually based on mutual love and conflicts with bosses can help understand that not all power relationships are actually founded on criteria of equity. We feel that dream experiences, and either individual or shared reflections on these experiences, can, and often do, lead to achieve new forms of intense personal and social awareness.

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Appendix

Associations for Dream Reports Protocol

Tell a recent dream:

(If the report is longer than four or five lines, only write a portion of your dream. A two- or three-line report is sufficient.)

[Box 1: Five blank lines]

Select four words, or short phrases, able to characterize your dream, from the report you have just written; write down these words or short phrases. (If the report contains names of people or places, these are indicatively preferable.)

[Box 2 is given by the following four lines]

First word or short phrase: _____

Second word or short phrase: _____

Third word or short phrase: _____

Fourth word or short phrase: _____

You will now be asked for association, which should regard episodes, either remote or recent, of your life, or concerns, either remote or recent.

Try and write what first comes to your mind, even though at first it seems illogical or not directly connected to your dream.

Try and refer to episodes that are definite in space and time.

Association with the first word:

[Box 3: Four blank lines]

Association with the second word:

[Box 4: Four blank lines]

Association with the third word:

[Box 5: Four blank lines]

Association with the fourth word:

[Box 6: Four blank lines]

Further association with the first word (No problem if only already reported associations come to your mind:

[Box 7: Four blank lines]

Further association with the second word:

[Box 8: Four blank lines]

Further association with the third word:

[Box 9: Four blank lines]

Further association with the fourth word:

[Box 10: Four blank lines]

What relationship may exist between the content of the association to the first word and the content of the association with the third word? (To answer this question, and to the following questions, preferably refer to the second series of associations.)

[Box 11: Four blank lines]

What relationship may exist between the content of the association to the second word and the content of the association with the fourth word?

[Box 12: Four blank lines]

What relationship may exist between the content of the association to the second word and the content of the association with the third word?

[Box 13: Four blank lines]

What relationship may exist between the content of the association to the third word and the content of the association with the fourth word?

[Box 14: Four blank lines]